

ECONOMIC REVIEW 2008

STATE PLANNING BOARD
THIRUVANANTHAPURAM
FEBRUARY 2009



ECONOMIC REVIEW 2008

STATE PLANNING BOARD THIRUVANANTHAPURAM FEBRUARY 2009

CONTENTS -

		Pages
Chapter - 1	An Overview	1-3
Chapter - 2	State Finances	4-19
	Kerala- Overall Fiscal Position	4.
	Pattern of Revenue Receipts	6
	State's Own Tax Revenue	
	State's Own Non-Tax Revenue	6
	Central Transfers	7 9
	Expenditure Pattern	11
	Debt Profile	. 16
Chapter - 3	Income and Population	20-38
Chapter - 5	Global Scenario	20~36
	National Scenario	
	National Income	21. □:
	Per capita National Income	24 24
	State Income	26
	Population	34
Chapter – 4	Agriculture and Allied Sectors	39-111
	Rainfall	40
	Land Use	42
	Trend in Area, Production and Productivity of Crops	44
	Crop-wise analysis	47
	Plantation crops	55
	Crop Husbandry	59
	Agricultural Insurance	63
	Agricultural Research and Education	63
	Farm Commodity Price	64
	Livestock Development	67
	Dairy Development	70
•	Milk Marketing	73
	Egg and Meat	78
	Animal Health Care	82
	Fisheries Development	85
	Trend in Production	87
	Export	. 89
	Tsunami	92
	Major Developmental Programmes	92
	Co-operation	97
	Support by NCDC	97
	Primary Agricultural Credit Societies	98
	Self Help Group Linkages and PACS	99
	Miscellaneous Types of Co-operatives Kissan Credit Cards	101
	Agricultural Finance	102 104
	Agricultural Finance Credit Flow to Agriculture	104
	Agricultural Debt Waiver and Debt Scheme	107
	(ADWDRS)	101
	Refinance Support by NABARD	110 1
	Rural Infrastructure Development Fund (RIDF)	110

1

Chapter - 5	Water Resources	112-142
	Live Storage Capacities of Irrigation Reservoirs	112
	Investment in Irrigation	114
	Review of Major Projects	117
ļ	Minor Irrigation	119
	Ground Water Development	119
	National Hydrology Project	123
	Flood Management	124
	Coastal Zone Management	124
	Command Area Development	125
ļ	Drinking Water Supply	126
	Water Supply Schemes in Operation	
	Production & Distribution of Water	130
,	Water Tariff and Revenue	139
Charter 6		140
Chapter – 6	Environment	143-167
	World Environment Day	143
	Wet Land Conservation	. 144
	Water Quality	144
}	Industrial Effluents	145
	Air Pollution	147
	Kerala Environmental Management Agency	150
·	Environmental Sanitation	152
	Community Perceptions and Local Government Initiative	152
	School Sanitation	152
	Solid Waste Management	153
	Bio Medical Waste	155
	E-Waste Hazards	156
	Soil and Water Conservation	157
	Forestry and Wild Life	159
	Participatory Forest Management (PFM)	161
	National Afforestation Programme	161
	Wild Life and Bio-sphere Reserve	163
	General Forestry	164
Chapter - 7	Energy Development	168-188
Campica - 7	Indian Context	168
	Power Sector in Kerala	168
	Generation	_ _ _
	Transmission	169 174
	Distribution	176
	Tariff	177
	Restructuring of KSEB	177
	Non Conventional Energy	182
•	Energy Conservation	184
1	Kerala State Electricity Regulatory Commission	187
Chapter - 8	Industry and Mining Industrial Growth	189-218 189

٠.

	Commodity Exports	190
	Central Sector Investment	191
	State Level Public Sector Enterprises	192
	Small Scale Industry	195
	Industrial Co-operatives	199
	KINFRA Food Park	200
	Handloom Industry	201
	Handicrafts	204
	Bamboo Industry	205
	Coir Industry Khadi and Village Industries	205 208
	Khadi and Village Industries Sericulture	208
	2-1-0-1-0	
	Cashew Industry	209
	Beedi Industry	212
	Industrial Promotion	212
	Industrial Financing	212
	Industrial Infrastructure	213
	Special Economic Zone (SEZ)	216
	Mining	217
Chapter - 9	Tourism	219-227
'	Performance of Kerala Tourism	219
	Tourist Statistics	219
	New Policy Initiatives	222
	Supporting Agencies/Organisation	223
	Eco-tourism	224
		226
	Promotion and Publicity	
Chapter - 10	Infrastructure	228-258
	Road Transport	228
	National Highways	229
	Kerala State Transport Project (KSTP)	231
	Research and Development in Road Sector	232
	Kerala Highway Research Institute	233 234
	Road Safety	234
	Kerala State Road Transport Corporation	238
	Kerala Transport Development Finance Corporation Trend of Road Accidents in Kerala	239
	Port Sector	240
		245
	Inland Water Transport Railways in Kerala	247
	Air Transport	248
	Communications	249
	Urban Development	251
	Urban Development Strategy	254
	Urban Development Programmes	255
	Development Authorities	256
Chapter - 11	Education	259-287
Chapter II		259-267
	Literacy Physical Infrastructure and facilities in Govt. Schools	259 260
	Higher Secondary Education	263
1	riigher Scottuary Education	203
	Vocational Higher Secondary Education	264
	Vocational Higher Secondary Education University and Higher Education	264 264

	Trabaiant Education	267
	Technical Education	270
	Expenditure on Education	271
	Sports and Youth Services	274
	Sports and Youth Affairs Art and Culture	276
	Kerala State Library Council	281
		286
C1 . 15	Archaeology	288-312
Chapter – 12	Medical and Public Health	288
	Basic Health Indicators	289
	Institutional Health Care ~Department wise Institution	293
	Para Medical Services	296
	Nursing Education	302
	Ayurveda	305
	Homoeopathy	308
	Critical Diseases Prevalent in Kerala	309
	Second Generation Problems and lifestyle Diseases	311
	Immunisation Coverage	311
OI . 12	Family Welfare	313-321
Chapter - 13	Housing	313-321
	Demand for Housing	
	Governmental Agencies	314
	Kerala State Nirmithi Kendra	315
	Kerala Police Housing and Construction Corporation	315
	Kerala State Housing Board	317
	Kerala State Co-operative Housing Federation	319
	Financial Institutions	319
	HUDCO	320
Chapter - 14	Poverty and Special Programmes for	322-393
Chapter 14	Weaker Sections	0
	Consumption Patterns below and above poverty line	323
	-	
	New Strategy of Poverty Reduction	326
	Kudumbashree Programmes in Rural Areas	326
	Asraya	328
	Other Major Poverty Alleviation Programmes	331
	Urban Poverty	341
	Urban Poverty Reduction Programme	343
	Social Security and Welfare	346
	Welfare of the old age people	348
	Welfare of the disabled	349
	Social Security and Pension	353
	Social Security measures Exclusively for Women	354
	Women Development Programmes	355
	Welfare of Ex-Servicemen and war widows	356
	Welfare of Prisoners	357
	Nutrition and Child welfare	363
	Development Programmes for Scheduled Castes, Scheduled Tribes and Backward Classes	366
	Scheduled Tribes and Backward Classes Kerala State Backward Classes Development	
	Scheduled Tribes and Backward Classes	366

Charter 15	D.1. ID 10	204 410
Chapter – 15	Prices and Food Security	394-410
	Consumer Price Index	394
	Retail Prices	395
	Consumption expenditure	396
ļ	Wholesale Price Index	399
	Parity Index	400
	Wages	401
	Food Security	402
	Public Distribution System in Kerala – Salient Features	403
	Central Allotment of Sugar and Kerosene	404
	Special Schemes	405
	Mid-day Meal Programme	407
	Kerala State Civil Supplies Corporation	408
Chapter – 16	Export and Import	411-423
_	World Trade	411
	India's Foreign Trade	413
	Export Import Trade of Kerala through Cochin Port	414
	Export of Marine Products - National Scenario	416
	Export of Marine Products from Kerala	417
	Cashew Trade	419
	Coffee	421
	Coir and Coir Products	422
Chapter – 17	Institutional and Bank Finance	424-434
Chapter 17	Institutional Finance	424
1	Bank Finance	424
	Advances by Scheduled Commercial Banks	425
	Advances by Public Sector Banks	426
	Growth of Bank Deposits	427
	NRE Deposits	428
	Credit Deposit Ratio	429
	Financial inclusion	432
	Housing Loans	433
	Educational Loans	433
	Advances to Weaker Sections and SC/ST	433
	Micro Finance	434
Chapter 19		435-455
Chapter – 18	Gender and Development Demographic and Health Indicators	436
		440
	Pattern of Education by Gender	
	Employment & unemployment	443
	Women's Autonomy	445
	Gender Role Attitudes	446
	Violence against women	446
	Kerala Women's Commission	450
	Kerala State Women Development Corporation	450
	Kudumbashree	452
	Women Empowerment Initiatives	.452
	Gender Board	453
	Credit Package for Women	455
Chapter – 19	Labour and Employment	456-483
	Composition of Workers	456
	Concillation Machinery	458

		150
	Safety of Workers	459
	Kerala Institute of Labour and Employment	460
1	Social Protection Measures	461
	Global Financial Crisis and Labours	463
ļ	Employees State Insurance Scheme	464
	Unemployment	469
	Employment in the Organised Sector	475
Í	Migration	480
	Placement through ODEPC	482
Chapter – 20	Human Development and Socio-economic	484-510
	Well-being in Kerala	
	Human Development Reports (HDR)	485
[Human Development and migration	486
	Human Development achievement	487
1	Infant and Child Mortality Rate	488
	Access to Health Care and Health expenditure	489
	Education development index	490
J	Cost of basic Services	491
	Financing of Human Development	492
	Sub Sector wise Percapita expenditure	493
	Human Development Initiatives in Kerala	494
1	Human Development and Outliers	496
	Disabled Population	497
]	Human security and Human Development	498
	Crime Rates in Kerala	498
ł	Crime against women and Children	499
1	Prison Population	500
	Accidents	503
[505
	Food and Nutrition in security and Human Development	303
	Nutritional Status	506
		506
	Food Availability and Hunger	
	Major Human Development Challenges	508
	Child Health	509
	Elderly in Kerala	510
Chapter - 21	Information & Communication Technology	511-520
	Infrastructure	512
	IT, Industry Current Scenario	513
	Physical Infrastructure Techno park,	513
	Thiruvananthapuram	515
	Indian Institute of Information Technology and	515
	Management-Kerala (IIITM-Kerala)	313
	-	£1 £
	Info park	515
	Infrastructure development of Co-developers and IT	516
	companies	
	Info park phase II Expansion Programme	516
	Kerala State IT Mission	517
	Akshaya	517
	Friends	518
	ICT for under Privileged	518
	E-Governance Initiatives	519
Chapter - 22	Local Governments and Decentralised	521-533

	Development in Kerala	
	Grant-in-Aid to LSGs	522
	Eleventh Five Year Plan - Performance of LSGs during 2007-08	523
	Sector-wise Performance	524
	Performance under Productive Sector	526
	Performance under Service Sector	528
	Performance under Infrastructure Sector	529
Chapter - 23	Scientific Services and Research	534-543
_	Achievements of KSCSTE	534
	Research and Development Institutions	537
	National Transportation Planning and Research Centre	540
	Tropical Botanical Garden and Research Institute	541
	Kerala State Pollution Control Board	542
	Regional Cancer Centre, Thiruvananthapuram (RCC)	543
	APPENDIX TABLES	S1 - S292

CHAPTER 1

AN OVERVIEW

- 1. The year 2008-09 was marked by momentous developments in the capitalist world economy. First there was a sharp acceleration in inflation. Crude oil prices, aided by speculative pressures, rose to as high as \$140 per barrel; and since the response of the Bush administration was to encourage the production of bio-fuels from foodgrains, foodgrain prices too shot up. There was a general upswing in primary commodity prices, but foograin prices rose even more sharply (in India they led the inflationary surge). The financial crisis arising from sub-prime lending hit the U.S. investment banks in the latter half of the year and it has now transformed itself into a major recession, which, while it has brought down the inflation rate, shows no signs of abating. The short term interest rates in most advanced countries are close to zero, the long-term rates are as low as they can possibly get, and yet there are no signs of any economic revival. Indeed the worry is that inflation may turn negative and hence start increasing the real interest rate, accentuating the recession. No counteracting co-ordinated fiscal stimulus across countries is forthcoming either, and protectionism is in the air. Almost everyone is agreed that this crisis is the worst since the Great Depression of the 1930s, and is likely to persist for quite some time.
- 2. The initial confidence that India, because of the limited exposure of its financial system to the "toxic" securities arising from sub-prime lending, will escape the effects of the crisis, has been belied. The world recession has already affected the exports of a whole range of goods and services from the country. With this recession persisting and even worsening, and with the multiplier effects of reduced export demand making themselves felt in the domestic economy only over a period of time, the prospects for the Indian economy appear gloomy in the foreseeable future. And Kerala is perhaps the most vulnerable among all Indian states.
- 3. Kerala is a significant exporter of primary commodities like coir, cashew, rubber, pepper, spices, and arecanut, whose demand has declined in the world market and whose prices are on a downtrend. This downtrend, starting from a high level, may not yet have pushed prices below costs of production, but this is likely to happen soon, causing distress to numerous peasants and petty producers. When the recession started there was a view that the oil-producing Gulf region would be immune to it. But with oil prices crashing to \$35 per barrel, again aided by speculative pressures, the oil producers too have been hit by crisis, which will not only dry up remittance inflows into Kerala but also cause accelerated reverse migration amounting to an "import of distress". Likewise the inflow of foreign tourists into the state is likely to dry up soon; and that of domestic tourists perhaps after a lag as the domestic recession gathers momentum. In short, Kerala's exposure to the world economy, a key element of past development strategy, will now, paradoxically, hurt the state.
- 4. The immediate need in the case of a whole range of primary commodities is a combination of price support and purchase guarantee, or, as a variant of it, price support-cumpurchase guarantee combined with subsidies on exports to make good the difference between the world price and the support price. But this requires first of all an agency that can intervene in the market. In the old days the various Commodity Boards, such as the Tea Board, Coffee Board, Rubber Board, and Coir Board could play this role. But the Central government's divesting them of their price-support-cum-marketing function in the neo-liberal period prevents them from playing this role any more, unless the Centre reactivates them. Secondly, there have to be appropriate tariffs to sustain the difference between the world

price and the support price. Thirdly, the price supporting agency has to explore the domestic market as an alternative, and this market has to be sustained through an appropriate domestic fiscal stimulus. Fourthly, wherever cost reduction can be effected without generating unemployment, as in coir for instance, it should be done.

- 5. All these measures however require the Central government to act. Tariff policy, policy with regard to Commodity Boards, and fiscal policy are all in its hands. Though the Centre has announced two stimulus packages, reither of them has anything to offer to the peasantry or the petty producers. Even the additional borrowing, totaling Rs.30000 crores, allowed to the states for 2008-09, is meant only to cover revenue losses, i.e. to keep public expenditure *undiminished*, and not to *raise* public expenditure to counter recession. On tariffs and Commodity Boards, the Centre remains unmoved.
- 6. Its refusal to tackle the problem of the peasants and petty producers may spring from a mistaken but commonly-held notion that the National Rural Employment Guarantee Scheme (NREGS) provides an adequate safety-net. The NREGS however can only deal with the distress arising from insufficient work, i.e. an inadequate number of labour days on which non-NREGS work is available. It cannot deal with cases where the problem is not an insufficient number of labour days worked, but an inadequate return per labour day. And the problem of the peasants, petty producers, fishermen and the self-employed is precisely that they get an inadequate return per labour day, especially in the midst of the crisis, rather than an insufficient number of labour-days of work. So, while the NREGS needs to be strengthened, it is not enough.
- Even though the state government's capacity for ameliorating crisis-caused distress is 7. strictly limited, it has nonetheless put in place a few schemes towards this end. It intends to introduce a Commodity Price Safety-net Scheme, which means providing outright subsidies, to cover the difference between the world price and a pre-announced support price, to marginal farmers of certain specific crops. Secondly, it has already put in place a Comprehensive Health Insurance Scheme under which a BPL household can incur medical expenses upto Rs.30,000 per annum free of charge (apart from a token registration fee of Rs.30). Since medical expenses constituted the most common proximate cause for unsustainable peasant indebtedness, leading to suicides, covering medical expenses in this manner will alleviate distress. Thirdly, the state is launching a massive housing programme, the "EMS Housing Scheme", financed mainly by the LSGIs, through a combination of plan funds and borrowings, to provide total housing to the BPL population in two years; it is also renovating the houses constructed under the "MN One Lakh Housing Scheme". These will not only alleviate distress by eliminating houselessness, but also generate significant employment during the recession.
- 8. Going beyond the short-run, the state must effect a change in its production structure. The basic assumptions that underlay its moving away from foodgrain production, viz. that cash crop prices in the world market would continue to rule high, and that the Central government would continue to make foodgrains available for the state's population at reasonable prices, have ceased to be valid for quite some time. The need therefore is to reemphasize food production, which is why the state government had introduced a Food Security Scheme. The case for this direction shift, which entails re-emphasizing not just paddy but livestock and other allied products, has been immensely refurbished by the crisis.

- 9. To effect this direction shift, to take care of the returning migrants, and to prevent unemployment in the non-traditional sectors, there is need for a substantial increase in public expenditure, including in particular public investment. When the Central government talks of public investment, it emphasizes the "infrastructure sector", by which it usually means a set of mega-projects to be built through "public-private partnerships" with Viability Gap Funding. But in the current Depression when private investment is hardly forthcoming, the public provisioning of such projects will have to be so great that it would be preferable to have them simply as public investment. Besides, such expansion in public investment need not, and should not, be confined to a set of mega projects. The expansion of public investment, while not ignoring *essential* urban infrastructure projects, must also lead to a substantial build up of rural infrastructure, which continues to be inadequate even in a state like Kerala. This will be a complement to the attempt to build up food security and to energize the agricultural economy of the state.
- 10. There is an even more basic *rationale* for this direction shift. Taking the world economy as a whole, per capita cereal output has been on a declining trend over the last two decades. The fact that this has not led to any significant food price inflation, except very recently in sympathy with the oil price increase, is because of the massive compression in purchasing power in the hands of large numbers of people, especially in rural areas, that has occurred under the neo-liberal regime. The recession by cutting purchasing power further has once more brought food prices down from the dizzy heights they had temporarily reached. But whether food prices escalate or remain subdued, the fact remains that decreasing per capita output and availability must mean lower intake of food for significant numbers of people, i.e. a problem of growing hunger. This problem, moreover, will get further compounded in the years to come if the climate change argument has weight. Since food deficit regions in such a situation will be particularly hard hit, Kerala, and indeed the whole of India, must strive to increase foodgrain production.

CHAPTER 2

STATE FINANCES

The aggregate fiscal deficit of the states relative to GDP declined from 4.2 per cent in 2001-02 to 2.7 per cent in 2006-07 (RE) and further to 2.3 per cent in 2007-08(BE). The decline in revenue deficit was even more marked from 2.6 per cent of GDP in 2001-02 to 0.13 per cent in 2006-07(RE) and 0.25 per cent 2007-08(BE). Fiscal consolidation at the state level even exceeded the targets set in the fiscal restructuring plan of the Twelfth Finance Commission.

2.2 This improvement resulted both from higher tax devolution and grants from the center and from increased own revenues owing inter alia to the introduction of value added tax and the enforcement of greater tax compliance. The lower interest payments due to debt swap and write off schemes also helped. The situation in some states still remains grim, while in general, state finances have shown a marked improvement. Revenue and fiscal deficits in some of the states still remain much too high and many of the poorer states have brought down their deficits by compressing developmental expenditures. Thus the attempt at macroeconomic stabilization may have been at the cost of economic growth and justice, particularly in the low-income states.

Table 2.1 Key Fiscal Deficits of All States

(Rs. Crore)

Year	Gross Fiscal Deficit	Revenue Deficit	Primary Deficit
1997-98	44200 (2.9)	16333 (1.1)	14087 (0.9)
1998-99	74254 (4.2)	43642 (2.5)	38381 (2.2)
1999-00	91480 (4.7)	53797 (2.7)	46309 (2.4)
2000-01	89532 (4.3)	53569 (2.5)	37830 (1.8)
2001-02	95994 (4.2)	59188 (2.6)	33488 (1.5)
2002-03	102123 (4.1)	55111 (2.2)	31981 (1.3)
2003-04	123070 (4.5)	61145 (2.2)	41306 (1.5)
2004-05	109257 (3.5)	36423 (1.2)	21268 (0.7)
2005-06	90084 (2.5)	7013 (0.2)	6060 (0.17)
2006-07 (RE)	113913 (2.7)	5566 (0.13)	18209 (0.44)
2007-08 (BE)	108323 (2.3)	11973 (0.25)	6648 (0.14)

Source: State Finances: A study of Budgets of 2007-08 (Figures in brackets are percentage to GDP)

Kerala

Overall Fiscal Position

2.3 The fiscal performance of the state has shown remarkable improvement in recent years aided mainly by better own revenue mobilization and improved fiscal management. (See Table 2.2)The fiscal deficit of the state was 4.11 per cent of the Gross State Domestic Product and the revenue deficit was 2.55 per cent in 2007-08. Both the above key deficit indicators for 2007-08 are lower than the estimates contained in the Medium Term Fiscal Policy Statement 2007-08. The fiscal deficit of the state relative to GSDP decreased from 4.44 per cent in 2004-05 to 4.11 percent in 2007-08 and further budgeted to decline to 3.41 percent in 2008-09(BE). Similarly the

revenue deficit of the state as percentage of GSDP was brought down from 3.66 percent in 2004-05 to 2.55 percent in 2007-08 and the same estimated for 2008-09 is 2.04 per cent only. However fiscal deficit, in absolute terms, increased from Rs 3821.87 crore in 2006-07 to Rs 6100.21 crore in 2007-08 The increase of fiscal deficit during the year was due to the implementation of pay commission recommendations, clearing up of arrears of social security pensions, contractor's work bills and significant increase in developmental spending.

Table 2.2 Major Deficit Indicators

(Rs. Crore)

Year	Revenu	e Deficit	Fiscal	Deficit	Primary Deficit		
1 ear	Amount	% toGSDP	Amount	% to SDP	Amount	% toGSDP	
1998-99	2029.96	3.61	3012.2	5.36	1565.94	2.78	
1999-00	3624.21	5.8	4534.56	7.25	2582.29	4.13	
2000-01	3147.06	4.51	3877.8	5.56	1620.20	2.32	
2001-02	2605.64	3.28	3269.4	4.12	779.94	0.98	
2002-03	4118.66	4.53	4990.04	5.49	2043.28	2.25	
2003-04	3680.30	3.59	5539.05	5.41	2210.75	2.16	
2004-05	3668.92	3.66	4451.90	4.44	839.36	0.84	
2005-06	3129.15	2.80	4181.72	3.70	382.00	0.30	
2006-07	2637.94	1.99	3821.87	2.88	+367.83	0.28	
2007-08	3784.84	2.55	6100.21	4.11	1770.56	1.19	
2008-09	3367.05	2.04	5625.66	3.41	481.58	0.29	
B.E							

Source: Finance department, Govt. of Kerala

2.4 The Balance from Current Revenue (BCR) deteriorated from Rs -711.61 crore in 2005-06 to Rs -2748.00 crore in 2007-08 and then estimated to improve to Rs -2010.21 crore in 2008-09. (See Table 2.3). This deterioration was mainly on account of an accounting change by which Plan Funds to Local Self Government Institutions are now given as Non Plan Revenue Grant, instead of Plan Grant which was the practice earlier. While the share of capital outlay on capital receipts has shown a steady improvement, fluctuation is seen in the case of Return on investment ratio over the years. The asset liability ratio has continued to remain unchanged since 2003-04.

Table 2.3
Financial Indicators for Government of Kerala

Particulars	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Balance of Current						
Revenue (BCR)	-1983.00	-1496.00	-711.61	-1332.00	-2748.00	-2010.21
(Rs in Crore)						
Interest Ratio	0.28	0.27	0.25	0.23	0.21	0.21
Capital Outlay/	0.12	0.15	0.17	0.22	0.24	0.26
Capital Receipt	0.12	0.13	0.17	0.22	0.24	0.20
Return of						
Investment ratio	0.009	0.013	0.008	0.013	0.011	0.014
Outstanding						
Guarantees/	1.18	0.91	0.78	0.52	0.39	NA
Revenue Receipt						
Assets/ Liabilities	0.4	0.4	0.4	0.40	NA	NA

Source: Finance department. Government of Kerala

Pattern of Revenue Receipts

2.5 Revenue Receipts consists of state's own revenue and central transfers in the form of shared taxes and grants for plan and non-plan purposes. The total revenue receipts of the State during the last decade is shown in Table 2.4. The total receipts is estimated to increase by Rs.3828.93 crore (18.14 %) in 2008-09 (BE) as against the increase of Rs. 3259.14 crore (16.06 %) in 2007-08.

Table 2.4 Revenue Receipt

(Rs. Crore)

					State's C)wn				
	State's ow	n Tax	State's ov	vn Non	Reven	ue	Share of C	entral	Total Re	venue
Year	Reven	ue	Tax Rev	venue	(2+4))	Taxes and Grants		(6+8)	
Tear		Grow	Amoun	Grow		Grow		Grow		Annual
	Amount	th	t	th	Amount	th	Amount	th	Amount	Growth
		rate		rate		rate		rate		rate
1	2	3	4	5	6	7	8	9	10	11
1997-98	4501.05	15.46	552.11	7.46	5053.16	14.52	2065.06	19.18	7118.22	15.84
1998-99	4649.56	3.30	557.66	1.01	5207.22	3.05	1990.9	-3.59	7198.12	1.12
1999-00	5193.51	11.70	530.71	-4.83	5724.21	9.93	2217.53	11.38	7941.75	10.33
2000-01	5870.26	13.03	659.09	24.19	6529.35	14.07	2201.51	-0.72	8730.86	9.94
2001-02	5923.42	0.91	543.38	17.56	6466.8	-0.96	2589.59	17.63	9056.39	3.73
2002-03	7302.54	23.28	681.26	25.37	7983.8	23.46	2653.58	2.47	10637.38	17.46
2003-04	8088.78	10.77	806.98	18.45	8895.76	11.42	2919.61	10.03	11815.37	11.07
2004-05	8963.65	10.82	819.08	1.50	9782.73	9.97	3717.75	27.34	13500.48	14.26
2005-06	9779.64	9.10	936.77	14.37	10716.41	9.54	4578.11	23.14	15294.52	13.30
2006-07	11941.82	22.11	937.57	0.09	12879.39	20.18	5307.23	15.93	18186.62	18.91
2007-08	13668.95	14.46	1209.55	29.01	14878.50	15.52	6228.29	17.35	21106.79	16.06
2008-09 BE	15780.85	15.45	1293.55	6.94	17074.40	14.76	7861.32	26.22	24935.72	18.14
AAGR 1997-98 to 2008-09		12.53		8.83		12.12		13.86		12.51

Source: Finance Department, Govt. of Kerala

2.6 The above Table shows that average annual growth rate of revenue receipts during the last decade is 12.51 per cent. The component wise average annual growth rates are: State's own tax revenue by 12.53 per cent, State's own non tax revenue by 8.83 per cent, share of central taxes and grants-in-aid by 13.86 per cent. The revenue receipt of the State increased from Rs. 7118.22 crore in 1997-98 to Rs. 24935.72 crore in 2008-09 (BE)

State's Own Tax Revenue

2.7 Growth rate in State's own tax revenue which was 14.46 percent in 2007-08 is estimated as 15.45 per cent in 2008-09 (BE) (see Table 2.5). The total own tax revenue realized during 2007-08 was Rs. 13668.95 crore and the budget estimate for 2008-09 is Rs 15780.85 crore. Sales tax was the major source of State's own tax revenue during 2007-08 having contributed Rs. 9371.76 crore (68.56 percent) followed by stamps and registration fees Rs. 2027.97 crore (14.84 per cent). State excise accounted for Rs. 1169.25 crore (8.55 per cent), motor vehicle tax for Rs. 853.17 core (6.24 percent) and Land revenue for Rs. 47.21 crore (0.35 per cent),. All components of own tax revenue registered an increase during 2007-08 compared to the previous year. The

highest growth rate was achieved by stamps and registration fees (33.43%) followed by tax on motor vehicles (20.55%).

Table 2.5 State's Own Tax Revenue

(Rs. Crore)

Year	Land Revenu e	Stamps and Registration fees	State Excise Duties	Sales tax	Motor vehicles tax	Others	Total	Annual Growth rate
1997-98	23.75	331.36	543.41	3084.09	301.63	216.81	4501.05	15.46
1998-99	32.73	301.15	529.62	3366.62	323.31	96.13	4649.56	3.30
1999-00	34.67	279.65	591.10	3853.54	380.83	53.72	5193.51	11.70
2000-01	39.35	341.10	688.94	4344.33	394.85	61.69	5870.26	13.03
2001-02	34.93	394.28	541.46	4440.85	452.18	59.72	5923.42	0.91
2002-03	38.40	486.53	663.07	5343.15	513.20	258.20	7302.55	23.28
2003-04	40.59	549.81	655.91	5991.43	585.78	265.26	8088.78	10.77
2004-05	43.85	775.35	746.45	6701.05	610.48	86.47	8963.65	10.82
2005-06	43.88	1101.42	841.00	7037.97	628.51	126.86	9779.64	9.10
2006-07	47.01	1519.93	953.07	8563.31	707.74	150.76	11941.82	22.11
2007-08	47.21	2027.97	1169.25	9371.76	853.17	199.59	13668.95	14.46
2008-09 BE	84.13	2420.56	1299.85	10616.39	1008.64	351.28	15780.85	15.45
AAGR from 1997-98 to 2008-09	13.57	18.62	10.76	11.96	12.60	-	-	12.53

Source: Finance Department, Govt. of Kerala

2.8 The annual average growth rate of State's own tax revenue during the period 1997-98 to 2008-09 was 12.53 percent, 13.57 percent for land revenue, 18.62 per cent for stamps and registration fees, 10.76 percent for state excise duty, 11.96 per cent for sales tax and 12.60 per cent for motor vehicle tax.

State's Own Non-Tax Revenue

2.9 State's own non-tax revenue constitutes on an average only 7 percent of state's own revenue. The component-wise details of non-tax revenue receipt from 1997-98 to 2008-09 are shown in Table 2.6. Remarkable increase of 29 percent was shown in the non tax revenue mobilization during 2007-08 over the previous year ie. from Rs. 937.57 crores in 2006-07 to Rs. 1209.55 crore in 2007-08. Budget estimate for 2008-09 envisages the non-tax revenue to increase to Rs. 1293.55 crore (an increase of 7 per cent). The revenue from major components of non-tax revenue, except the revenue from forest, has increased during 2007-08 over the previous year. The Revenue from forest was Rs. 174.56 crore during 2006-07 and the same fell to Rs. 154.45 crore in 2007-08. The revenue from debt services also increased from Rs. 44.63 crore in 2006-07 to Rs. 69.65 crore in 2007-08.

Table 2.6 State's Own Non-Tax Revenue

(Rs. Crore)

	For	rest	Debt S (inte	ervices rest)		velopment ices*	Oth	ners	То	tal
Year	Amount	Annual Growth rate	Amount	Annual Growth rate	Amount	Annual Growth rate	Amount	Annual Growth rate	Amount	Annual Growth rate
1997-98	144.91	-10.55	53.48	-4.04	106.73	23.67	246.99	17.74	552.11	7.46
1998-99	121.03	-16.48	70.96	32.69	122.66	14.93	243.01	-1.61	557.66	1.01
1999-00	109.88	-9.21	37.31	-47.42	118.41	-3.46	265.11	9.09	530.71	-4.83
2000-01	141.24	28.54	36.81	-1.34	165.07	39.36	315.97	19.18	659.09	24.18
2001-02	113.70	-19.50	31.08	-15.57	135.51	-17.88	263.09	-16.74	543.38	-17.55
2002-03	149.50	31.56	35.86	15.38	185.67	37.02	310.15	17.89	677.76	24.64
2003-04	187.18	25.14	32.40	-9.65	207.90	11.97	379.50	22.36	806.98	19.15
2004-05	199.69	6.68	40.51	25.03	209.85	0.94	369.03	-2.76	819.08	1.50
2005-06	189.63	-5.04	46.35	14.42	236.67	12.78	464.12	25.77	936.77	14.37
2006-07	174.56	-7.94	44.63	-3.71	242.26	2.36	476.12	2.59	937.57	0.09
2007-08	154.45	-11.52	69.65	56.06	369.76	52.61	615.60	29.30	1209.55	29.01
2008-09 BE	191.21	23.80	51.16	-26.55	310.45	-16.04	740.73	20.33	1293.55	6.90
AAGR from 1997-98 to 2008-09		2.96		2.94		13.19		11.93		8.83

Source: Finance Department, Govt. of Kerala

Table 2.7 Component-wise realisation of Own- Non Tax Revenue-Kerala & All States (Rs.Crore)

							(115.0	/
	2005-00	(RE)	2006-0	07 (BE)	2007-20	08 (RE)	2008-20	09 (BE)
Items	Kerala	All states	Kerala	All states	Kerala	All States	Kerala	All States
States Own-Non tax	889	46702	1113	53301	1084	NA	1294	NA
Revenue	(100)	(100)	(100)	(100)	(100)		(100)	
Interest receipts	36	9673	50	9724	48	NA	51	NA
_	(4.0)	(20.7)	(4.5)	(18.2)	(4.4)		(5.9)	
Dividend & Profit	31	413	40	307	33	NA	35	NA
	(3.5)	(0.9)	(3.6)	(0.6)	(3.0)		(2.7)	
General Services	332	12043	460	15157	519	NA	633	NA
	(37.4)	(25.8)	(41.3)	(28.4)	(47.9)		(48.9)	
(Of which) State	159	7864	251	10741	328	NA	420	NA
Lottories	(17.8)	(16.8)	(22.6)	(20.2)	(30.3)		(32.5)	
Social &	137	3239	163	3314	173	NA	197	NA
Community Service	(15.4)	(7.0)	(14.6)	(6.2)	(10.0)		(15.2)	
Economic Service	354	21329	400	24795	311	NA	377	NA
	(39.8)	(45.7)	(36.0)	(46.5)	(28.7)		(29.1)	
(Of which) Forestry	210	2174	250	2363	145	NA	191	NA
& Wild Life	(23.6)	(4.7)	(22.5)	(4.4)	(13.4)		(14.8)	

Source: State Finances: A study of Budgets of 2007-08

(Figures in brackets are percentage to State's own Non-Tax Revenue.)

^{*} It includes education, medical and public health, Agriculture, Rural Development, Animal Husbandry, Cooperation, Industries, Community Development and miscellaneous Social Development Organisation

- 2.10 Table 2.7 shows the changing pattern of non-tax revenue receipts of Kerala and all states from 2005-06 to 2008-09. Sectors like General Services and Economic Services continued to contribute the major share of own non-tax revenue of the state for 2007-08 also. These two sectors together account for more than three fourth of the own-non tax revenue. The contribution of state lotteries to the state was about 30 per cent of the total non-tax revenue collected during 2007-08. The share of dividend and profit recorded a slight increase over 2005-06. Interest receipts also increased consecutively.
- 2.11 A comparative position of non-tax revenue in the four neighboring states during 2007-08 is shown in Table 2.8. The non-tax revenue realized by Andhra Pradesh, Karnataka and Tamil Nadu are 12.34 per cent, 2.86 per cent and 6.59 percent respectively of their total revenue expenditure whereas the same realized by Kerala is only 4.86 percent. While the ratios of non-tax revenue to revenue receipts for Andhra Pradesh, Karnataka and Tamil Nadu are 12.24 per cent 2.65 per cent and 6.46 percent respectively, the same for Kerala is only 5.73 per cent.

Table 2.8
Comparative Position of States Own Non-Tax Revenue in Neighbouring
States: 2007-08 (Rs. Crore)

	D 4444 4 5 4 5 5 6 5 6 5 6 5 6 5 6 5 6 5		(=-	DI 01010)
Items	Andhra Pradesh	Karnataka	Tamil Nadu	Kerala
Own Non tax Revenue	6872	1082	3004	1210
Revenue Expenditure	55675	37859	45601	24892
Revenue Receipts	56126	40840	46516	21107
NTR/RE	12.34	2.86	6.59	4.86
NTR/RR	12.24	2.65	6.46	5.73

Source: State Finances: A study of Budgets of 2007-08, Finance Department, Govt. of Kerala

Central Transfers

- 2.12 The main components of central transfers to the state are tax devolution and grants. The central transfers to Kerala during the period from 1997-98 to 2008-09 is shown in Table 2.9. The growth rate in central transfers to Kerala continue to fluctuate throughout the years since 1997-98. The annual growth rate of total transfers to the state for the year 1997-98 was 19.18 percent but declined to 2.47 per cent in 2002-03. During the period 2004-05, the growth rate was 27.34 per cent and again declined to 15.93 per cent in 2006-07. The budget estimate for 2008-09 shows an increase of 26.22 per cent in central transfers to the state.
- 2.13 The total transfers to Kerala during 2007-08 was Rs. 6228.29 crore as against Rs. 5307.23 crore received in 2006-07. An amount of Rs. 123.19 crore was received as compensation towards shortfall in VAT collection of the state during 2007-08. Out of the total transfers for 2007-08, Rs. 4051.70 crore was the state share in central taxes and Rs. 2176.59 crore was grant-in-aid and other receipts from central Government for plan and non-plan purposes. The average annual growth rate of central transfers from 1997-98 to 2008-09 is 13.86 per cent.

Table 2.9 Central Transfers: 1997-98 to 2008-09

(Rs.Crore)

Year		entral taxes & uties	receipts fro	nid and other om Centre for Non-Plan	Total T	Transfers
Teat	Amount	Annual Growth rate	Amount	Annual Growth rate	Amount	Annual Growth rate
1997-98	1271.74	2.34	793.32	61.85	2065.06	19.18
1998-99	1382.30	8.69	608.60	-23.28	1990.90	-3.59
1999-00	1535.22	11.06	682.31	12.11	2217.53	11.38
2000-01	1585.61	3.28	615.90	-9.73	2201.51	-0.72
2001-02	1614.26	1.81	975.33	58.36	2589.59	17.62
2002-03	1715.21	6.25	938.37	-3.79	2653.58	2.47
2003-04	2012.00	17.31	907.61	-3.28	2919.61	10.03
2004-05	2404.95	19.53	1312.80	44.64	3717.75	27.34
2005-06	2517.18	4.67	2060.93	57.00	4578.11	23.14
2006-07	3212.00	27.60	2095.23	1.66	5307.23	15.93
2007-08	4051.70	26.14	2176.59	3.88	6228.29	17.35
2008-09 BE	4710.54	16.26	3150.79	44.76	7861.33	26.22
AAGR from 1997-98 to 2008- 09		12.08		20.35		13.86

Source: Finance Department, Govt. of Kerala

2.14 Central transfers in Kerala and neighboring states during 2007-08 is compared in Table 2.10. Kerala's position is the lowest in terms of total transfers as it is only 2.35 per cent of total central transfers. Andhra Pradesh is at the top position getting 6.54 per cent of the total transfers followed by Karnataka (4.33 per cent) and Tamil Nadu (5.23 per cent).

Table 2.10 Comparative Position of Central Transfers to Neighbouring States (Rs. Crore)

	2007-08								
State	Share of Central Taxes	Grant from Centre	Total Amount	%					
Andhra Pradesh	10498	7355	17853	6.54					
Karnataka	6300	5520	11820	4.33					
Tamil Nadu	8066	6199	14265	5.23					
Kerala	3992	2424	6416	2.35					
All States	148134	124638	272772	100.00					

Source: State Finances: A study of Budgets of 2007-08

Expenditure Pattern

Revenue Expenditure

2.15 Annual average growth rate of revenue expenditure in the State was 13.01 percent during the period from 1997-98 to 2008-09 BE (see Table 2.11). At the same time revenue receipts have increased by 12.51 per cent only. The revenue expenditure during 2007-08 was Rs. 24891.64 crore higher by Rs. 4067.07 crore over the corresponding figure for 2006-07 registering a growth rate of 19.53 per cent. The budget estimate for the period 2008-09 shows an increase in revenue expenditure by Rs. 3411.13 crore over 2007-08; growth at a rate of 13.70 per cent. The share of development expenditure to total expenditure increased from 43.12 percent in 2007-08 to 47.05 in 2008-09(BE). During the year 2008-09 the non development expenditure is estimated to decline to 52.95 percent from 56.88 percent in 2007-08 to total expenditure.

Table 2.11
Trend in Revenue Expenditure

(Rs.Crore)

	Total Ro Expend		Developme	ent Expenditure		evelopment penditure
Year	Amount	Annual Growth rate	Amount	% to total Revenue expenditure	Amount	% to total Revenue expenditure
1997-98	8241.12	21.41	5031.26	61.05	3209.86	38.95
1998-99	9228.08	11.98	5642.03	61.14	3586.05	38.86
1999-00	11565.96	25.33	6510.24	56.29	5055.72	43.71
2000-01	11877.92	2.69	6396.50	53.85	5481.42	46.15
2001-02	11662.03	-1.18	6028.34	51.69	5633.69	48.31
2002-03	14756.05	26.53	8064.80	54.65	6691.25	45.35
2003-04	15495.67	5.01	8061.94	52.03	7433.73	47.97
2004-05	17169.41	10.80	9244.45	53.84	7924.95	46.16
2005-06	18423.68	7.30	9757.79	52.96	8665.79	47.04
2006-07	20824.57	13.03	9283.26	44.58	11541.31	55.42
2007-08	24891.64	19.53	10732.15	43.12	14159.49	56.88
2008-09 (BE)	28302.77	13.70	13316.21	47.05	14986.56	52.95
AAGR from 1997- 98 to 2008-09		13.01				

Source: Finance Department, Govt. of Kerala

2.16 The trend in revenue expenditure in the state is given in Table 2.12. The revenue expenditure during 2007-08 was Rs.24892 crore which is 91.31 per cent of the total expenditure and the growth rate in revenue expenditure is 19.53 per cent over the previous year. The increase in revenue expenditure during the year was mainly due to the increase in expenditure on pension (Rs.1629.95 crore), education (Rs.611.94 crore), interest payment (Rs.139.95 crore) and health (Rs.114.14 crore), etc. over the previous year.

Table 2.12 Revenue Expenditure: 1997-98 to 2008-09

(Rs. In Crore)

		De	velopment l	Expenditur	е			Non Dev	elopment Exp	penditure	
Year	Education	Health	Agri. AH & Co-op	Industrie s, Labour & Employ ment	Others	Total	Interest Payments	Pension	Others	Total	Total Revenue Expenditur e
1997-98	1761.05	634.12	575.65	214.61	1845.83	5031.26	1286.09	913.02	1010.75	3209.86	8241.12
1998-99	1957.90	694.86	615.43	191.75	2182.09	5642.03	1446.26	1154.32	985.47	3586.05	9228.08
1999-00	2609.49	870.38	643.67	216.87	2169.83	6510.24	1952.27	1808.29	1295.16	5055.72	11565.96
2000-01	2620.24	837.04	594.69	178.34	2166.19	6396.5	2257.60	1929.48	1294.34	5481.42	11877.92
2001-02	2471.00	861.21	487.57	176.36	2032.20	6028.34	2489.47	1837.93	1306.29	5633.69	11662.03
2002-03	2967.56	954.78	594.50	197.58	3350.38	8064.80	2946.77	2282.9	1461.58	6691.25	14756.05
2003-04	3080.12	1062.00	498.38	283.12	3138.32	8061.94	3328.30	2408.83	1696.60	7433.73	15495.67
2004-05	3254.19	1153.76	623.93	367.10	3845.48	9244.46	3612.54	2600.77	1711.64	7924.95	17169.41
2005-06	3456.85	1165.73	730.54	306.34	4098.43	9757.89	3929.84	2861.18	1874.77	8665.79	18423.68
2006-07	3917.10	1334.17	959.38	358.95	2713.66	9283.26	4189.70	3294.58	4057.03	11541.31	20824.57
2007-08	4529.04	1448.31	927.90	340.16	3486.74	10732.15	4329.65	4924.53	4905.31	14159.50	24891.60
2008-09 B.E	5526.13	2036.94	1127.10	418.12	4207.97	13316.21	5144.08	4569.03	5273.45	14986.60	28302.80
AAGR from 1997-98 to 2008-09	11.24	13.31	8.72	10.46	16.62	11.40	13.94	17.57	18.07	22.06	12.96

Source: Finance department, Govt. of Kerala

Capital Expenditure

2.17 The capital expenditure in the state has shown a substantial upward revision since 2004-05. The ratio of capital expenditure to total expenditure which was 3.78 per cent in 2004-05 gradually increased to reach 5.67 per cent in 2006-07 and further to 8.69 per cent in 2007-08. In the budget estimate for 2008-09, this ratio is estimated to be 7.62 per cent. The capital expenditure which was in the range of less than 1 per cent of GSDP till recently has witnessed substantial rise to the level of 1.6 per cent of GSDP in 2007-08. The details of capital expenditure in the state during the period from 1997-98 to 2008-09 are given in Table 2.13 and 2.14.

Table 2.13 Capital Expenditure and Total Expenditure : 1997 to 2008-09

(Rs.crore)

	Capital E	xpenditure	Total Ex	penditure	Capital
Year	Amount	Annual Growth Rate	Amount	Annual Growth Rate	expenditure as % to total expenditure
1997-98	738.87	18.69	8979.96	21.18	8.23
1998-99	651.63	-11.81	9879.96	10.02	6.60
1999-00	648.18	-0.53	12214.14	23.63	5.31
2000-01	577.20	-10.95	12455.11	1.97	4.63
2001-02	558.36	-3.26	12220.39	-1.88	4.57
2002-03	698.66	25.13	15704.72	26.47	4.52
2003-04	639.71	-8.44	17427.32	4.40	3.96
2004-05	681.75	6.57	18047.62	3.56	3.78
2005-06	816.95	19.83	19471.30	7.89	4.19
2006-07	1251.97	53.25	22076.53	13.38	5.67
2007-08	2367.74	89.12	27259.38	23.48	8.69
2008-09 BE	2334.03	-1.42	30636.80	12.39	7.62
AAGR from 1997-98 to 2008-09		14.92		12.21	

Source: Finance Department, Govt. of Kerala

Non-Plan Expenditure - Interest, Pension and Salary

2.18 Interest, pension and salary are the major items coming under non-plan/non-developmental expenditure of the state. During the period 2007-08, the above three commitments accounted for about 80.29 per cent of the total revenue receipt of the state where as it was 77.7 per cent in 2006-07. The rate of growth of interest during 2007-08 over the previous year was 3.30 per cent. Pension payment has grown at an alarming rate of 49.5 per cent and salary at a rate of 16.80 per cent in 2007-08 over the previous year. The total commitment on interest, pension and salary which was 70.3 per cent of the revenue receipts and 60.7 per cent of revenue expenditure in 1997-98 gradually increased and reached at a level of 80.29 per cent of revenue receipts and 68.08 per cent of revenue expenditure in 2007-08. The budget estimate for 2008-09 shows that these commitments amount to 75.93 per cent of revenue receipts and 66.90 per cent of revenue expenditure as shown in Table 2.15.

Table 2.14 Sector wise Capital Expenditure : 1997-98 to 2008-09

(Rs.Crore)

			Agricultu									
Year	Irrigation	Growth rate	re & Allied services	Growth rate	Industrie s	Growth rate	Public works	Growth rate	Others	Growth rate	Total	Growth rate
1997-98	188.29	0.37	53.57	4.75	106.11	-4.14	236.04	51.65	154.86	31.84	738.87	18.69
1998-99	177.76	-5.59	40.57	-24.27	80.06	-24.55	182.68	-22.61	170.56	10.14	651.63	-11.81
1999-00	169.57	-4.61	54.67	34.75	68.79	-14.08	241.96	32.45	113.19	-33.64	648.18	-0.53
2000-01	154.50	-8.89	36.59	-32.89	58.20	-15.39	187.99	-22.31	139.92	23.72	577.20	-10.95
2001-02	147.21	-4.72	29.18	-20.47	30.24	-48.04	222.13	18.16	129.60	-7.31	558.36	-3.26
2002-03	132.32	-10.11	44.95	54.04	33.09	9.42	287.42	29.39	200.88	55.00	698.66	25.13
2003-04	159.20	20.31	35.44	-21.16	30.55	-7.68	272.73	-5.11	141.79	-29.42	639.71	-8.44
2004-05	175.18	10.04	33.19	-6.35	74.53	143.96	260.34	-4.54	138.51	-2.31	681.75	6.57
2005-06	208.37	18.95	36.91	41.58	31.24	-58.08	352.54	35.41	187.89	29.02	816.95	19.83
2006-07	156.64	-24.83	66.84	81.09	110.10	252.43	431.31	22.34	487.08	159.24	1251.97	53.25
2007-08	184.87	18.02	90.84	35.91	154.53	40.35	825.15	91.31	219.19	-54.10	1474.58	17.78
2008-09 BE	218.02	17.93	107.53	18.37	75.37	-51.26	653.73	-20.77	507.28	131.43	1561.93	5.92
AAGR from 1997-98 to 2008-09		2.24		13.78		18.58		17.11		26.13		9.35

Source: Finance Department, Govt. of Kerala

Table 2.15
Trend in Expenditure on Interest, Pension and Salary

(Rs.Crore)

	(Itoloro)											
		Interest			Pension			Salary			Total	
Year	Amount	% to revenue receipt	% to revenue expdr.	Amount	% to revenue receipt	% to revenue expdr.	Amount	% to revenue receipt	% to revenue expdr.	Amount	% to revenue receipt	% to revenue expdr.
1997-98	1286.10	18.1	15.6	913.00	12.8	11.1	2803.30	39.4	34.0	5002.40	70.3	60.7
1998-99	1446.30	20.1	15.7	1154.30	16.0	12.5	3254.70	45.2	35.3	5855.30	81.3	63.5
1999-00	1952.30	24.6	16.9	1808.30	22.8	15.6	4502.90	56.7	38.9	8263.50	104.1	71.4
2000-01	2257.60	25.9	19.0	1929.50	22.1	16.2	4491.60	51.4	37.8	8678.70	99.4	73.1
2001-02	2489.47	27.5	21.3	1837.90	20.3	15.8	4200.80	46.4	36.0	8528.20	94.2	73.1
2002-03	2946.77	27.7	20.0	2282.90	21.5	15.5	4678.99	44.0	31.7	9908.66	93.1	67.1
2003-04	3328.30	28.2	21.5	2408.83	20.4	15.5	5067.09	42.9	32.7	10804.22	91.4	69.7
2004-05	3612.54	26.8	21.0	2600.77	19.3	15.1	5345.58	39.5	31.1	11558.89	85.5	67.3
2005-06	3799.25	24.8	20.6	2861.18	18.7	15.5	5605.49	36.7	30.4	12265.92	80.2	66.6
2006-07	4189.70	23.04	20.1	3294.58	18.1	15.8	6644.48	36.5	31.9	14128.76	77.7	67.8
2007-08	4329.65	20.51	17.39	4924.53	23.34	19.80	7693.20	36.45	30.91	16947.38	80.29	68.08
2008-09 BE	5144.08	20.63	18.18	4569.03	18.32	16.14	9220.42	36.98	32.58	18933.53	75.93	66.90
AAGR from 1997-98 to 2008-09	13.18			17.62			11.59			12.38		

Source : Finance Department, Govt. of Kerala

Debt Profile

2.19 Debt liabilities of the state include borrowings on account of internal debt, treasury savings and provident fund and loans and advances from Government of India. The debt of the state increased from Rs. 12868.14 crore in 1997-98 to Rs. 61653 crore in 2008-09 (BE) (See Table 2.16).

Table 2.16
Debt of the State

(Rs. Crore)

Year	Internal Debt	Growth rate	Small Savings Provident Fund, Others	Growth rate	Loans and Advances from the Central Govt.	Growt h rate	Total	Growth rate
1997-98	3585.12	20.68	4292.51	11.86	4990.51	8.19	12868.14	12.67
1998-99	4424.36	23.41	5627.78	31.11	5648.13	13.18	15700.27	22.01
1999-00	5735.61	29.64	8537.67	51.71	5902.79	4.51	20176.10	28.51
2000-01	7627.34	32.98	10189.75	19.35	6101.88	3.37	23918.97	18.55
2001-02	9342.46	22.49	11261.65	10.52	6346.46	4.01	26950.57	12.67
2002-03	11747.02	25.74	12778.37	13.47	6534.88	2.97	31060.27	15.25
2003-04	17420.94	48.30	14403.33	12.72	5627.96	-13.88	37452.23	20.58
2004-05	21676.23	24.43	14790.83	2.69	5410.82	-3.86	41877.88	11.82
2005-06	25670.72	18.43	14840.93	0.34	5417.40	0.12	45929.05	9.67
2006-07	29969.15	16.74	14534.26	-2.07	5371.77	-0.84	49875.18	8.59
2007-08	34019	13.51	15858	9.10	5533	3.00	55410	11.10
2008-09 BE	38590	13.44	17135	8.05	5928	7.14	61653	11.27
AAGR from 1997-978 to 2008-09		24.15		14.07		2.32		15.22

Source: Finance Department, Govt. of Kerala

- 2.20 The debt burden of the State Government is a major concern. While in the past, a significant component of the debt burden went towards the financing of state plans; in recent times a substantial portion has to be used to bridge the gap between non-plan revenue receipts and expenditure. The Balance of Current Revenue (BCR) becomes negative on account of higher rate of growth on non-plan revenue expenditure over the rate of growth of revenue receipts and the plan size getting increased every year results in higher borrowing for financing the plan. The growth in debt which was 8.59 percent in 2006-07 increased to 11.10 per cent in 2007-08.
- 2.21 Internal debt continued to grow faster with an annual average growth rate of 24.15 percent during the period 1997-98 to 2008-09. But a down fall in the annual growth of rate of internal debt was shown during the period from 2004-05. A comparison of debt / GSDP ratio as well as percapita debt liability of Kerala's with neighbouring states and all states average can be seen in Table 2.17

Table 2.17 **Debt Position: Comparison with Other States**

~		Debt/0	GSDP Ra	tio(%)		Per Capita Debt (Rs)				
State	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Andhra Pradesh	28	31	32	34	33	5542	6420	7290	8427	9338
Karnataka	25	28	-	-	-	5707	5838	6587	7446	8555
Kerala	35	39	40	42	42	8388	9723	10922	12681	14358
Tamil Nadu	22	25	28	27	27	5211	6207	7382	7782	8605
All States	-	31	32	38	38	5639	6402	7405	8343	9176

Source: Budget in Brief, Govt. of Kerala 2007-08

- 2.22 The per capita debt of Kerala which was Rs. 8388 in 2002 increased to Rs. 14358 in 2006. The per capita debt of neighbouring states in 2006 next to Kerala was Andhra Pradesh (Rs. 9338) followed by Tamil Nadu (Rs. 8605) and Karnataka (Rs. 8555). When the debt/GSDP ratio of Kerala in 2006 was 42 per cent, that of neighbouring states and all states ranged between 27 per cent and 38 per cent.
- 2.23 The details of debt profile of the state is given Table 2.18. The gross retention (receipt minus disbursement) and net retention (gross retention minus interest) which were Rs. 3946.13 crore and Rs. -150.03 crore respectively in 2006-07 and increased to Rs. 5534.38 crore and Rs. 1204.01 crore in 2007-08. The budget estimate for 2008-09 shows the gross retention as Rs. 5919.31 crore and net retention as Rs. 775.23 crore.

Contingent Liabilities

2.24 Contingent liabilities also become the debt obligations of the state in the event of default by borrowing public sector units for which Government is a guarantor. The outstanding guarantees of the State Government from 1997-98 to 2008-09 are shown in Table 2.19. Over a decade, liability on account of guarantee increased. But from a peak of Rs.14009.18 crore in 2003-04, the outstanding liability on Government Guarantees declined to Rs. 8317.34 crore in 2007-08.

Table 2.18

Debt Profile of the State (1998-99 to 2008-09)

(Rs. Crore)

												(Rs. Crore)
Item		1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09 BE
Loans and	Receipts	869.59	1072.97	483.11	780.69	1192.86	968.17	1482.11	603.29	205.01	416.43	1218.08
advances	Disbursements	211.96	246.95	284.01	536.12	1004.44	1875.09	1699.25	596.71	250.64	255.57	618.86
from Government	Interest	606.54	703.74	732.26	778.56	805.02	809.92	671.60	412.50	432.73	429.48	468.47
of India	Gross Retention	657.63	826.02	199.10	244.57	188.42	-906.92	-217.14	6.58	-45.63	160.86	599.22
	Net Retention	51.09	122.28	-533.16	-533.99	-616.60	-1716.84	-888.74	-405.92	-478.36	-268.62	130.75
	Receipts	3875.61	6986.41	6295.44	5917.95	8147.87	7011.55	6317.80	6146.25	5838.15	6601.46	8184.39
Small Savings	Disbursements	2935.66	4981.87	5332.26	4830.22	6770.85	5824.84	6523.40	6381.50	6818.20	6404.44	8377.55
and Deposits	Interest	78.92	273.00	357.84	441.64	578.5	662.46	668.33	633.16	782.59	548.97	926.79
and 2 op cont	Gross Retention	939.95	2004.54	888.02	1087.73	1377.02	1186.71	-205.60	-235.25	-980.05	197.02	-193.16
	Net Retention	861.03	1731.54	530.18	646.09	798.52	524.25	-873.93	868.41	-1762.64	-351.95	-1119.95
	Receipts	1128.11	1731.92	1722.63	1268.51	1685.99	1761.58	1578.63	1595.75	2058.83	2821.66	3157.60
State	Disbursements	770.01	859.97	1033.71	1284.34	1546.29	1323.33	985.53	988.85	1385.45	1695.17	2014.07
Provident	Interest	276.32	364.19	391.02	290.03	375.98	353.86	449.14	537.74	500.67	624.21	656.03
Funds	Gross Retention	358.10	853.95	688.92	-15.83	139.70	438.25	593.10	606.9	673.38	1126.49	1143.53
	Net Retention	81.78	489.76	297.90	-305.86	-236.28	84.39	143.96	69.16	172.71	502.28	487.50
	Receipts	3101.91	4858.25	6975.36	7849.7	10518.26	14120.87	14442.36	11366.48	11577.39	12212.07	14242.73
	Disbursements	2262.67	4118.37	5083.63	6134.58	8113.70	8446.95	10187.07	7371.99	7278.96	8162.06	9873.01
Internal Debt	Interest	465.38	589.23	747.71	941.14	1140.29	1502.06	1823.45	2216.21	2380.17	2727.71	3092.79
	Gross Retention	839.24	739.88	1891.73	1715.12	2404.56	5673.92	4255.29	3994.49	4298.43	4050.01	4369.72
	Net Retention	373.86	150.65	1144.02	773.98	1264.27	4171.86	2431.84	1778.28	1918.26	1322.30	1276.93
	Receipts	8975.22	14631.55	15476.5	15816.85	21544.98	23862.17	23820.90	19711.77	19679.38	22051.62	26802.80
	Disbursements	6180.30	10207.16	11733.6	12785.26	17435.28	17470.21	19395.25	15339.05	15733.25	16517.24	20883.49
Total Debt	Interest	1427.16	1930.16	2228.83	2451.37	2899.79	3328.30	3612.52	3799.61	4096.16	4330.37	5144.08
	Gross Retention	2794.92	4424.39	3742.93	3031.59	4109.70	6391.96	4425.65	4372.72	3946.13	5534.38	5919.31
	Net Retention	1367.76	2494.23	1514.10	580.22	1209.91	3063.66	813.13	573.11	-150.03	1204.01	775.23

Source : Finance Department, Govt. of Kerala

Table 2.19 Outstanding Guarantees

(Rs. Crore)

Year	Maximum Amount	Amount Outstanding
	Guaranteed	_
1997-98	6656.89	3292.29
1998-99	9078.16	5112.96
1999-00	11431.59	7952.24
2000-01	12797.80	9553.17
2001-02	14222.46	11817.53
2002-03	14922.61	12623.88
2003-04	15612.67	14009.18
2004-05	14783.36	12315.96
2005-06	13751.80	11934.69
2006-07	12646.70	9405.33
2007-08	14871.08	8317.34
2008-09 BE	NA	NA

Source: Finance Department, Govt. of Kerala

2.25 In order to discourage guarantees to public sector undertakings and co-operatives for normal commercial operations that can be secured through appropriate arrangements by due diligence, 'the Kerala Ceiling on Government Guarantee Act, 2003 was enacted by government. As per the Act, the outstanding government guarantee as on the first day of April of every year shall not exceed Rs. 14,000 crore. The Government is encouraging the public sector units to secure loans on the strength of their mortgagable assets or through partial guarantees to achieve the objective of this Act.

CHAPTER 3

INCOME AND POPULATION

Global Scenario

First time in the last two and a half decades the world may face a decrease in the world growth rate and the trade pool. On the basis of a survey of 185 countries, the World Bank has estimated, in its report titled as World Economic Situation and Prospects that in the first half of 2009 unemployment would be the biggest problem before the world. In addition to this, ILO report entitled The Global Wage Report 2008-09 holds that difficult times lie ahead for the world's 1.5 billion wage earners. The report further states, "Slow or negative economic growth, combined with highly volatile food and energy prices, will erode the real wages of many workers, particularly the low-wage and poorer households. The middle classes will also be seriously affected". The report warns that tensions are likely to intensify over wages. Based on the latest IMF growth figures, the ILO forecasts that the global growth in real wages will at best reach 1.1 per cent in 2009, compared to 1.7 per cent in 2008, but wages are expected to decline in a large number of countries, including major economies.

- 3.2 In its gloomiest evaluation yet of the economic crisis, the IMF in its recent update of the World Economic Outlook, has said the global economy will grow at just 0.5 per cent in 2009, the slowest since the Second World War. The projected rate is 1.7 percentage points lower than what the IMF had forecast in November, 2008. The reasons for the growing pessimism are as oblivious as they are intractable. Financial markets remain under great stress, despite unprecedented policy measures undertaken by Governments and central banks worldwide. With the global economy taking a sharp turn for the worse, both output and trade are falling. If the IMF's prognosis proves right, it would come to a virtual halt during the later part of this year. Echoing the opinions of several world bodies, governments, and central banks, the IMF has said that a sustained economic recovery will not be possible until the banking sector is restructured and credit markets are unclogged.
- 3.3 The severity of the crisis is such that no country will be spared, The advanced economies will witness the biggest contraction in 60 years: in the IMF's view, the U.S. economy will shrink by 1.5 per cent, the euro zone by 2 per cent, and Japan by 2.5 per cent. Developing countries, though more resilient than before, will also suffer. During 2009, China will grow by 6.75 per cent, and India by 5 per cent, which is below the 7 per cent levels forecast by the RBI and other official bodies for 2008-09. Global recession continues to the worsen with out put and trade falling sharply during the last few months of 2008.
- 3.4 Government policies have failed to dispel uncertainty, which has resulted in households and business postponing expenditures and this in turn reduced the demand for consumer and capital goods. The IMF has recommended stronger policy actions to mend the financial sector and macroeconomic measures both monetary and fiscal to stimulate demand. Almost all countries have pursued these policies without being able to arrest the downturn. In the circumstances, the IMF's prescription of "a unified approach" to financial sector problems and "strengthening the fiscal framework" does not sound original but needs to be pursued by governments around the world.
- 3.5 The recently intensified credit crunch, slumping asset prices and increasingly tough employment conditions pose renewed downward risks to short-term but also long-term growth perspectives. It is still difficult to see through all the announced and implemented stabilization measures and gauge their impact on real economic activity. The recent economic dataflow suggests a very weak ending to this memorable year. Personal consumption decelerated sharply through the third

quarter and it is difficult to see a major support for households at this stage apart from lower energy prices. Unemployment is on the rise and not bound to reach a peak before mid 2009 at best.

- 3.6 As anticipated, the hysteria surrounding headline inflation rates during summer was seamlessly replaced by disinflation or even deflation debates. The October report on CPI will do anything but calm those speculations. On the contrary, we now gauge a monthly decline of 0.8% this month, basically driven by lower gasoline prices, which will cause the annual inflation rate to drop by more than one percentage point from 4.9% in September to 3.8% in October 2008.
- 3.7 Meanwhile, as on January 2009, oil prices falls below US\$42 a barrel in New York. There seems to be no way to arrest the falling price of oil. Indeed, nothing from Middle East upheaval to OPEC production cuts appears to be having any real effect on oil prices beyond brief, occasional bounces. The overriding factor affecting oil prices in commodities trading is the economy. The U.S. economy is one of the biggest factors, but the rest of the world is also sinking further into recession, and that means demand for oil on a consumer and industrial basis will be decreasing further.

National Scenario

- 3.8 India's Real GDP slips to 7.4% in the third quarter 2008-09 reflect the immediate impact of the Global Liquidity Crisis that erupted in late September 2008. Exports declined by 12.1 percent October and than again by 9.9 percent in November. It is also reported to have declined by 1.6 percent in December. The impact of the fall in export is reflected in the index of industrial production that declined by 0.3 percent in October than grow by a meager 2.4 percent in November. 2008. The collapse of the international financial markets in October dried up international trade finance. This led to the fall in exports the IIP and the movement of cargo. The industrial sector would see growth dropping sharply to 5.6 percent within the service sector we expect the trade and transport sectors to suffer a slowdown while the other sectors would continue to record growth rates.
- 3.9 The Economic Advisory Council of the Prime Minister of India submitted the second report on the 'Review of Indian Economy 2008 09 on Jan. 23. Executive Summary of the report accepts the impact of global economic and financial crisis in Indian economy when it reads as 'the direct impact of funding constraints on the investment plans of Indian corporates and hence on growth and job creation, together with the second order effects of this development, coupled with the compression in export markets and the second order effects on this count, are the two principal channels through which the impact of the global financial and economic crisis are being felt in India'. The summery further reads as 'India and perhaps China, would have a difficult time in the first part of the year, but should be able to show a pickup in growth in the last quarter of 2009.
- 3.10 The Council, vide its said report, expects that in the financial year 2009-10, the Indian economy is likely to remain relatively weak in the first quarter (April–June) and slowly pick up thereafter and the economy would show fairly strong recovery in growth in the second half of the fiscal year (Oct 2009 to Mar 2010) assuming some improvement in international economic and financial conditions. Overall, the Council assesses that growth in 2009-10 would be between 7.0 and 7.5 % or some what above that, with the first half of the year averaging growth close to 7.0 % and the second half an average growth of close to 7.5 % or higher.
- 3.11 The annual wholesale price index-based inflation has dipped to a ten month low of 5.07 percent in February,2009. Inflation almost halved from the peak of 12.91 percent five months ago as manufactured goods and some food items turned cheaper during the latest reported month. Besides, a cascading effect of cuts in fuel prices in early December also had a dampening effect on the headline inflation. The Centre had also cut retail prices of petrol by Rs. 5/- a litre and diesel by Rs.2 a litre on December 2008. Prices of fuel items are projected to headline by 3 percent and inflation in many groups of manufactured is projected to see a sharp fall. The average inflation during 2008-09 is projected as 8.6 percent as compared with 4.7 percent in 2007-08

- 3.12 As liquidity improved, interest rates eased in December 2008. Average prime lending rates as well as benchmark term security yields eased by upto 150 basis points while short term rates represented by T-bills plunged from over 7 per cent to under five per cent. Home loan rates on smaller loans particularly eased after a package was announced by PSU banks. Despite, rates too eased by 25-100 basis points over the past two months.
- 3.13 In the Agriculture sector, Rabi sowing is almost completed. Acreage till 2 January 2009 had reached 549.5 lakh hectares that was 95 per cent of the normal area sown and was 4.8 per cent higher than the sowing levels in the corresponding period a year ago. Acreage of all the rabi crops was higher. Wheat, the major rabi crop, is expected to witness another year of bumper production. Kharif season was satisfactory and rabi season is expected to be better than the kharif and rabi season of the previous year. Overall agricultural crop production is estimated by us to grow by 2.5 per cent during 2008-09.
- 3.14 After several months of decline, crude petroleum production showed a 0.5 per cent growth in November 2008. Coal production was up by 10.9 per cent in October 2008. During April October 2008 coal production clocked a growth of 8.4 per cent, Power generation grew by a lower rate of 2.7 per cent during April-November 2008.
- 3.15 Freight traffic of railways grew by 1.3 per cent in November 2008 after falling by 0.1 per cent in October 2008. The good performance in the earlier months resulted in 6.5 per cent growth during April-November 2008. Cargo traffic at major ports fell by 4.6 per cent in November 2008. During April-November 2008, the traffic was up by a lower rate of 3.9 per cent. We expect cargo traffic to grow by 3.5 per cent in 2008-09. Passenger traffic at all Indian airports fell for the fifth month in a row in October 2008. During April-October 2008, the decline was 3.4 per cent.
- 3.16 The poor export performance and the fall in automobile sales pushed the IIP down by 0.4 per cent in October 2008. While exports and automobile sales continued to fall in November 2008, early estimates released by a few automobile companies hinted at a poor performance in December 2008. Hence, we expect the industrial growth during both November and December 2008 to be dull. The government and the RBI announced stimulus packages in December 2008 and January 2009 to revive the economic growth. We expect this along with the low inflationary expectations to revive industrial growth in 2009-10. The growth in 2008-09, however, will remain subdued at 3.9 per cent.
- 3.17 The change in economic environment has adversely affected the plans of Indian corporates. During April-December 2008, projects worth Rs. 64,170 crore were shelved. This is the highest shelving in recent years. Fresh investment announcements by the private sector dipped by 23.5 per cent in the December 2008 quarter. However, the government compensated for it well, accelerating its fresh investments by 91.4 per cent.
- 3.18 The impact of the slowdown in exports and the crash in commodity prices is expected to have its impact on the financial performance of Corporate India in the December 2008 quarter. After growing by a record 34 per cent in the September 2008 quarter, the net sales growth of Corporate India is expected to decelerate to 20 per cent in the December 2008 quarter.
- 3.19 During April-November 2008, trade deficit was USD 84.6 billion a steep hike of 59 per cent when compared to the deficit of USD 53.2 billion during the same period of 2007. During 2008-09, we expect a deficit of USD 108 billion, 36 per cent higher than the previous year.
- 3.20 Erosion observed in forex reserves from USD 314 billion in April 2008 to USD 252 billion in October 2008 was said to be on account of intervention by the RBI in the forex markets to support the domestic currency from weakening further.

- 3.21 Indian rupee continues to stay weak. Since September 2008 Indian Rupee showed weakness, averaging at 49 to the US\$ in November and 48.6 in December 2008. The global financial turmoil leading to weakening of economic fundamentals shaved off more than 10K points during the year 2008. In January first week the BSC Sensex stood at more than 20 K as 20873 and we saw it slide since then to below 10K as 9300 in February 2009. The crises seem deeper than it appears and it may take a while to revive the confidence of the foreign investors in the Indian stocks. Markets continue to remain weak and volatile
- 3.22 Indian economy can't remain untouched by any economic turmoil in the rest of the world. The present economic slowdown in Indian economy also is an aftermath of the recession prevailing in almost all big economies of the world. Therefore, the conclusions made and inferences drawn by some big organizations like World Bank, IMF, National Association of Business Economists (of America) and ILO on the basis of extended survey and analysis of the world economies are not only applicable to Indian economy but they are believable, too, at least more than those drawn by national agencies like 'Economic Advisory Council of the Prime Minister of India' from their own national level surveys.

National Income

3.23 As per the statistics published by Central Statistical Organization the Revised Estimate of Gross Domestic Product (GDP) of India at factor cost at constant (1999-2000) prices for the year 2007-08 is estimated at Rs.3122862/- crores as against the quick estimate of GDP for the year 2006-07 of Rs. 2864310/- crore. This shows that the GDP in real terms could grow at a rate of 9% during 2007-08 compared to the growth at the rate of 9.6% during 2006-07. GDP at factor cost at current prices in the year 2007-08 is estimated at Rs.4303654 crore showing a growth rate of 13.6 percent over the quick estimate of GDP of Rs. 3790063 crore in 2006-07.

Table 3.1

National Product, Domestic Product & Per Capita Income at Factor Cost
(All India)

(Rs. Crores)

		At 1999-2000 Prices			At	Current Pr	ices
Sl. No	Item	2005-06	2006-07*	2007-08**	2005-06	2006-07*	2007-08**
1	Gross National Product (GNP)	2593160	2845156 (9.7)	3109361 (9.3)	3249554	3760285 (15.7)	4281795 (13.9)
2	Net National Product (NNP) (National Income)	2306894	2530495 (9.7)	2767682 (9.4)	2870750	3325817 (15.9)	3789482 (13.9)
3	Gross Domestic Product (GDP)	2612847	2864310 (9.6)	3122862 (9.0)	3275670	3790063 (15.7)	4303654 (13.6)
4	Net Domestic Product (NDP)	2326581	2549649 (9.6)	2781182 (9.1)	2896866	3355595 (15.8)	3811341 (13.6)
5	Per Capita NNP (Rs)	20858	22553 (8.1)	24321 (7.8)	25956	29642 (14.2)	33299 (12.3)

Note: The figures in Parenthesis show the percentage change over previous year.

*-Quick Estimate, **- Revised Estimate Source: Central Statistical Organisation.

- 3.24 The Revised Estimate of National Income (Net National Product at factor cost) at constant (1999-2000) prices is estimated at Rs. 2767682 crores during 2007-08 as against the previous years quick Estimate of Rs. 2530495 crore. In tems of growth rate, the National Income is estimated to rise by 9.4% during 2007-08 compared to the growth rate of 9.7% in 2006-07. At current prices the revised estimate of National Income at factor cost is 2007-08 is estimated Rs. 3789482 crore, showing a growth rate of 13.9% over the quick estimate of National Income for 2006-07 of Rs. 3325817 crore. (Table 3.1)
- 3.25 The details of GDP and National Income at current and constant (1999-2000) prices from 1999-2000 to 2007-08 with percentage change over previous year are given in Appendix 3.1 to 3.4

Per Capita National Income

- 3.25 The Per Capita Income in real terms (at 1999-2000 prices) during 2007-08 is estimated to attain a level of Rs. 24321 as compared to Quick Estimate for the year 2006-07 of Rs.22553. The growth rate in per capita income is estimated at 7.8% during 2007-08. The per capita income at current prices during 2007-08 is estimated to attain a level of Rs.33299 showing a rise of 12.3 percent as compared to the Quick Estimates for the yar 2006-07 of Rs. 29642
- 3.26 The sectoral distribution of GDP at constant (1999-2000) prices and current prices with percentage change over previous year is given in Table 3.2 and Table 3.3.

Table. 3.2 Sector wise Distribution of GDP at Factor Cost by Economic Activity- All India (At 1999-2000 prices)

(Rs. Crore)

Sl No	Industry	2005-06	2006-07 (Quick	2007-08 (Revised	Percentage change over previous year		
110			Estimate)	Estimate)	2006-07	2007-08	
1	Agriculture forestry & fishing	5,11,013	5,30,236	5,54,336	3.8	4.5	
2	Mining &quarrying	55,150	58,294	61,061	5.7	4.7	
3	Manufacturing	3,93,557	4,40,770	4,79,456	12.0	8.8	
4	Electricity, gas & water supply	57,309	60,737	64,544	6.0	6.3	
5	Construction	1,84,255	2,06,338	2,26,579	12.0	9.8	
6	Trade, hotels, transport and communication	6,86,738	7,67,884	8,60,212	11.8	12.0	
7	Financing, insurance, real estate & business services	3,59,942	4,10,030	4,58,364	13.9	11.8	
8	Community, Social & Personal services	3,64,883	3,90,020	4,18,307	6.9	7.3	
	GDP at factor cost	26,12,847	28,64,310	31,22,862	9.6	9.0	

Source: Central Statistical Organisation

3.27 A growth rate of 9 percent in GDP could be achieved during 2007-08 because of high growth in sectors like Trade, hotels, transport and communication (12%), financing, insurance, real estate and business services (11.8%), construction (9.8%), manufacturing (8.8%), community, social & personal services (7.3%) etc:

Table. 3.3 Sector wise Distribution of GDP at Factor Cost by Economic Activity-All India (At Current Prices)

(Rs. Crore)

Sl.			2006-07	2007-08	Percentage change over previous year		
No	Industry	2005-06	(Quick	(Revised			
110			Estimate)	Estimate)	2006-07	2007-08	
1	Agriculture forestry & fishing	615844	695423	764082	12.9	9.9	
2	Mining &quarrying	94153	101816	118712	8.1	16.6	
3	Manufacturing	519387	617954	705103	19.0	14.1	
4	Electricity, gas & water supply	64406	70563	75329	9.6	6.8	
5	Construction	264616	319497	366946	20.7	14.9	
6	Trade, hotels, transport and communication	815698	949469	1085468	16.4	14.3	
7	Financing, insurance, real estate & business services	452593	526755	614066	16.4	16.6	
8	Community, Social & Personal services	448972	508586	573948	13.3	12.9	
	GDP at factor cost	3275670	3790063	4303654	15.7	13.6	

Source: Central Statistical Organization

3.28 An analysis of percentage distribution of GDP shows that the contribution from primary sector to the GDP is decreasing and that from secondary and tertiary sector are increasing.

Table.3.4
Gross Domestic Product at Factor Cost by Economic Activity – Percentage Distribution (All India)

		At	1999-2000Pı	rices	A	t Current Pri	ces
Sl. No.	Industry of Origin	2005-06	2006-07 (Quick Estimate)	2007-08 (Revised Estimate)	2004-05	2006-07 (Quick Estimate)	2007-08 (Revised Estimate)
1	Agriculture, Forestry & Fishing	19.5	18.5	17.7	18.8	18.4	17.7
2	Mining & Quarrying	2.1	2.1	2.00	2.9	2.7	2.8
	Sub Total- Primary	21.6	20.6	19.7	21.7	21.1	20.5
3	Manufacturing	15.1	15.4	15.4	15.8	16.3	16.4
4	Electricity, Gas & Water Supply	2.2	2.1	2.1	2.00	1.8	1.8
5	Construction	7.1	7.2	7.3	8.1	8.4	8.5
	Sub Total-Secondary	24.4	24.7	24.8	25.9	26.5	26.7
6	Trade, Hotels, Transport and Communication	26.3	27.5	27.5	24.9	25.1	25.2
7	Financing. Insurance, Real Estimate & Business Services	13.7	14.7	14.7	13.8	13.9	14.3
8	Community. Social & Personal	14	13.6	13.3	13.7	13.4	13.3
	Sub Total- Tertiary	54.00	54.7	55.5	52.4	52.4	52.8
GDP		100	100	100	100	100	100

Source: Central Statistical Organisation.

3.29 The percentage distribution of GDP during 2007-08 at constant (1999-2000) of GDP prices shows that 27.5 percent of the GDP is from trade, hotels, transport and communication followed by Agriculture forestry and fishing (17.7 percent) and manufacturing (15.4 percent). At current prices the maximum contribution during 2007-08 is from trade, hotels, transport and communication (25.2 percent) followed by agriculture, forestry and fishing (17.7 percent) and manufacturing (16.4 percent) (Table 3.4).

State Income

3.30 As per the statistics published by Department of Economics and Statistics, the quick estimate of Gross State Domestic Product (GSDP) at factor cost at constant (1999-2000) prices is Rs.126452.68 crore during 2007-08 as against the provisional estimate of Rs. 114520.86 crore during 2006-07, registering a growth rate of 10.42 percent in 2007-08 compared to 11.1 percent in 2006-07 (Fig 3.1). At current prices the Gross State Domestic Product is estimated as Rs. 162414.79 crore (quick estimate) during 2007-08 as against the provisional estimate of Rs. 142470.04 crores during 2006-07. The growth rate at current prices is 14 percent in 2007-08 compared to 14.5 percent in 2006-07.

Growth Rate of GSDP at Constant (1999-2000) Prices - Kerala 11.1 12 9.97 9.17 10 7.30 Percentage 8 6.25 6 3.53 4 2 2000-01 2001-02 2002-03 2003-04 2004-05 2005-06 2006-07 2007-08 Year

Fig.3.1

Source: Department of Economics and Statistics

3.31 The quick estimate of Net State Domestic product (State income) at factor cost at constant (1999-2000) process is Rs. 111059.37 crore during 2007-08 compared to the provisional estimate of Rs. 100426.59 crore during 2006-07 recording a growth rate of 10.6 percent in 2007-08. At current prices the State income is estimated at Rs. 140889.06 crore (quick estimate) in 2007-08 compared to the provisional estimate of Rs.123365.55 crore during 2006-07. The growth rate of state income at current prices is 14.2 percent is 2007-08 compared to 14.7 percent in 2006-07 (Table 3.5)

Table 3.5
State Domestic Product and Per capita Income of Kerala

Sl.		In	ncome (Rs. Cro	Growth rate (Per cent)		
No	Item	2005-06	2006-07 (P)	2007-08(Q)	2006-07(P)	2007-08(Q)
1	2	3	4	5	6	7
1	Gross State Domestic Product a) At Constant (1999-2000) prices b) At Current prices	103080.56	114520.86	126452.68	11.1	10.4
		124389.42	142470.04	162414.79	14.5	14
2	Net State Domestic Product (State Income) a) At Constant (1999-2000) prices	90243.83	100426.59	111059.37	11.3	10.6
	b) At Current prices	107583.42	123365.55	140889.06	14.7	14.2
3	Per Capita State Income (Rs) a) At Constant (1999-2000) Prices	27220	30044	32961	10.4	9.7
	b) At Current Prices	32450	36907	41814	13.7	13.3

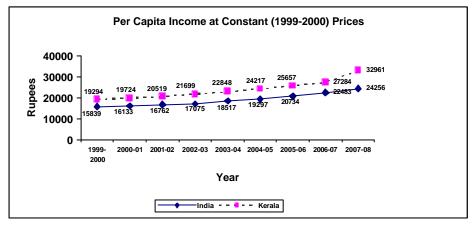
Source: Department of Economics and Statistics

P: Provisional, Q: Quick Estimate

Per capita State income

- 3.32 The per capita gross state domestic product at constant (1999-2000) prices during 2007-08 is Rs.37530 compared to Rs. 34261 during 2006-07. The growth rate in per capita GSDP is estimated at 9.5 percent during 2007-08. At current prices the per capita GSDP during 2007-08 is 48203 as against Rs.42623 during 2006-08 registering a growth rate of 13.1 percent.
- 3.33 The per capita state income at constant (1999-2000) prices increased from 30044 in 2006-07 to Rs.32961 in 2007-08, registering a growth rate of 9.7 percent. At current prices the per capita state income during 2007-08 is Rs 41814 as against Rs.36907 during 2006-07, recording a growth rate of 13.3 percent in 2007-08. The per capita state income is higher than the per capita national income(see fig.3.2)

Fig. 3.2

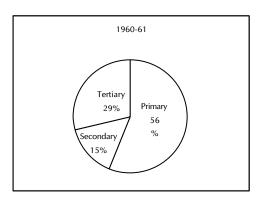


Source: Central Statistical Organization and Department of Economics and Statistics

Sectoral Distribution of Gross State Domestic Product

- 3.34 During 2007-08 the contribution from Primary, secondary and tertiary sectors to the GSDP at constant (1999-2000) prices constitutes 15%, 26.8% and 58.2 % respectively. At current prices the primary, secondary and tertiary sectors contribute 16.8%; 26.4% and 56.8 % respectively is the GSDP during 2007-08. while analysing the sectoral distribution of sate income it is seen that the contribution from primary sector is decreasing and secondary sector slightly increasing. But teritiary sector remains almost same level of about 58 percent. The details of sectoral distribution of GSDP with percentage during the last three years is given in Table 3.6.
- 3.35 Economic growth is directly linked with the department of territory sector. In the year 1960, the contribution from primary sector, secondary sector, and tertiary sector respectively as 56%, 15% and 29%. As compared to 2007-08 figurers, the contribution from tertiary sector increased from 29% to 57% and primary sector contribution decreased to 26% from 56% see Fig (3.3) and Fig (3.4)

Fig.3.3
Sectoral Distribution of GSDP - Kerala



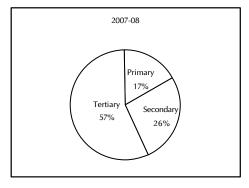
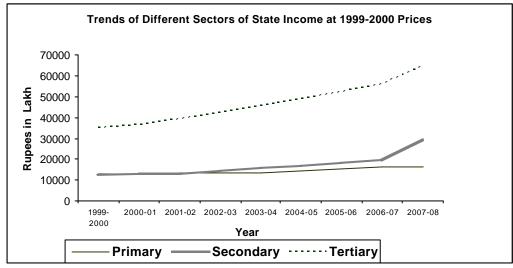


Fig.3.4



Source: Department of Economics and Statistics

Table 3.6: Sectoral share of Gross state Domestic Product (GSDP) at Factor Cost (2005-06 to 2007-08)

(Rs.Crore)

		At current Price				At Constant Prices							
		2005-0	-	2006-07(. /	2007-08	` •			2006-07(. /	2007-08	·
Sl.No	Industry of origin	GSDP	%	GSDP	%	GSDP	%	GSDP	%	GSDP	%	GSDP	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Agriculture & Allied activities	16990.22	13.5	19563.52	13.7	21652.38	13.3	14582.14	14.1	14975.75	13.1	15181.38	12
2	Forestry and Logging	1500.31	1.2	1682.05	1.2	1859.36	1.1	1271.47	1.2	1394.3	1.2	1459.81	1.2
3	Fishing	2481.96	2	2644.09	1.9	2729.42	1.7	1469.02	1.4	1549.3	1.4	1565.04	1.2
4	Mining and Quariying	702.54	0.6	819.02	0.6	1144.83	0.7	483.05	0.5	542.88	0.5	713.8	0.6
	Sub Total:Primary	21675.03	17.4	24708.68	17.3	27385.99	16.8	17805.68	17.3	18462.23	16.1	18920.03	15
5	Manufacturing	10095.04	8.1	11976.63	8.4	13724.95	8.5	8058.82	7.8	9143.67	8	10144.24	8
6	Elecricity gas & water supply	2422.61	1.9	2601.09	1.8	2820.14	1.7	1935.02	1.9	1986.62	1.7	2085.17	1.6
7	Construction	17353.14	13.9	21197.25	14.9	26282.94	16.2	14934.18	14.5	17702.57	15.5	21617.52	17.1
	Sub Total:Secondary	29870.79	24	35774.97	25.1	42828.03	26.4	24928.02	24.2	28832.86	25.2	33846.93	26.8
8	Transport storage & communication	12690.59	10.2	14124.12	9.9	15952.72	9.8	12366.32	12	13972.87	12.2	16203.28	12.8
9	Trade, Hotel & Restaurants	26051.53	20.9	29354.96	20.6	33256.39	20.5	20850.76	20.2	22981.95	20.1	25010.45	19.8
10	Banking and Insurance	6011.63	4.8	7117.24	5	8007.92	4.9	5324.33	5.2	6383.62	5.6	6683.42	5.3
11	Real Estate Ownership, Business, Legal	12450.38	10	14126.44	9.9	16215.57	10	9085.56	8.8	10234.05	8.9	11590.7	9.2
12	Public Administration	6120.7	4.9	7146.03	5	7828.36	4.8	4914.32	4.8	5615.3	4.9	5921.16	4.7
13	Other Services	9518.68	7.7	10117.6	7.1	10939.81	6.7	7805.57	7.6	8037.98	7	8276.71	6.5
	sub Total:Tertiary	72843.6	58.68	81986.39	57.6	92200.77	56.8	60346.86	58.5	67225.77	58.7	73685.72	58.2
	Total GSDP	124389.42	100	142470.04	100	162414.8	100	103080.6	100	114520.86	100	126452.7	100

Source: Department of Economics and Statistics

P: Provisional, Q: Quick Estimate

3.36 The analysis of annual sectoral growth rate of Gross State Domestic Product shows that followed by tertiary sector (12.5%) and primary sector (10.8%). At constant (1999-2000) prices, secondary sector recorded the highest rate of growth 19.7 per cent in 2007-08 at current prices the secondary sector recorded a growth rate of 17.4 per cent, tertiary sector 9.6 per cent and primary sector 2.5 per cent in 2007-08. (Table 3.7)

Table – 3.7 Sector wise Annual Growth Rate of GSDP- Kerala

		or wise rain			over Previo		
Sl.No	Industry Origin	At	Current Pr			nt (1999-20	000) Prices
		2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
			(P)	(Q) 5		(P)	(Q)
1	2	3	4	5	6	7	8
1	Agriculture &Allied Activities	12.5	15.2	10.7	3.5	2.7	1.4
2	Forestry & Logging	12.5	12.1	10.5	1.6	9.7	4.7
3	Fishing	36.8	6.5	3.2	-4.3	5.5	1.01
4	Mining &Quarrying	50.7	16.6	39.8	46	12.4	31.5
	Primary Sector	15.8	14	10.8	3.5	3.7	2.5
5	Manufacturing	10.6	18.6	14.6	6.9	13.5	10.9
6	Electricity, Gas & Water Supply	11.3	7.4	8.4	7.7	2.7	5
7	Construction	22.7	22.2	24.0	22.4	18.5	22
	Secondary Sector	17.4	19.8	19.7	15.8	15.7	17.4
8	Transport, Storage & Communication	7.5	11.3	13	9.7	13	16
19	Trade, Hotels & Restaurants	16.2	12.7	13.3	12	10.2	8.8
10	Banking, Insurance & Real Estate	-0.4	18.4	12.5	5.9	19.9	4.7
11	Real Estate ownership Business, legal	16.5	13.5	14.8	11.1	12.6	13.3
12	Public Administration and other services	3.5	16.8	9.6	1.1	14.3	5.5
13	Other Services	3.3	6.3	8.1	1.2	3	3
	Tertiary Sector	10.2	12.6	12.5	8.4	11.4	9.6
	GSDP	12.8	14.5	14	9.2	11.1	10.4

P: Provisional, Q: Quick Estimate

Source: - Department of Economics & Statistics

District-wise Gross State Domestic Product

3.37 District-wise distribution of Gross State Domestic Product at factor cost at current prices shows that Ernakulam District continues to have the highest income of Rs. 23324.68 crore in 2007-08 as against Rs. 20289.17 crore in 2006-07 registering a growth rate of 15 %. At constant (1999-2000) prices it comes to Rs. 18417.68 crore during 2007-08 compared to Rs. 16447.18 crore during 2006-07. Thiruvananthapuram District stands second with an income of Rs. 17525.35 crore in 2007-08 at current prices followed by Thrissur (Rs.15610.49 crore), Kozhikode (Rs. 14222.63 crore), Malappuram (Rs. 12771.25 crore) and Palakkad (Rs.12227.88 crore). The lowest income of Rs. 3633.99 crore was recorded in Wayanad District at current prices during 2007-08 preceded by Kasaragod (Rs. 5151.35 crore), Idukki (Rs. 6138.68 crore) and Pathanamthitta (Rs.6410.38 crore).

Table 3.8
District-wise Distribution of Gross State Domestic Product

(Rs. Crore)

	(Rs. Crore)							
		Gross Sta	ate Domestic	Product a	t Factor			
		1	Cos	st	!	Grow	th Rate	
		1				(%)		
Sl.NO						At	At	
1 '		1	1	1	I	1999-	Current	
1 '		1			= .	2000	Prices	
<u> </u>	District		000 Prices	At Curren		Prices		
l'	<u> </u>	2006-07	2007-08	2006-07	2007-08	2006-	2007-	
		(P)	(Q)	(P)	(Q)	07	08	
1	2	3	4	5	6	7	8	
1	Thiruvananthapuram	12427.19	13775.93	15376.66	17525.35	10.90	14.00	
2	Kollam	8477.65	9311.77	10667.27	12088.58	9.80	13.30	
3	Pathanamthitta	4624.27	5061.40	5657.85	6410.38	9.50	13.30	
4	Alappuzha	7137.55	7899.97	8954.97	10178.96	10.70	13.70	
5	Kottayam	8007.98	8784.35	9879.9	11221.18	9.70	13.60	
6	Idukki	4336.57	4652.40	5456.84	6138.68	7.30	12.50	
7	Eranakulam	16447.18	18417.68	20289.17	23324.68	12.00	15.00	
8	Thrissur	11054.31	12282.73	13663.3	15610.49	11.10	14.20	
9	Palakkad	8572.86	9411.10	10746.77	12227.88	9.80	13.80	
10	Malappuram	8930.43	9814.42	11210.03	12771.25	9.90	13.90	
11	Kozhikode	9943.08	11059.14	12418.2	14222.63	11.20	14.50	
12	Wayanad	2553.93	2737.82	3224.19	3633.99	7.20	12.70	
13	Kannur	8365.33	9250.82	10405.37	11909.38	10.60	15.50	
14	Kasaragod	3642.54	3993.17	4519.53	5151.35	9.60	14.00	
	GSDP	114520.86	126452.68	14240.04	162414.8	10.40	14.00	

P - Provisional, Q - Quick Estimate

Source: Department of Economics & Statistics

District-wise Per Capita Income

3.38 The analysis of district wise per capita income shows that Ernakulam district stands first with the per capita income of Rs.48835 at constant (1999-2000) prices in 2007-08 as against Rs.43894 in 2006-07. Kottayam District has the second largest per capita income of

Rs. 37638 in 2007-08 at constant prices followed by Pathanamthitta (Rs.35203), Idukki (Rs.34787), Thrissur (Rs.34750). and Thiruvananthapuram (Rs 34564). The lowest per capita income was recorded in Malappuram District (Rs.21685) in 2007-08 at constant prices preceded by Kasaragod (Rs.27584), Wayanad (Rs. 27924), and Palakkad (Rs.29574).

3.39 The highest rate of growth of per capita income at constant (1999-2000) prices of 11.3 % was recorded in Ernakulam District in 2007-08 followed by Kozhikode (10.5 %), Thrissur (10.4 %) and Alapuzha (10.3). The lowest growth rate was recorded in Wayanad District (6 %) preceded by idukki (7 %), Malappuram (8.4 %), Kasaragode (8.7 %) and Palakkad (8.9 %) The district wise per capita income with growth rate is given in Table 3.9.

Table 3.9
District-wise Per Capita Income at constant (1999-2000) Prices

Sl. No.		Pe	r Capita I	s.)			
						Growth 1	Rate (%)
						At	At
		A + 100	0.2000			1999-	Current
		At 1999 Pri		At Curre	nt Drigge	2000 Prices	Prices
		2006-	2007-	2006-	2007-	2006-	2007-08
		07	08	07	08	2000-	2007-08
	District	(P)	(Q)	(P)	(Q)	07	
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	31373	34564	38239	43328	10.2	13.3
2	Kollam	27485	30048	34196	38576	9.3	12.8
3	Pathanamthitta	32207	35203	38809	43931	9.3	13.2
4	Alappuzha	28803	31780	35746	40517	10.3	13.3
5	Kottayam	34462	37638	41906	47399	9.2	13.1
6	Idukki	32505	34787	40297	45231	7	12.2
7	Eranakulam	43894	48835	53378	60983	11.3	14.2
8	Thrissur	31464	34750	38430	43661	10.4	13.6
9	Palakkad	27144	29574	33561	37915	8.9	12.9
10	Malappuram	19998	21685	24837	27925	8.4	12.4
11	Kozhikode	29297	32375	36240	41249	10.5	13.8
12	Wayanad	26334	27924	32824	36593	6	11.5
13	Kannur	30044	33087	36972	42149	10.1	14
14	Kasaragod	25382	27584	31114	35158	8.7	13
	STATE	30044	32961	36907	41814	9.7	13.3

P: Provisional Q:Quick

Source: Department of Economics & Statistics

District-wise Sectoral Distribution of Gross State Domestic Product

3.40 District wise and sector-wise analysis of GSDP at constant (1999-2000) prices shows that the highest contribution from primary sector income of Rs. 1798.06 crore was in Malappuram district during 2007-08 followed by Idukki (Rs.1785.83 crore), Kollam (Rs.1676.47 crore) and Kottayam (Rs. 1653.95 crore). During 2007-08 the lowest primary sector income was in Alappuzha district (Rs.754.44 crore). The highest income from

secondary sector during 2007-08 was in Ernakulam district (Rs. 7586.87 crore) followed by Thiruvananthapuram (Rs. 3957.77 crore), Thrissur (Rs. 3447.92 crore) and Kozhikode (Rs. 3050.95 crore). Lowest secondary sector income was in Wayanad district (Rs. 351.25 crore). Regarding tertiary sector the highest income during 2007-08 was in Ernakulam district (Rs. 9405.21 crore) followed by Thiruvananthapuram (Rs.8586.17 crore), Thrissur (Rs. 7583.74 crore) and Kozhikode (Rs. 6690.34 crore). Lowest tertiary sector income was in Wayanad district (Rs. 1293.09 crore).

3.41 While analysing the growth rates, in primary sector it ranges between 3.7% in Kozhikode and Kannur districts and Thrissur 27%. Growth rate in secondary sector is lowest at 14.6% in Idukki, highest at 20.7% in Kasaragod. Growth rate in tertiary sector is between 9.1% in both Malapuram and 10.1% in Ernakulam district. The district wise details of sectoral GSDP and growth rate are presented in Table 3.10

Table 3.10
District wise and Sector-wise Distribution of Gross State Domestic product during 2007-2008 at constant (1999-2000) Prices (Quick Estimate)

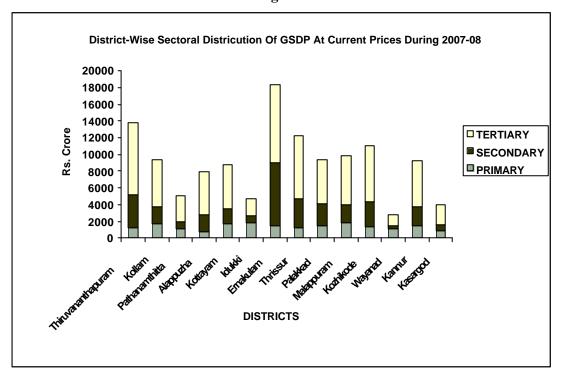
(Rs.Crore)

		Prim	ary	Secon	dary	Tert	tiary
			Annual Growth		Annual Growth		Annual Growth
Sl. No.	District	GSDP	Rate (%)	GSDP	Rate (%)	GSDP	Rate (%)
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	1231.99	2.3	3957.77	16.7	8586.17	9.6
2	Kollam	1676.47	2	2040.25	17.5	5595.05	9.7
3	Pathanamthitta	1110.85	2.3	880.03	18.2	3070.52	9.9
4	Alappuzha	754.44	2	2073.23	17.1	5072.3	9.6
5	Kottayam	1653.95	1.8	1863.24	17.3	5267.16	9.9
6	Idukki	1785.83	2.1	812.96	14.6	2053.61	9.3
7	Eranakulam	1425.59	2.5	7586.87	16.4	9405.21	10.1
8	Thrissur	1251.07	2.7	3447.92	17.7	7583.74	9.8
9	Palakkad	1440.35	2.5	2615.5	15.4	5355.25	9.3
10	Malappuram	1798.06	2.6	2208.31	19.1	5808.04	9.1
11	Kozhikode	1317.85	3.7	3050.95	19.2	6690.34	9.4
12	Wayanad	1093.48	1.9	351.25	18.4	1293.09	9.2
13	Kannur	1477.9	3.7	2247.36	19.4	5525.56	9.2
14	Kasaragod	902.2	2.6	711.29	20.7	2379.68	9.5
	State	18920.03	2.5	33846.93	17.4	73685.7	9.6

Source: Department of Economics and Statistics

3.42 District-wise sectoral distribution of Gross State Domestic Product from 2005-06 to 2007-08 at current and constant (1999-2000) prices are given in Appendices 3.9 to 3.14.

Fig: 3.5



Population

3.43 The World Population in 2005 is 646 crores and the population of India is 110 crore. India is the second most populous country in the world, sustaining 17 per cent of the world's population. Urban Rural distribution of World Population is given in Table 3.11

Table: 3.11
World Population – Urban and Rural

Particulars	Population in Crore							
Turuculur 5	1950	1975	2005	2030				
Urban Population	73	152	315	491				
Rural Population	179	256	331	329				
Total World Population	252	408	646	820				

Source: United Nations Department of Economic and Social Affairs.

Box No. 3.1

Urban dwellers represented 49 per cent of the global population in 2005 compared to 29 per cent in 1950. By 2008, half of the World's Population is projected to be Urban. (Population Newsletter by Unitted Nations Department of Economic and Social Affairs.)

3.44 The population of India as per 2001 Census was 102.7 crore comprising of 53.13 crore males and 49.57 crore females. Kerala's population as per Census 2001 was 318.41 lakh consisting of 154.69 lakh males and 163.72 lakh females. Kerala's share in the population of

India is 3.1%. In Kerala, 74% of the population lives in rural areas. Projected population of Kerala is 337 lakhs in 2006.

Decadal Growth of Population

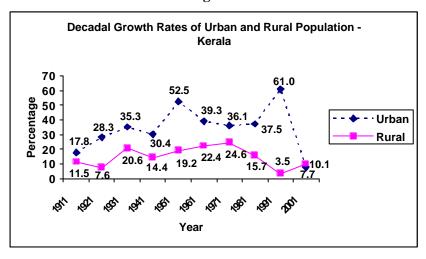
3.45 An analysis of the decadal growth rate of all India population shows that it increased from 1921 to 1981 and since then it started declining gradually. In Kerala the decadal growth rate had been at higher rate from 1941 to 1971 and since then growth rate has been declining. The details of decadal growth rate of population at All India and Kerala from 1901 to 2001 are given in Table 3.12. Fig 3.6 shows decadal growth rates of urban and rural population.

Table 3.12 Population and Its Growth from 1901 to 2001

		All	India			Ke	erala	
Census	Population (lakhs)			Decadal	Popu	ılation (la	khs)	Decadal
Year	Rural	Urban	Total	Growth Rate(%)	Rural	Urban	Total	Growth Rate(%)
1	2	3	4	5	6	7	8	9
1901	2125.4	258.5	2383.9	-	59.4	4.5	63.9	-
1911	2261.5	259.4	2520.9	5.75	66.2	5.3	71.5	11.75
1921	2232.3	280.9	2513.2	-0.31	71.2	6.8	78.0	9.16
1931	2455.2	334.6	2729.8	11.0	85.9	9.2	95.1	21.85
1941	2745.1	441.5	3186.6	14.22	98.3	12.0	110.3	16.04
1951	2986.5	624.4	3610.9	13.31	117.2	18.3	135.5	22.82
1961	3602.9	789.4	4392.3	21.64	143.5	25.5	169.0	24.76
1971	4390.5	1091.1	5481.6	24.8	178.8	34.7	213.5	26.69
1981	5238.7	1594.6	6833.3	24.66	206.8	47.7	254.5	19.24
1991	6286.9	2176.1	8463.0	23.86	214.1	76.8	290.9	14.32
2001	7416.6	2853.6	10270.2	21.34	235.7	82.7	318.4	9.42

Source: Census of India

Fig: 3.6



- 3.46 Among the Districts in Kerala, Malappuram has the highest population of 36.3 lakhs followed by Thiruvananthapuram (32.35 lakhs) and Ernakulam (30.98 lakhs). Wayanad is the lowest populated district in Kerala with a population of 7.87 lakhs preceded by Idukki (11.29 lakhs) and Kasaragod (12.03 lakhs). Among the districts, Pathanamthitta had the lowest decadal (1991-2001) growth rate of population of 3.72% and Malappuram the highest growth rate of 17.22%. All districts in Kerala showed a decrease in decadal growth rate (1991-2001) compared to 1981-1991 decade. Malappuram district achieved a deduction of about 11 points between the two decadal growth rates, which is the highest among the districts in Kerala.
- 3.47 The details of State-wise all India population and District-wise Kerala population are given in Appendices 3.15 and 3.16

Annual Growth Rate

- 3.48 The annual average growth of world population is 1.2 per cent in 2004 and it is 1.5 per cent in India (World Development Report 2006).
- 3.49 The average annual growth in population of Kerala during 1991-2001 was 0.91 per cent as against the average annual growth rate of 1.93 percent in India. In addition to achievements, such as low infant mortality rate and high life expectancy the population growth rate in the state remains the lowest in the country.
- 3.50 Kerala's Population consists of 82.96 lakhs in the age group 0·14, 201.82 lakhs in the age group 15-59 and 33.35 lakhs above the age of 60. Between 1991 and 2001, children in the age group 0·14 have declined by 4.24%. Population in the15-59 age group increased by 12.91% and people above 60 years increased by 30.22%. In Kerala when the number of children (0·14 years) decreased, their number increased over 22 per cent in India. The proportion of people in the working age group is 63.4% in Kerala as against 55.6% in India. This indicates very high potential for economic growth. The age group population in 2001 and their percentage distribution is given in Appendix 3.17.
- 3.51 The proportion of children (0-14) to the total population is 26.1 percent in Kerala, which is the lowest among the major states in India. In the proportion of people in the working age group (15-59) Kerala is second only to Tamil Nadu (63.7%). The proportion of population above 60 years in Kerala is 10.5 percent, which is the highest among the major states in India. Details of age group of population of India and Kerala are given in Table 3.13.

Population Density

- 3.52 The World Population Density in 2004 is 49 persons per sq.km. and it is 363 persons per sq. km. in India (World Development Report 2006). The density of population in low-income countries, middle-income countries and high-income countries are 80, 44 and 30 respectively. Higher population density puts greater pressure on infrastructure and environment but reduces the per capita costs of supply of public goods and services.
- 3.53 As per 2001 Census, the density of population for India as a whole is 324 persons per sq. km. where in Kerala it is 819 persons per sq. km. Among the Indian States, Kerala is in third position in respect of density, the first being West Bengal (904) and the second Bihar (880).

Table 3.13

Age Group Population of India & Kerala

Sl.		Populatio	n 1991	Populatio	on 2001	Growth 1	Rate (%)
No.	Age Group	India (crore)	Kerala (Lakhs)	India (crore)	Kerala (Lakhs)	India	Kerala
1	2	3	4	5	6	7	8
1	0-14	31.96 (37.76%)	86.64 (29.78%)	39 (37.3%)	82.96 (26.1%)	22.02	-4.24
2	15-59	47.03 (55.57%)	178.74 (61.42%)	57 (55.6%)	201.82 (63.4%)	21.19	12.91
3	60+	5.64 (6.66%)	25.61 (8.8%)	7 (6.7%)	33.35 (10.5%)	24.11	30.22
	Total	84.63 (100%)	290.99 (100%)	103 (100%)	318.41 (100%)	21.7	9.42

Source: Census of India

3.54 Among the Districts in Kerala, Alappuzha has the highest density with 1489 persons per sq. km. followed by Thiruvananthapuram with 1476 persons per sq. km. Idukki District has the lowest density of 252 persons per sq. km. Eight districts have densities higher than the State average and six Districts lower than the State average.

Sex Ratio

3.55 Kerala has a unique position in regard to sex ratio. In all the Censuses, females outnumbered males in Kerala, which is contrary to All India pattern. The sex ratio of Kerala has gradually increased from 1004 in 1901 to 1028 in 1951 and then to 1058 in 2001. The 2001 Census shows that Kerala is the only state in India where sex ratio is above the equality ratio and is a 100-year high with 1058 females per 1000 males. District-wise analysis shows that the highest sex ratio of 1094 is in Pathanamthitta District and the lowest in Idukki District with 993 females per 1000 males. Details of sex ratio for India and Kerala from 1951 to 2001 is given in Table 3.14

Table 3.14
Sex Ratio - India & Kerala(1951 to 2001)

Year	Sex Ratio				
i ear	India	Kerala			
1	2	3			
1951	946	1028			
1961	941	1022			
1971	930	1016			
1981	934	1032			
1991	927	1036			
2001	933	1058			

Source: Census of India 2001.

Ageing Population

- 3.56 The number of aged persons as a proportion of the total population has increased all over the world. The rate is more in developed countries as compared with developing countries. The increasing proportion of aged people is accompanied by a falling proportion of young persons. The average annual global growth rate of older population (60 +) is 1.9 percent, which is higher than the total population growth at 1.2 percent (2000-02). The average annual global growth rate of persons aged 80 years and above (3.8 per cent) is currently twice as high as the growth rate of the population over 60 years of age (1.9 percent).
- 3.57 India has the second largest number of elderly persons after China. India is home to 10 per cent of the total senior citizens of the world. There were about 4.3 crore elderly in 1981, comprising 6.5% of the population. Their number increased to 5.7 crore (6.7%) in 1991 and again increased to 7.0 crore (6.7%) in 2001. The proportion of elderly to total population in rural areas is higher than that in urban areas.
- 3.58 It is a noteworthy feature of Kerala that the percentage of aged population (above 60 years) is increasing fast. During 1961, the aged population constituted only 5.9% of the total population in Kerala. It increased to 6.2% in 1971, 7.5% in 1981, 8.8% in 1991 and to 10.5% in 2001. As per 2001 Census, the total number of old age persons was 33.36 lakhs.
- 3.59 In Kerala the highest percentage of old age population is in Alappuzha district followed by Ernakulam, Kottayam, Thrissur and Thiruvananthapuram. The lowest is in Kozhikode and Wayanad Districts.

CHAPTER 4

AGRICULTURE AND ALLIED SECTORS

The turmoil in the international markets of advanced economies that started around mid 2007 has exacerbated substantially since August 2008. The exports from the developing countries to developed countries are falling, capital is being withdrawn from emerging markets and short term credit is drying up. This could further trigger a fall in production and investment in the productive sector. The developing country GDP growth is projected to decline to 4.5 per cent in 2009, more than 3 percentage points below the average of the past five years and the overall global GDP is projected to decline to 0.9 percent in 2009.

- 4.2 There was a slowing down in agricultural growth in the country in 2008-09 at 2.9 per cent as compared to the growth of 4.5 percent in the corresponding period of the previous year. There has been a continuous decline in the share of agriculture in the GDP from 20.2 per cent in 2004-05 to 17.8 per cent in 2007-08, in the country. The current global financial crisis has important implications for the nature and effectiveness of the policy options available to the state.
- 4.3 The growth rate of agriculture and allied sectors was 1.95 per cent during Tenth Plan while the growth rate at the national level for agriculture and allied sectors was 2.5 per cent during the period. The growth rate of agricultural and allied sectors has declined in the first year of the Eleventh plan to 1.60 per cent from 3.40 per cent in 2006-07 in the state while the growth rate of the agriculture and allied sector at the country level declined to 2.6 per cent in 2007-08 from 3.8 per cent during 2006-07. Further decline in growth rate is expected during 2008-09.

Table 4.1
Growth Rate of GSDP at constant prices during Tenth Plan in Kerala (1999-00 prices) (2002-03 to 2006-07)

Sl.No.	Sector	Growth rate (%)
1	Agriculture	2.25
2	Forestry and logging	0.88
3	Fishing	0.19
4	Agriculture and allied sectors	1.95
5	Primary Sector	2.21
6	GSDP of the state	7.22

Source: Computed from the data published by DES

4.4 The quick estimate of agricultural income of the state recorded a growth of 1.37 per cent during 2007-08, being the lowest since 2004-05. The trends in agricultural income in Kerala during the last six years is shown in Table - 4.2. The provisional estimate for 2006-07 indicated an increase of 2.70 per cent in growth. The share of agriculture and allied sectors in GSDP indicated a continuous decline in the state. The share was only 14.40 per cent during 2007-08.

Table 4.2 Trends in Agricultural Income in Kerala (2002-03 to 2007-08)

Sl. No.	Year	Agricultural Income (Rs. in crores)	Rate of change over previous year	Agriculture and Allied Sectors (Rs. in crores)	Share of Agriculture and Allied Sectors in GSDP
1.	2002-03	13400	1.69	16269	20.13
2.	2003-04	13121	-2.08	16042	18.68
3.	2004-05	14092	7.40	16878	17.88
4	2005-06	14582	3.48	17323	16.80
5	2006-07 *	14976	2.70	17919	15.65
6	2007-08**	15181	1.37	18206	14.40

* Provisional ** Quick

Source: Directorate of Economics and Statistics

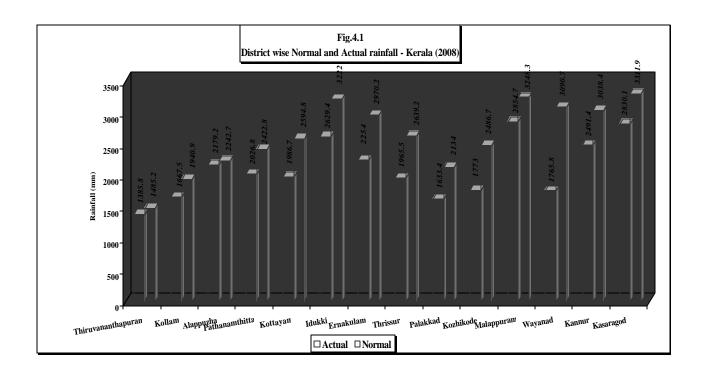
Rainfall

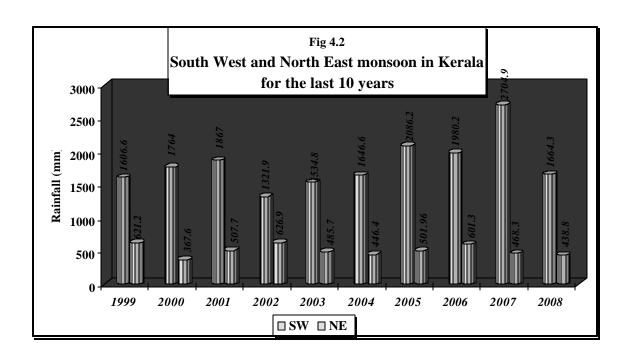
- 4.5 During the year 2008, the south west monsoon arrived over Kerala on May 31,2008, one day ahead of the normal date. In Kerala, the rainfall was 2103.1 mm in 2008, against the normal of 2630.6 mm. The highest departure from the normal in the last two decades was recorded during the Southwest Monsoon of 2002. The deviation in rainfall, apart from affecting production and productivity of annual crops, also affects the productivity of perennial crops such as coconut, rubber and pepper in the long run.
- 4.6 Deficient rainfall was recorded in 8 districts during South West Monsoon and excess rainfall in 3 districts during North East monsoon of 2008 in the State. (Appendix 4.4). Out of 516 meteorological districts for which data were available, 76 per cent of the meteorological districts received excess or normal rainfall and the remaining 24 per cent received deficient/ scanty rainfall during the south west monsoon.
- 4.7 The cumulative rainfall in the country during the South West Monsoon 2008 was near normal. Out of 36 meteorological subdivisions, 92% of the country's area comprising 32 meteorological subdivisions received excess/normal rainfall and the remaining 8% received deficient rainfall during the season. Details are shown in Table 4.3

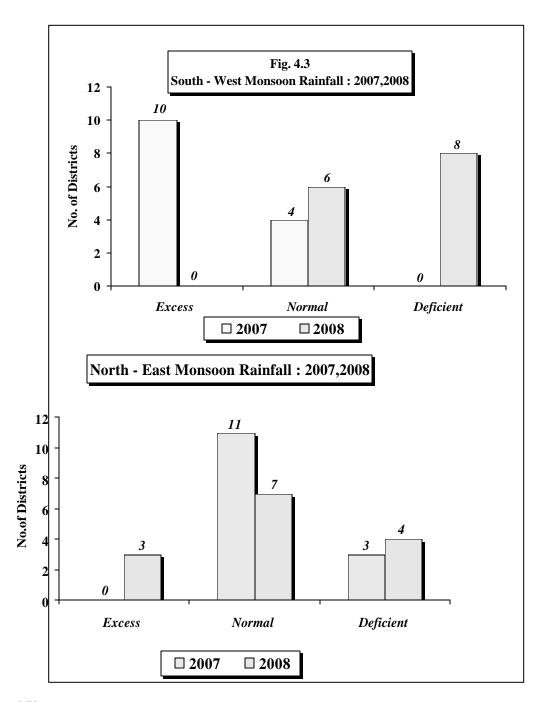
Table 4.3
Percentage Departure of Rainfall from Normal (2002 to 2008) in Kerala

Sl. No.	Year	Annual	South West Monsoon	North East Monsoon
1	2002	-14	-33	32
2	2003	-14	-24	5
3	2004	-3	-19	12
4	2005	0	-2	2
5	2006	-2	-7	22
6	2007	20	27	-5
7	2008	-20	-22	-11

Source: IMD website







Land Use

4.8 Data on land use pattern of Kerala for the year 2007-08 is given in Table 4.4. Out of a total geographical area of 38.86 lakh ha. net sown area is about 54 per cent. Forest occupies around 28 per cent. Agriculture and forest sectors together account for over 82 per cent of the land area. There was no perceptible improvement in the extent of land use for agriculture. Land under non-agricultural uses was 9.10 percent in 1999-00 and has increased to 11.55 per cent in 2007-08. There was an increase in the area under current fallow (1803 ha) and a decrease in the area under fallow other than current fallow (1500 ha) during 2007-08 over 2006-07. The area

under cultivable waste also increased by 805 ha. and barren and uncultivated land declined by 299 ha. The land use pattern in Kerala during 2007-08 are shown in Fig 4.4.

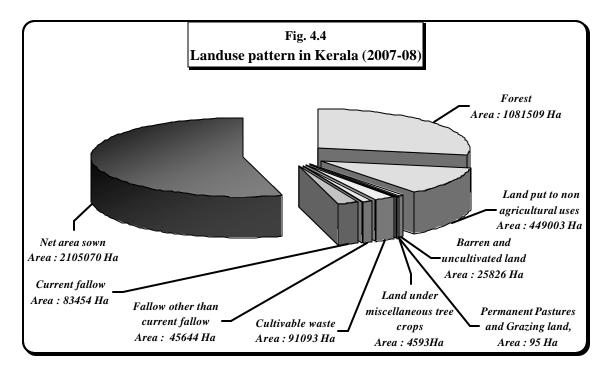


Table 4.4 Land use Pattern in Kerala

Sl. No.	Classification of Land	2006-07	2007- 08*	/ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Area between and 2007-08
NO.			Uo.	al Area	Actual	Percentage
1	Total Geographical Area	3886287	3886287		-	-
2	Forest	1081509	1081509	27.83	-	-
3	Land put to non agricultural uses	448879	449003	11.55	124	0.03
4	Barren and uncultivated land	26125	25826	0.66	- 299	-1.14
5	Permanent Pastures and Grazing land	301	95	0.002	-206	68.4
6	Land under miscellaneous tree crops	8959	4593	0.12	-4366	-48.73
7	Cultivable waste	90288	91093	2.34	805	0.89
8	Fallow other than current fallow	47144	45644	1.17	-1500	-3.18
9	Current fallow	81651	83454	2.15	1803	2.21
10	Net area sown	2101431	2105070	54.16	3639	0.17
11	Area sown more than once	816110	663667	17.08	-152443	-18.68
12	Total Cropped area	2917541	2768737	75.07	-148804	-5.10
13	Cropping intensity	138	131			

^{*} Provisional

Source: Directorate of Economics and Statistics

Trend in Area, Production and Productivity of Crops

4.9 Data regarding the area, production and productivity of important crops grown in Kerala are shown in Table 4.5 and Appendix 4.5. Out of a gross cropped area of 27.69 lakh ha. in 2007-08, food crops comprising rice, pulses, minor millets and tapioca occupy only 11.57 per cent. Kerala state which had a low base in food production is facing serious challenges in retaining even this meagre area. Kerala agricultural economy is undergoing structural transformation from the mid seventies by switching over a large proportion of its traditional crop area which was devoted to subsistence crops like rice and tapioca to more remunerative crops like coconut and rubber.

Table 4.5 Area, Production and Productivity of Principal crops

Sl. No	Crops	Area (ha) Production (MT)			Productivity (kg./Ha.)		
		2006-07	2007-08*	2006-07	2007-08*	2006-07	2007-08*
1	Rice	263529	228938	641575	528488	2435	2308
2	Pulses	6870	4478	5211	3399	759	759
3	Pepper	216709	215154	64264	63901	297	297
4	Ginger	11082	7308	42496	28026	3835	3835
5	Turmeric	3917	3167	9980	8070	2548	2548
6	Cardamom	41362	39763	8545	7030	207	177
7	Arecanut	102078	100731	109968	108487	1077	1077
8	Banana	59143	56489	463766	442930	7841	7841
9	Other Plantains	53096	49803	435636	408634	8205	8205
10	Cashewnut	70463	58183	61680	50910	875	875
11	Tapioca	87128	83336	2518999	2409327	28911	28911
12	Coconut **	872943	802330	6054	5564	6935	6935
13	Coffee	84571	84115	59475	48650	703	578
14	Tea	35365	36236	53659	61831	1517	1706
15	Rubber	502240	512045	780405	753000	1554	1471

^{**} Production million nuts and Productivity in nuts/ha.

Source: Directorate of Economics and Statistics

^{* 2007-08} figures are provisional except Paddy

- The area under rice has declined from 2.64 lakh ha. in 2006-07 to 2.29 lakh ha. in 2007-08. In the case of tapioca the area has declined from 0.87 lakh ha. to 0.83 lakh ha during this period. The area under commercial crops in general and rubber in particular has increased considerably during the last two decades. During Ninth plan average annual increase in area under rubber was 1951 ha while during 2007-08 area increased by 9805 ha compared to previous year and the increase was mainly due to upsurge in prices. The index of area, production, productivity of crops in Kerala for the year 2005-06 to 2007-08 with the base of triennium ending 1993-94 is shown in Appendix-4.6. The index of food grain production declined by 10.7 points and non-food grains declined by 6.84 points. Even though there was a decline of index of ron-food grain area, index of area under plantation crops increased by 1.83 points in 2007-08. While index of area of food grains declined by 6.47 points, productivity However non-food grains showed slight decline and the indices declined by increased by 6.18. 3.71, 6.84 and productivity declined by 2.56 respectively. The production of plantation crops showed decline during the year by 6.42 points. (Appendix-4.6)
- 4.11 In the case of coconut, area was at its peak during 2000-01. During the year 2007-08 area declined by 70613 ha. over 2006-07. Major commercial crops which had recorded expansion of area during 2007-08 from previous year include rubber (9805 ha) and Tea (871 ha). The major crops with considerable loss in area include cashewnut (12280 ha) ginger (3774 ha) Pepper (1555 ha) Arecanut (1347 ha), Banana (2654 ha), Tapioca (3792 ha) and Coconut (70613 ha). Crops which have failed to sustain the production level in 2007-08 compared to previous year include Rice (113087 MT), Cashewnut (10770 MT), Ginger (14470 MT), Pepper (363 MT), Banana (20836 MT), Other Plantain (27002 MT), Arecanut (1481 MT), Tapioca (109672 MT), Coconut (490 MN), Cardamom (1515 MT), Coffee (10825 MT), Rubber (27405 MT) and Turmeric (1910 MT). During 2007-08 increase in production was reported only for Tea (8172 MT).
- 4.12 The growth rate in area, production and productivity of important crops during Tenth Plan is shown in Table 4.6. Rubber alone indicated consistent growth in area and production. In the case of cashew nut, the decline in growth rate in area was the highest followed by tapioca and paddy. The strategies adopted and programmes implemented during Tenth Plan have not resulted in reversing the trend in food crop production.

Table 4.6 Growth rates of Area, Production and Productivity of major crops in 10th Plan (2002-03 to 2006-07)

Crop		Growth Rate (%)	
Сгор	Area	Production	Productivity
Paddy	-3.23	-1.41	1.88
Coconut	-0.59	1.18	1.78
Arecanut	0.93	0.50	-0.42
Pepper	0.76	0.94	-1.66
Banana and other plantain	0.31	1.59	1.27
Cashewnut	-4.47	-1.37	3.24
Tapioca	-3.51	0.86	4.53
Rubber	1.08	5.57	4.45
Coffee	0.35	-1.25	-1.60
Tea	-0.94	-0.62	0.31
Cardamom	-0.01	-0.31	-0.29
Plantation crops	0.80	4.54	3.72

Capital formation in agriculture

4.13 The productivity increase in agriculture is considerably dependent on capital formation from the public and private sectors. The Gross Capital Formation (GCF) in agriculture as a proportion to the total capital formation has shown a continuous decline in the country. GCF in agriculture relative to GDP has shown an improvement from 9.6 percent in 2000-01 to 12.5 percent in 2006-07. This needs to be raised to 16 percent during Eleventh Five Year Plan to achieve the targeted growth of 4 percent in the sector in the country. However state wise database is not available on GCF in agriculture. The only available information state wise is the study conducted by the NCAP which estimated the per hectare public investment in Kerala at Rs.654 per hectare in 1991-92 and private investment at Rs.700 per hectare in the year. The private per hectare investment in agriculture has increased by 2.5 times between 1981-82 and 1991-92 and per hectare public investment increased by 86 percent during this period, while per hectare institutional term loan increased by 540 percent during this period. Steps have to be taken to further increase the investment in the agriculture sector. There is a stagnant investment credit flow to agriculture in recent years in the state at 17-18 percent of total agriculture credit.

Plan outlay and expenditure

4.14 The plan outlay and expenditure under agriculture and allied sectors during Tenth Five Year Plan in the state is shown in Table 4.7. An amount of Rs.1160.15 crore was spent for the development of agriculture and allied sectors during Tenth plan from the state plan, apart from the plans of the local governments. However the revival of the agriculture economy of the state needs further investment support in combination with alternative strategies and policy prescriptions.

Table 4.7
Plan outlay and Expenditure during Tenth plan

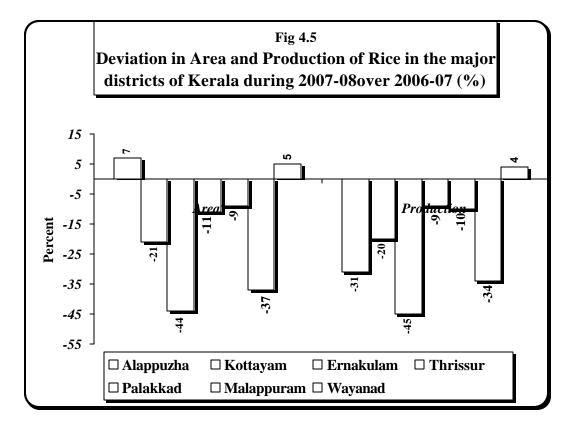
(Rs. in lakhs)

Subsector	Budgeted outlay	Expenditure
Crop Husbandry	27012.00	28427.71
Soil and Water Conservation	8963.00	10736.22
Animal Husbandry	23534.00	16356.46
Dairy Development	1539.00	1265.86
Fisheries Development	16078.00	19055.74
Food storage, Warehousing	325.00	75.00
Agricultural Research	11760.00	11631.98
Investment in Financial Institutions	2450.00	2255.47
Co-operation	7200.00	4726.39
Other Agricultural Programmes	2747.00	21483.81
Total	101608.00	116014.64

Crop wise analysis

Rice

4.15 The average annual decline in area under rice during the Eighth Five Year Plan was around 22000 ha, whereas it has come down to an average of 13000 ha. during the Ninth Plan period. The average annual reduction in area during Tenth Plan was 9398 ha. During 2007-08. decline in area was 34591 ha. from 2.64 lakh ha. in 2006-07 to 2.29 lakh ha and rice production decreased from 6.42 lakh MT to 5.28 lakh MT, a decrease of 2.29 per cent during this period compared to an increase of 1.8 per cent in 2006-07 with that of 2005-06. The department of agriculture has introduced a scheme on Promotion of Paddy cultivation in fallow lands in 2004-05. In terms of increase in area under rice, the scheme seems to be less effective. However a major food security project was launched during 2008-09 covering the production of rice, egg, vegetables and milk. Special schemes were also launched during 2008-09 by the local governments and the department of Agriculture and is expected to increase area under paddy during 2008-09. The conversion of paddy lands for other purposes is also expected to be stopped from the current year as a result of the Kerala Paddy Land – Wet Land Conservation Act, 2008 passed by the state. Separate targets were fixed for each commodity and the local governments also were given a target of 10,000 acres to be brought under paddy during 2008-09.



4.16 The average productivity which was stagnant at around 2.2 MT/ha for four years till 2005-06 has improved to 2.4 t/ha in 2006-07 and slightly declined to 2.31 MT/ha in 2007-08 (Table-4.8). Maximum increase in productivity during the year to the tune of 4 per cent was recorded in Pathanamthitta district. Rice productivity at current level is sub optimal. Instead of providing area based subsidies, suitably designed incentive system is essential to promote productivity of rice in the state.

Year Area (000' ha.) Production (000'MT) Productivity (kg./ha.) Kerala India Kerala India Kerala India 2002-03 2003-04 2004-05 2005-06 2006-07 2007-08

Table - 4.8
Area, Production and Productivity of Rice in Kerala and India

Source : Directorate of Economics and Statistics, CMIE

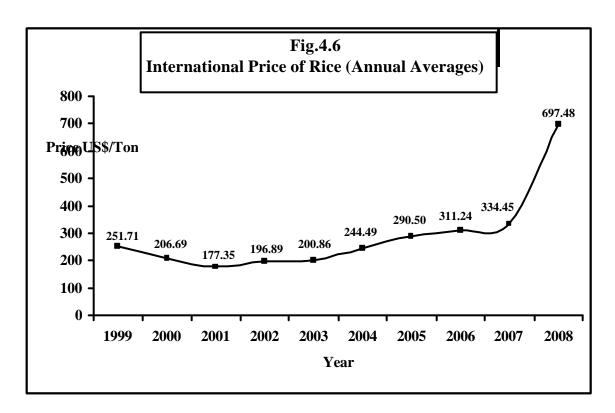
4.17 A State level project has to be prepared for the promotion of rice production by linking the schemes of Department of Agriculture, local governments and Kudumbashree. Padasekharam based action plans have to be prepared linking with credit, input support, water management, procurement and supplementary income sources.

Season wise performance

4.18 Season wise data on the performance of rice during the last three years is shown in Appendix 4.7 Data shows increase in area in Puncha season with decline in Mundakan and Virippu seasons. There was 7.5 per cent decline in area during Virippu season in 2007-08 compared to previous year and 26.3 per cent reduction in Mundakan season. Area under Virippu is gradually shrinking. Group farming samithies should concentrate their efforts in such areas with a view to bringing such areas under double cropping. Mundakan season accounts for highest share in production with 47.51 per cent followed by 31.8 per cent in Virippu and 20.68 per cent in Punja season. The productivity recorded in Punja is the highest with 2405 kg. per ha. during 2007-08 which is 16.5 per cent lower than that in 2006-07.

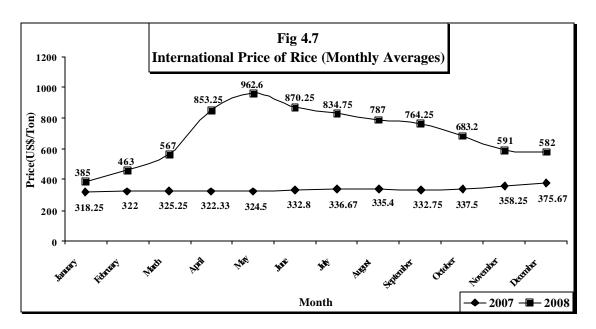
Global Food Crisis

- 4.19 The price of nearly every agricultural commodity sharply increased in 2007 and 2008, creating a global food price bubble. At their peaks in the second quarter of 2008, world prices of wheat and maize were three times higher than at the beginning of 2003, and the price of rice was five times higher. Dairy products, meat, palm oil and cassava also experienced sharp price hikes. The prices of butter and milk, for example, tripled between 2003 and 2008, and the prices of beef and poultry doubled. Even though current prices are not particularly high in historical terms, the recent price hikes increase the challenge of feeding the world's growing population . At the time of notoriously high food prices in the 1870s, the world population was about 1.3 billion, compared with 6.7 billion today.
- 4.20 The International Price of Rice during the past 10 years is given in Fig 4.6. The price of rice in the international market increased from US\$ 334.45 per ton during 2007 to US\$ 697.48 during 2008 indicating 109 per cent increase in one year.

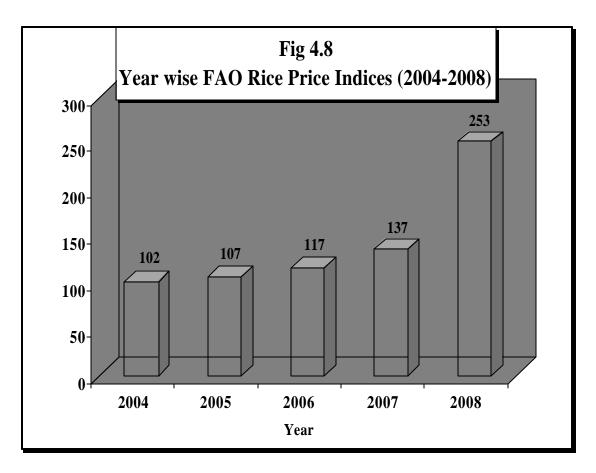


4.21 However the recent global financial crisis influenced the prices of food and the decline in prices of major commodities recorded from month of June 2008 onwards. The international price of rice reached a peak during May 2008 reaching to US\$ 963 per ton and then declined sharply to US\$ 582 per ton during December 2008 indicating a decline of 40 per cent. However the price in December 2008 is still 35 per cent higher than the price in the corresponding month in 2007.

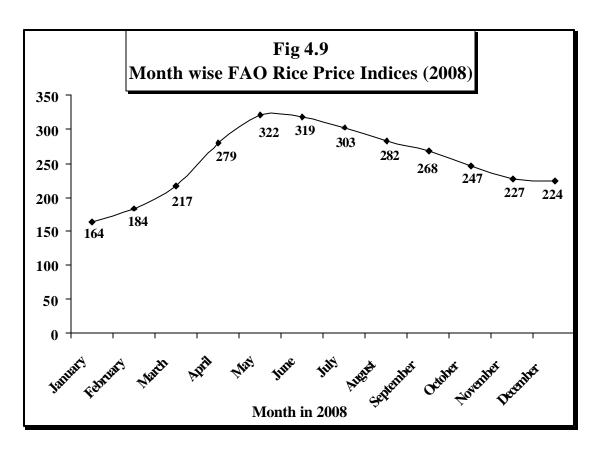
Monthly price variation during the past two years are given in Fig 4.7



- 4.22 Prices for most agricultural commodities have dropped significantly and swiftly in recent months. World grain prices have fallen by over 50 percent from their record highs earlier in 2008. International prices for other important foodstuffs, such as vegetable oils, oilseeds or dairy products have also drifted downwards, even if they still remain above their longer term trend levels. Prices of major cereals have fallen by over 50 percent from their peaks earlier in 2008 but they remain high compared to previous years. Despite its sharp decline in recent months, the FAO Food Price Index was still 28 percent higher in October 2008 compared to October 2006. The FAO Price Index for Rice during the past 5 years is shown in Fig 4.8.
- 4.23 At first sight, the falling food prices is good news for the global food system but the gradual return to equilibrium in food markets should not be taken to assume that the world's food problems have been fixed, neither in the short-run nor with a view to the longer-term challenges. Cereal stocks still need to be replenished and lower prices will again divert more supply from food to fuel. With only 433million tonnes in opening stocks, the cereal stocks-to-use ratio in 2008/09 is at its second lowest in three decades. To bring stocks back to their pre-crisis levels will require 40 percent of the production increase in 2008. Bio energy has already absorbed 100 million tonnes of cereals in 2007/08.



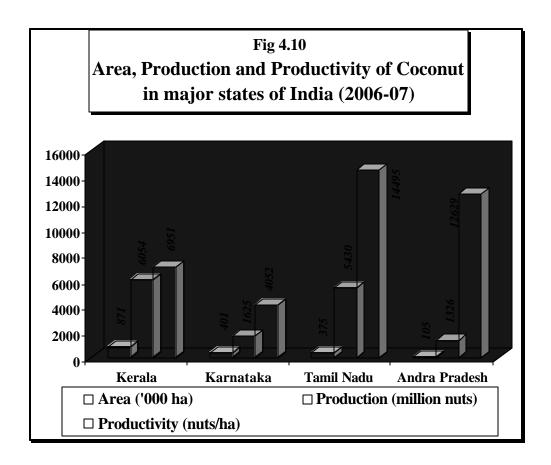
The monthly trend of FAO Price Index of Rice during 2008 is shown in Fig 4.9.



- 4.24 Recent estimates from the Food and Agriculture Organization of the United Nations (FAO) show that the number of undernourished people increased from 848 million to 963 million between 2003-05 and 2008, largely owing to the food price crisis (FAO 2008). Food price hikes have also exacerbated micronutrient deficiencies, with negative consequences for nutrition and health, such as impaired cognitive development, lower resistance to disease, and increased risks during childbirth for both mothers and children.
- 4.25 More actions are needed to successfully resolve the food price crisis, build resistance to future challenges, and reduce poverty and hunger. Three sets of complementary policy actions should be taken: (1) promote pro-poor agricultural growth, (2) reduce market volatility, and (3) expand social protection and child nutrition action.
- 4.26 The domestic price of paddy also moved to a higher trajectory during 2007 and 2008 in the state. The farm prices of paddy reached a peak level of Rs.920 per quintal in August 2008 from Rs.682 during 2006-07 and the average retail price of rice (Matta) reached a peak level of Rs.19.76 per Kg in December 2008 from Rs.13.50/Kg in December 2005. The price of paddy during August 2007 wasRs.693 indicating a 33 per cent increase during the corresponding month in 2008. The higher domestic price of paddy is expected to act as an incentive for the paddy farmers of the state. Government also announced a higher procurement price of Rs.11 per kilogram to support the farmers in the state. The crucial question is the relative profitability of paddy in the state which is one of the major determinants for land allocation under this crop.

Coconut

4.27 In India, coconut is grown in an area of 1.94 million ha. producing 15840 million nuts with a per hectare productivity of 8165 nuts. (Table 4.9) Kerala's share in area as well as production of coconut in the country is declining over time. The share of area declined from 57 per cent in 1991-92 to 45 per cent in 2006-07, while share of area in Karnataka and Tamil Nadu together increased from 29 per cent in 1992-93 to 40 per cent in 2006-07 (Fig. 4.10).



4.28 With a coverage of 8.02 lakh ha, coconut occupies 38 per cent of the net cropped area and provides livelihood to over 3.5 million families in Kerala. Production declined by 4.3 percent in 2006-07 compared to the previous year and further declined by 8.1 per cent in 2007-08 compared to previous year. The productivity levels in Kerala are also lower than other major producing states. The productivity in 2006-07 in Maharashtra was 8338 nuts and 14495 nuts in Tamil Nadu.

Table - 4.9 Area, Production and Productivity of Coconut in Kerala and India Area (000'Ha.) Production (Million Nuts) Kerala India Kerala India Kerala 926 1840 5536 12597 5980

Productivity (Nuts/ha.) Sl. No Year India 2000-01 6847 1 2 2001-02 1890 5479 12822 6049 6776 906 3 2002-03 1922 5709 12535 6349 6523 899 4 2003-04 898 1934 5876 12178 6540 6298 2004-05 1935 6001 12830 5 899 6673 6632 2005-06 1950 7046 898 6326 14811 7608 6. 7 2006-07 873 1940 6054 15840 6935 8165 8 2007-08 802 NA 5564 NA 6935 NA

Source: Directorate of Economics and Statistics, CMIE, CDB, Ministry of Agriculture, GOI.

4.29 Massive replanting of root wilt affected palms with seedlings of elite palms could be initiated immediately. The present level of adoption suggests the need for further intervention to enhance technology adoption. Generation of technologies for different agro ecological situations may improve the level of adoption. Integrated farming system with due emphasis on multi-tier cropping systems needs to be promoted in different agro ecological situations.

Pepper

- World pepper production during 2007 was estimated at 2.71 lakh tonnes compared to 2.89 lakh tonnes reported during 2006.
- 4.31 The state continues to enjoy a near monopoly in area and production of pepper, accounting for 98 per cent each in the country. The productivity achieved its peak level of 376 kg. per ha during 1998-99. The productivity of pepper recorded during 2007-08 was only 296 kg, per ha. The production declined from 64264 MT during 2006-07 to 63901 MT in 2007-08. Pepper produced in Kerala fetches a premium price in international market in view of its intrinsic quality.
- 4.32 However consequent to the liberalisation of imports, there are reports of low quality pepper arriving from other producing countries. The import of pepper has increased from 4028 MT in 2000-01 to 15750 MT in 2006-07 affecting the interests of pepper farmers of the State.
- Government of India should build in adequate safety mechanism and monitoring system to see that the issue of certification of origin and the condition relating to origin of the goods are not violated. Similarly in respect of import for re-export of pepper which enjoys duty free status, a minimum value addition needs to be prescribed.
- India could export 42806 MT of pepper in 1999-00, which declined to 35000 MT in 4.34 2007-08. The value realization was at Rs. 519.50 crores in 2007-08 compared to Rs. 306.2 2006-07 and unit value realization is almost stagnant at Rs. 148.43 to Rs. 106.50 per kg. respectively in the corresponding period.

4.35 Price of pepper moved consistently upwards from early nineties and reached a peak level in 1999-00 with Rs. 215 per kg. Since then declined to Rs. 174 per kg. in 2000-01, further down to Rs. 80 per kg. in 2001-02 and increased slightly to Rs. 128.54/kg. in 2007-08.

Cashew

4.36 Area under the crop in Kerala, has been declining steadily from 1.25 lakh ha. in 1988-89 to 0.58 lakh ha. in 2007-08 and the production declined from 1.08 lakh MT to 0.51 lakh MT during the period (Table 4.10). The share of Kerala in the area under cashew in the country has come down from 23 per cent in 1987-88 to 6.7 percent in 2007-08 and the corresponding decline in share of production from 31 per cent to 7.7 per cent. Area and production are increasing steadily in other producing states in the country. Maharashtra is the leading producer with 31.58 percent share in production during 2007-08, whose share was only 10 per cent in 1990-91.

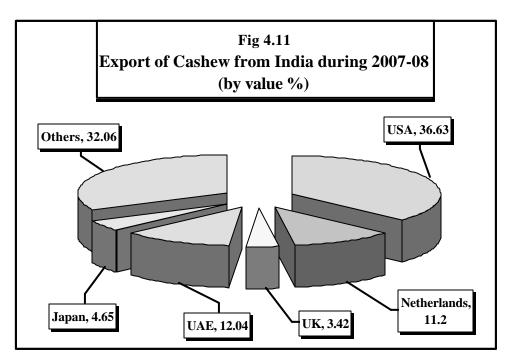
Table 4.10

Area, Production and Productivity of Cashew in Kerala and India

Sl. No	Year	Area (00	Area (000'Ha.) Production Productivity (kg./h				tivity (kg./ha.)
		Kerala	India	Kerala	India	Kerala	India
1	2003-04	88.4	730	65.2	535	737	733
2	2004-05	81.5	820	60.6	544	743	810
3	2005-06	80.7	855	57.6	573	714	815
4	2006-07	70.46	854	61.7	620	875	726
5	2007-08	58.18	868	50.91	665	875	766

Source :DES, Cashew Export Promotion Council of India

- 4.37 In spite of operating special schemes for expansion of area under cashew, the coverage has been steadily declining during the last two decades. The decline in area from 1980-81 to 2007-08 was to the tune of 83087 ha. Productivity of the crop, which was around 900 kg. per ha. during late eighties has also started declining from 1995-96 onwards, reaching 562 kg. per ha. during 1998-99 and thereafter hovering around 740 kg. In 2006-07 and 2007-08, it was stagnant at 875 Kg/ha.
- India exported cashew kernels worth Rs. 2288.90 crore during 2007-08 and imported raw 4.38 nuts worth Rs. 1746.80 crore resulting in a net foreign exchange earning of Rs. 542.10 crore indicating 15.76 per cent decline in value terms compared to 2006-07 and 3.5 per cent decline in quantity of cashew kernals exported and 3.5 per cent increase in the quantity of raw nuts imported. U.S.A. is the major export market with 37 per cent export share followed by Netherlands (11 per cent). The unit export price of cashew kernels declined during the year 2007-08 by 3 per cent compared to 2006-07. The total raw nuts imported into India during 2007-08 was 6.06 lakh MT. Around 28 per cent of total raw nuts imported is from Ivory Cost followed by Guinea Bissau (15 per cent). Tanzania has emerged as another supplier of raw cashew nuts with a share of 19 per cent of total imports. Out of imported nuts 54 per cent of imported raw nuts is bought to Kerala during 2007-08 which was 46 per cent in 1998-99. Cashew processing industry is finding it extremely difficult even to maintain the present level of capacity utilization because of the lower availability of local raw cashew nuts. Concerted efforts are needed to nurture this crop in the state with programmes to promote high density planting with high yielding cashew grafts.



Plantation crops

- 4.39 Plantation crops in general are either export oriented or import substituting and therefore assume special significance from the national point of view. It is estimated that nearly 14 lakh families are dependent on the plantation sector for livelihood. Each of the four plantation crops of South India has its distinct characteristics and economic problems. Consequent to the removal of quantitative restrictions on import, plantation crops in general are facing the threat of low quality imports.
- 4.40 Kerala has a substantial share in the four plantation crops of rubber, tea, coffee and cardamom. These four crops together occupy 6.72 lakh ha, accounting for 31.9 per cent of the net cropped area in the state and 43 per cent of the area under these crops in the country. Kerala's share in the national production of rubber is 91 per cent, cardamom 75 per cent, coffee 19 per cent during the year 2007-08. Kerala's share in the production of tea is 7 percent during 2006-07.

Rubber

- 4.41 India is the fourth largest producer of natural rubber with a share of eight per cent in the world after Thailand, Indonesia and Malaysia. The production of natural rubber in the country was 8.25 lakh MT in 2007-08, registering a 3.2 per cent growth compared to the previous year while it was 6.3 per cent growth over the previous year during 2006-07. India is at the same time the fourth largest consumer of natural rubber after China, USA and Japan
- 4.42 Kerala accounts for 8l percent of the area under rubber in the country. The coverage under the crop in 2007-08 was 5.12 lakh ha, higher by 9805 ha. over the previous year. The production of natural rubber in Kerala during the year was 7.53 lakh tonnes indicating a 3.5 per cent decline over the previous year. The increasing trend in productivity continued during 2007-08. It was 1190 kg. per ha in 1998-99, which rose to 1471 kg. during 2007-08. In terms of tapping area, productivity recorded was 1960 kg. per ha during the year 2006-07.

4.43 Even though the domestic prices of natural rubber were more or less comparable to international prices during 2007-08, (See Appendx-4.17) the industrial sector still resorts to imports in bulk quantities. The total quantity imported was 89690 MT in 2006-07 which slightly declined to 89394 MT in 2007-08. The annual average growth of the domestic natural rubber industry for the period 1996-97 to 2007-08, showed an annual average increase of 3.3 per cent in production where as consumption had increased at 3.48 per cent per annum while import of natural rubber increased by 12.5 per cent. Details are given in the Table 4.11.

Table 4.11 Consumption of Rubber during 2006-07, 2007-08

Sl. No	Item	Consumpti	Crowth non cont	
S1. NO		2006-07	2007-08	Growth per cent
	Natural Rubber			
1	Auto Tyres and Tubes	462081	495577	7.2
2	Others	358224	365878	2.1
	Total NR	820305	861455	5.0
	Synthetic Rubber (SR)	<u>'</u>		
3	Auto Tyres and Tubes	170809	191507	12.1
4	Others	100021	105648	5.6
	Total SR	270830	297155	9.7
	NR and SR	·		•
5	Auto Tyres and Tubes	632890	687084	8.6
6	Others	458245	471526	2.9
	Total of NR and SR	1091135	1158610	6.2

Source: Rubber Board

4.44 The higher prices in the international market is reflected in the domestic market also. The average price of RSS4 in the domestic market at Kottayam was Rs. 92.04 per kg. in 2006-07 which declined to Rs. 90.85 in 2007-08. The international price of RSS3, equivalent of RSS4 of India, declined from Rs. 97.75 to Rs. 96.75 in the corresponding period. The price of RSS 4 in Kottayam reached Rs.137.82 during August 2008 and then declined to Rs.90.01 in October 2008.

Coffee

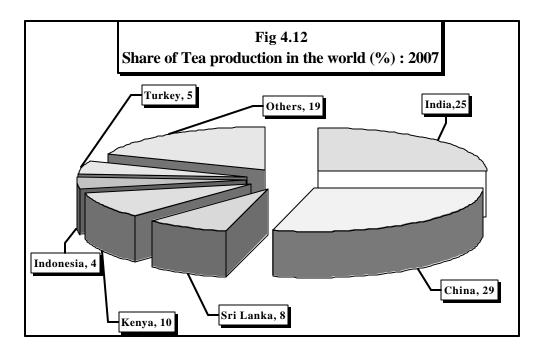
4.45 The area under coffee in Kerala was 0.84 lakh ha out of 3.84 lakh ha in the country during 2007-08, which works out to 22 per cent. The share of Kerala in production is 19 per cent during 2007-08. Major variety grown in Kerala is Robusta with a share of 95 per cent in planted area. Production of coffee during the year was only 0.49 lakh MT against 2.62 lakh MT for the country. Productivity of the crop in Kerala (578 kg/ha) is lower than the national level of 682 kg./ha. Area under coffee registered substantial increase during the last two decades with an annual growth rate of over 2 per cent. The increase in production recorded during the period was much higher and registered an annual average growth rate of nearly nine per cent. Coffee provides opportunities for livelihood to nearly one lakh families including agricultural labourers. In Kerala, coffee is also one of the small holder plantation crops with nearly 76,000 holdings coming under the category with an average size of 1.1 ha. Consumption of coffee has remained

more or less static at around 55,000 tonnes for the past one and half decades till 1999 and then slightly improved to 70,000 tonnes in 2003. Out of this, 28000 MT is robusta coffee.

- 4.46 Coffee is a highly export dependent crop and more than 80 per cent of domestic production is exported. The unit value realization has declined drastically from Rs. 95.37 per kg. in 1997-98 to Rs. 80.63 per kg. in 2006-07 which improved to Rs.93.36 per kg in 2007-08. The quantity of coffee exported from India declined in 2007-08 to 2.18 lakh tonnes from 2.49 lakh tonnes in 2006-07.
- 4.47 To mitigate the problems of coffee growers arising from the low prices of coffee, a series of steps have been taken including the restructuring of loans and interest relief to coffee growers (a subsidy of 5 percent for small growers and 3 percent for large growers is available for working capital). Rainfall insurance as a risk management support for coffee growers in collaboration with AIC is also implemented.

Tea

- 4.48 A declining trend in production in the state was observed for the last eight years from 68.9 m. kgs. in 2000 to 62 m. kgs. in 2007. Against the total area of 5.11 lakh ha under tea in the country Kerala accounts for only 0.35 lakh ha. In respect of production the share of Kerala is 6.6 per cent in 2007. Tea plantations owned by big companies employ a labour force of over 84,000 in the organised sector. There is fluctuation in production and it ranged from 64.8 M. kgs. in 1995-96, reaching to 69.1 M.kgs. in 2000-01 which declined to 61.8 M kgs. in 2007-08.
- 4.49 Imports increased from 13.4 M. kg. in 2000 to 15.99 M kg. in 2007. However during 2003 the import declined substantially to 9.8 M. kgs. The maximum quantity of tea was imported from Nepal (46 per cent), followed by Kenya (18 per cent) and Vietnam (4 per cent). The unit value of imported tea was the lowest from Vietnam (Rs.53/kg) while the average being Rs.62/kg. The disturbing fact is that most of the countries are exporting to India at low prices.



- 4.50 The average auction prices for 1999 at Kochi was Rs. 62 per kg. which declined to Rs. 56.05 per kg. in 2007. The price of tea in south India during January-June 2008 has slightly improved to Rs. 57.71 per kg from Rs.52.69 during the corresponding period during 2007. The auction price of three centers (Colombo, Kolkata and Mombassa) averaged US\$ 1.66 /kg. during 2005, which is slightly lower compared to 2004 level.
- 4.51 Productivity of Tea in India is much lower than that in Vietnam. The organic tea production is a major shift in this sector. (eg. Darjeeling tea). In Kerala coverage under organic tea could be increased.
- 4.52 Government of India has set up a special purpose Tea Fund for funding replantation and rejuvenation aimed at improving the age profile of tea plantation with an estimated outlay of Rs.567.10 crores during Eleventh Five Year Plan. The estimated area to be taken up for replantation/rejuvenation during the period would be 85044 ha in the country.

Cardamom

Productivity which was more or less stagnant around 50 kg./ha. in the 1980s has improved to the level of around 203 kg, per ha by 2001 and increased slightly to 208 kg/ha in 2007-08 Kerala was lagging behind the national level till 1992-93 but has improved its position by raising its productivity to 215 kg. per ha over the last five years. Consequently, the share of Kerala in production at the All India level also increased from 28 per cent in 1992-93 to 75 per cent in 2007-08. While area under cardamom in the country has declined from 0.97 lakh ha to 0.73 lakh ha. in the period, in Kerala it has come down from 65,000 ha to 39763 ha. On the export front cardamom has been facing competition from Guatemala although the quality of Guatemala cardamom is inferior. The country could tide over the challenge by expanding domestic market through market promotion. The average auction price during 2000-01 was Rs. 570 per kg. which improved to Rs. 622.96 in 2001-02 and declined to Rs. 561.13 in 2002-03 and further declined to Rs. 313.22 in 2007-08. The Indian export of cardamom has increased from early nineties and reached a peak evel of 1545 MT in 2000-01 and then declined by 67 percent in 2007-08 to reach 500 MT. The unit price of exported Cardamom increased steadily 2007-08 from Rs. 344 per kg. in 2006-07. However the market for to Rs. 495 per kg. in cardamom is largely domestic as could be seen from the declining share of exports and the share of exports is only 5 per cent of the production.

Lease land farming through Kudumbashree

4.54 'Harithashree', the lease land farming promoted by the State Poverty Eradication Mission, Kerala, through 'Kudumbasree', has helped women farmers to stay on in agriculture for their livelihood. The number of Grama Panchayats involved in the programme is 855. There are about 28705 NHGs and 183984 families presently involved in the Harithashree' programme covering an area of 111663.8 ha. The area under leased land farming increased from 43425.36 ha. in 2006-07 to 111663.8 ha. during 2007-08. The details are given in Table – 4.12

Table 4.12 Lease Land Farming through Kudumbashree as on 31/10/2008

Sl.No.	Name of District	No. of	No. of	No. of	Area in
51.110.	Name of District	GPS	NHGs	families	Hectares
1.	Thiruvananthapuram	73	2019	21159	2624.38
2.	Kollam	66	699	2212	733.35
3.	Pathanamthitta	54	2812	19244	4171.4
4.	Alappuzha	38	2418	20204	3185.61
5.	Kottayam	61	1334	8636	3430.97
6.	Idukki	47	4283	10359	1902.95
7.	Ernakulam	88	3186	26850	12623
8.	Thrissur	53	451	3280	62878
9.	Palakkad	87	2628	20472	6194.29
10.	Malappuram	89	3729	20956	5915
11.	Kozhikode	54	876	1210	1638.5
12.	Wayanad	25	2200	17600	4300
13.	Kannur	81	163	348	374
14.	Kasaragod	39	1907	11454	1692.35
	Total	855	28705	183984	111663.8

Source: Kudumbashree

4.55 Paddy, Tapioca, other tuber crops, vegetables etc. are the major crops cultivated under lease land farming. Certain innovative groups are experimenting fewer other crops such as water melon in Pathanamthitta district and Basmathi and scented rice in Wayanad district. Many Grama panchayats are also promoting organic farming through their women groups.

Crop Husbandry

Crop Development Programme - Review of Annual Plan 2007-08

4.56 During the Annual plan 2007-08 an amount of Rs. 10637.01 lakhs was provided to crop husbandry which include Rs. 92.5 lakhs for partially aided schemes and Rs.5166.51 lakhs under 100 per cent Centrally sponsored including Macro management schemes. (Table 4.13). The State sector schemes incurred an expenditure of Rs. 5672.76 lakh which constitutes 105.48% of the outlay.

Table 4.13 Financial Performance of Crop Husbandry during 2007-08

(Rs. Lakh) per cent of Expdr. SI. Item Outlay Expenditure to Sanctioned No. amount 1. State Sector Schemes 5378 5672.76 105.48 Partially Aided 2. 92.5 34.38 37.16 schemes 100% CSS including 3. 5166.51 3442.98 66.64 MOU Total 10637.01 9150.12 86.02

4.57 Major crop wise financial achievements made during the period is furnished below (Table 4.14). An amount of Rs. 15.20 crore was utilised for the development of rice in the State from the State and Central Plan schemes. For Horticulture crops, apart from the amount shown in Table above, State Horticulture Mission also provided separate funds.

Table 4.14
Major Scheme wise Expenditure during 2007-08

(Rs. Lakh)

Sl.No.	Schemes	Expenditure
1.	Rice Development	1421.40
2.	Macro Management programme	2026.62
3.	National Bio gas Development Programme	99.98
4.	Coconut based farming system	1119.87
5.	Integrated farming in Coconut holdings	968.35
6.	Women in Agriculture	22.12
7.	Special package under Distress Districts	341.61

Rice

4.58 Rice development activities in the State were carried through State schemes and Centrally sponsored schemes. The ultimate objective of rice development programme during the Eleventh Plan period is to sustain rice cultivation in 4.4 lakh ha and to augment the average productivity to more than 2.8 tonnes per ha. Revitalisation of group farming samithies in predominant rice growing areas like Palakkad, Thrissur, Ernakulam and Alappuzha, assistance to paddy development agencies and assistance to seed development agencies were continued under State plan for attaining the targeted level of rice production and productivity.

Coconut Development

4.59 Coconut based farming system is the main stay of more than 35 lakh farmers of the state. State contribution in area and production has rapidly declined over the years. Department is implementing coconut development schemes with the intention of increasing productivity of coconut and generate more income from coconut gardens. As per the Centrally sponsored scheme the Coconut Development Board provides assistance for production and distribution of quality hybrid coconut seedlings. During the year 2007-08, 3.51 lakh number of quality Coconut seedlings were distributed. Coconut Development programme has been implemented in an area of 18100 ha on cluster basis (724 clusters). Fertilizers were applied to 382974 nos of palms. During 2007-08, 20184 nos of disease affected palms were cut and removed.

Programmes under State Horticulture Mission

State Horticulture Mission

4.60 The National Horticulture Mission was launched in 2005-06 in order to give new momentum to the development of horticulture to generate employment and enhance farm income. The mission aims at addressing problems related to generation of technology, production, post harvest management, processing and marketing under one umbrella in the horticulture sector. The expenditure under the scheme in the state is shown in Table 4.15.

Table 4.15 Expenditure under SHM in Kerala

(Rs.in lakhs)

Year	Sanctioned amount	Released amount	Expenditure	Unspent balance
2005-06	7590	3533.98	400	3133.98
2006-07	20230.05	7559.525	2472	5487.525
2007-08	19212.758	6147.731	10428.89	4281.159
Total	47032.808	17241.236	13300.89	4340.346

- 4.61 The implementation of the scheme was quite unsatisfactory during the initial phase of the project and recently it improved and an amount of Rs.133.00 crores was utilised for three years in the state, out of a total sanctioned amount of Rs.470.32 crore till 2007-08. An amount of Rs.1150 crores was earmarked for the scheme during 2007-08 in the country. A project oriented monitoring system has to be evolved for realizing the envisaged outputs. A number of NGOs as well as private sector are also part of the project which needs further monitoring. Establishment of new gardens, planting material production, rejuvenation of pepper, cashew, cocoa, creation of water resources, promotion of IPM and post harvest management are part of the project activities.
- 4.62 Under Pepper Development Programme production and distribution of pepper cuttings, area expansion, rehabilitation of old pepper gardens and promotion of soil conservation measures are taken up by SHM. During the year 2007-08, 33.12 lakh pepper cuttings were produced and distributed through SHM. Pepper rehabilitation was introduced in 18370 ha. Promotion of organic pepper was introduced in 2768 ha.
- 4.63 In the case of cashew development, rehabilitation, plant protection and establishment of cashew nurseries were given importance during the Annual plan 2007-08. Through Centrally Sponsored programme an area of 481 ha was brought under rehabilitation programme against the annual target of 1610 ha.

Vegetable and Fruit Promotion Council's Programme

- 4.64 Vegetable and Fruit Production Council, Keralam, was involved in the implementation of vegetable and Fruit Promotion Programme. The programme covers production, formation of SHGs, credit management and marketing.
- 4.65 During the year 2007-08, 8057 farmers were inducted and 420 new SHG's were formed. 36 farmers markets were established. 29885 farmers were covered under the 'Karshaka Raksha' medical insurance scheme. The farmers received Rs.40.39 lakh as claim amount during the year. During 2007-08 an area of 41084 ha was covered under vegetable and banana cultivation.

Rashtriya Krishi Vikas Yojana (RKVY)

4.66 RKVY was launched in 2007-08 in pursuance of the decision taken in the 53rd meeting of the NDC held on 29th May 2007 to incentivise the states to enhance public investment to achieve the envisaged 4 percent growth rate in agriculture and allied sectors during 11th plan with an outlay of Rs.25000 crores. The scheme aims to assist states to achieve a quantifiable increase in production, productivity and farm income and to reduce the yield gaps in the agriculture and allied sectors. The allocation for Kerala during 2007-08 and 2008-09 are shown in Table 4.16.

Table 4.16 Allocation under RKVY

(Rs.in crores)

Year	Kerala	India	% for Kerala
2007-08	61.41	1500.00	4.09
2008-09	60.11	3165.67	1.90

4.67 During 2007-08, an amount of Rs.55.01 crore was sanctioned for Kerala and an amount of Rs.17.15 crore was utilised during the year. The share of allocation for Kerala is very low compared to the budget provision for the country. More proactive steps are needed to convince Government of India about the expenditure incurred in the agriculture and allied sectors by the local governments in the state. Even though this aspect is included in the revised guidelines, the additional allocation due for the state has not been provided. A number of very small schemes are included for assistance under RKVY in the state. More focused areas with larger projects have to be identified for support under RKVY. The preparation of district and state agriculture plans are a prerequisite for getting assistance from 2008-09 for which concrete steps are required.

Support to State Extension Programme

4.68 A new CSS on support to State Extension Programme for extension reforms was launched in March 2005 with the objective of making extension system farmer driven by way of promoting new institutional arrangements, viz, ATMA for technology dissemination, at district level and below. An amount of Rs.324 lakh was released for three years from 2005-06 to 2007-08 and an amount of Rs.104.74 lakh was utilised. The Strategic Research and Extension plans were prepared for all districts and a series of training programmes were initiated through SAMETI. Even though a convergence approach is envisaged in the scheme, more needs to be done to realize the objectives. Along with ATMA, a field visit oriented extension system also has to be designed to develop the agriculture sector of the state. The extension system needs a thorough restructuring. ATMA could be utilised as an institution to channelise funding from various sources.

Food Security Project

- 4.69 A state food security project has been launched in the state during 2007-08 through a convergence approach and various ongoing schemes were dovetailed to realize the targets. Rice, milk, egg and vegetables were included in the project.
- 4.70 The National Food Security Mission (NFSM) was also launched in 2007-08 to enhance the production of rice, wheat and pulses. It will target those districts which have lower productivity than state average, but have the potential to augment the production of the three crops. From Kerala, Palakkad district alone is included in the project and an amount of Rs.158.85 lakh was sanctioned and an amount of Rs.151.80 lakh was released.

Supplies and Services

4.71 The State has a strong network for supplies and services. This include Krishi Bhavans in all the Grama panchayats for transfer of technology and organising agricultural services. Planting material delivery system has been developed which includes 33 state seed farms, 10 district farms, 10 special farms and 8 coconut nurseries. The paddy seed farms and the District Agricultural Farms are under the control of the District Panchayats for facilitating appropriate

seed planning at the grass root level. Inspite of such elaborate progeny support, supply of quality seeds of paddy and other seasonal crops remain as a weak link in the production front.

Agricultural Insurance

- 4.72 A survey conducted by FAO in the early 1990s revealed that various types of crop insurance programmes are present in more than 140 countries. Low insurance penetration despite high premium subsidies, mostly captured by large farmers, poor financial performance with excessive claims, inappropriate pricing methodologies etc are few of the key endemic problems that plague national insurance programmes worldwide.
- 4.73 Two crop insurance schemes are currently in operation in the State, viz., The State Crop Insurance Scheme and The National Agricultural Insurance Scheme. The State Crop Insurance Scheme, being implemented since 1995, provides insurance cover to 24 major crops against crop loss due to natural calamities like drought, storm, cyclone, flood, landslip, forest fire, sea erosion, earth quake and lightening. The National Agricultural Insurance Scheme (NAIS), was introduced from 1999-2000, replacing the Comprehensive Crop Insurance Scheme (CCIS) which was in operation since 1985. NAIS is implemented in the State through the GIC of India, and provides insurance cover to Paddy, Banana, Tapioca, Pineapple, Ginger and Turmeric against risks such as natural fire and lightening, storm, hailstorm, cyclone, typhoon, tempest, hurricane, tornado, flood, inundation and land slide, drought, dry spells, pests and diseases. Small and marginal farmers are eligible for 50 per cent subsidy on premium, which is equally shared by the State and Central Governments. The scheme is being implemented in 23 States and 2 Union Territories.
- 4.74 The State Crop Insurance Scheme, has so far enrolled 150370 farmers. It is also required to include more perennial crops like, Coconut, Rubber, Pepper etc. in the National Agricultural Insurance Scheme, and withdraw these crops from the State Insurance Scheme. An amount of Rs.100.00 lakhs, provided under the State budget has been credited to the Crop Insurance Fund during 2007-08.
- 4.75 At present State Insurance Scheme and NAIS are in operation in the State. As on March 2008, 289807 farmers were enrolled, covering an area of 245835 ha and an amount of Rs.794.1 lakhs was collected as premium. A total claim of Rs.44.37 lakhs have been disbursed in 2007-08 to 2706 eligible farmers. The Agricultural Insurance Corporation has prepared a pilot scheme for the insurance of coconut in the state.

Agricultural Research and Education

- 4.76 The Kerala Agricultural University is the principal institution in the state providing human resources and technology required for the sustainable development of agriculture encompassing all production activities based on land and water, including crop production, animal husbandry, forestry and fisheries. The university fulfills its obligations and commitments through a network of 36 big and small campuses spread through out the state consisting of ten colleges, six RARS's, 26 Research Stations, 3 centers of Advanced studies, the Central Training Institute(CTI), the ATIC (Agriculture Technology Information Center), 7 KVK's (in Kollam, Kottayam, Thrissur, Palakkad, Malappuram, Kannur and Wayanad Dsts.), the KAU Press, the Central Library and various other research programmes. The University has a strong technical manpower consisting of 1000 academics and over 800 technical staff.
- 4.77 The research support for sustainable development of agriculture sector in the state is rendered by Kerala Agricultural University in a participatory mode in close association with

research institutions managed by Indian Council of Agricultural Research, Commodity Boards and Departments of the State and Central Governments. Over 500 research projects are currently in operation including 38 All India Co-ordinated Projects/Network Projects, 18 Ad-hoc Projects, 12 KSCSTE Projects and 49 other externally aided projects funded by SHM, Western Ghat Cell, UGC and Cadbury India Ltd. The notable research accomplishments of the University during the year 2007-08 are covering the areas such as rice and rice based cropping systems, coconut and other palms, vegetables, sugar and tuber crops, vegetables, fruits, spices and plantation crops, pulses and oil seeds, forage and green manure crops, aromatic and medicinal plants, soils and agronomy, plant protection, biotechnology, post harvest technology, economics, extension and statistics, beneficial organisms, agroforestry and silviculture, food science and nutrition, veterinary & animal sciences, agricultural engineering and fisheries.

Farm Commodity Price

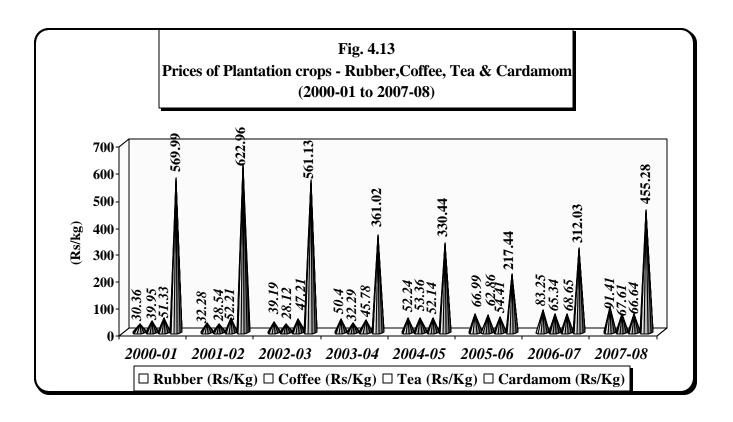
4.78 Data on average farm price of principal crops grown in Kerala are shown in Table 4.17. The table shows increase in 2007-08 compared to previous year in respect of most of the commodities, namely Rubber (9.80 per cent) tapioca (10.37 per cent), banana (8.83 per cent). Paddy (14.38 percent), Pepper (19.79 Per cent), Coffee (3.47 Per cent) Cardamom (45.91 per cent) cashew (24.21) and coconut (1.22). Decline was reported to Arecanut (3.66 per cent) and Tea (2.93 per cent). Global agricultural prices have also indicated a recovery path from the later half of 2002 onwards. Data on month-wise prices of the commodities during 2007-08 are shown in Appendix 4.18. The prices of plantation crops for the last eight years are shown in Fig. 4.13.

Table 4.17 Average Farm Price of Important Agricultural Commodities

Year	Paddy (qtl.)	Coconut with husk (in 00' nos.)	Arecanut (00' nos.)	Cashewnu t (qtl.)	Banana (qtl)	Tapioc a (qtl.)	Pepper (qtl.)	Rubber (qtl)	Tea (kg.)	Coffee (kg)	Cardam om (kg)
2000-01	646.36	281.43	41.88	2368.81	1042.51	397.24	12401.24	3036	51.33	39.95	569.99
2001-02	600.27	340.64	32.81	2569.33	949.51	321.01	6745.43	3228	52.21	28.54	622.96
2002-03	649.76	475.63	32.11	2730.30	971.34	394.01	7692.17	3919	47.21	28.12	561.13
2003-04	694.69	582.73	34.62	2831.75	1167.00	389.36	6802.46	5040	45.78	32.29	361.02
2004-05	651.00	635.00	40.00	3533.00	1112	404	6032	5224	52.14	53.36	330.44
2005-06	610.78	494.89	43.73	2899.54	1247.81	432.63	5979.84	6699	54.41	62.86	217.44
2006-07	681.72	473.36	52.17	2463.90	1333.58	469.54	10730.62	8325.16	68.65	65.34	312.03
2007-08	779.73	479.15	50.26	3060.50	1451.35	518.22	12853.69	9140.77	66.64	67.61	455.28
% Change in 2007-08 over 2006-07	14.38	1.22	-3.66	24.21	8.83	10.37	19.79	9.80	-2.93	3.47	45.91
2008-09*	913.38	572.85	64.61	-	1497.77	565.57	13504.3	13552.67	75.23	70.11	591.18

Source: Directorate of Economics and Statistics

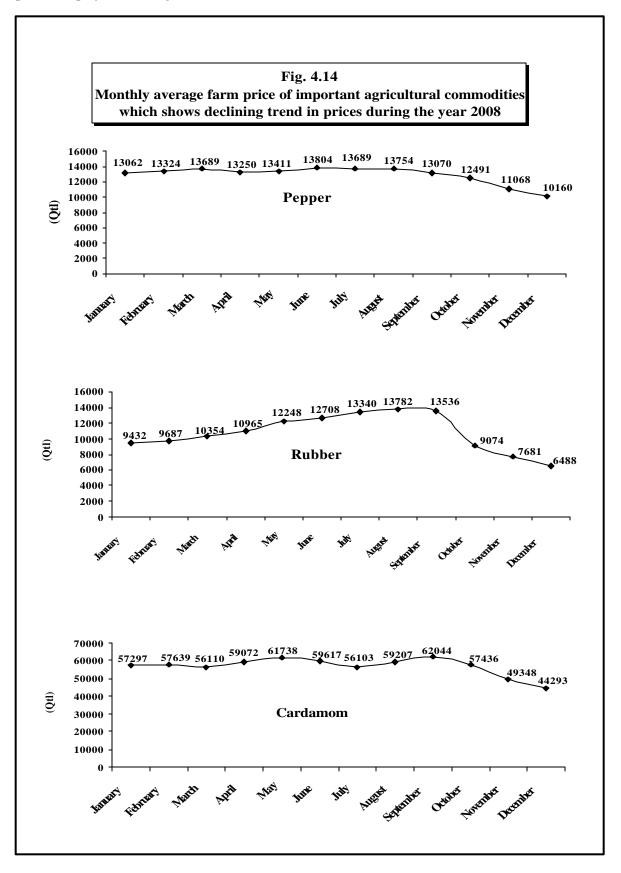
?? upto September 2008



4.79 The price of rubber reached a peak of Rs.137.82 per Kg during August 2008 and then started steady decline reaching to Rs.64.88 per Kg during December 2008. December 2008 was 30 per cent lower than the price in the corresponding month in 2007 and 53 per cent lower than the peak price in August 2008. The price of pepper was hovering around Rs.60 to Rs.76 per Kg from 2001-02 to 2005-06 and then started increasing trend reaching to Rs.129 during 2007-08. During 2008, the price reached a peak level of Rs.138 during June 2008 and then started declining and reached Rs.102 during December 2008. The corresponding price during December 2007 was Rs.123. In the case of cardamom the price reached the lowest level during 2005-06 at Rs.217 per Kg and further improved to Rs.455 per Kg during 2007-08. The price reached a peak level during September 2008 at Rs.620 and declined thereafter and reached Rs.443 during December 2008. The farm price of paddy reached a peak level of Rs.780 per quintal during 2007-08 from Rs.682 during 2006-07 and further to Rs.906 in April 2008 and to Rs.920 during August 2008. The price of paddy during August 2007 was Rs.693 indicating a 33 percent increase during the corresponding month in 2008. During 2008, the retail price of paddy increased from Rs.17.64 during January 2008 to Rs.19.76 during December 2008.

4.80 The international commodity prices which has been consistently higher since 2003, continued the robust rise that began in 2007 into the first half of 2008. Prices of food traded internationally increased almost 60 percent during the first half of 2008, in dollar terms. As of mid November 2008, prices have since fallen sharply in the international market giving up most of their gains of the first half of the year. The abrupt decline reflects a response of commodities to slowing global growth at the end of a boom. A decline that has been amplified and accelerated by the global financial crisis. The freezing of credit markets, collapse of stock markets, large

shifts in exchange rates and commodity prices and unprecedented policy reactions have combined to create an uncertain and declining global economic prospects and further decline in commodity prices are projected during 2009 and 2



Implication of the Global Financial crisis on Kerala Agriculture

- 4.81 Government has entrusted the Centre for Development Studies to study the implications of the global financial crisis on Kerala and measures to mitigate the effects. The report was submitted in December 2008. The salient findings of the report on Kerala agriculture are shown in Box 4.1. The decline in export of major commodities, job loss and decline in growth of GSDP by 2-3 percent in the next two years are predicted in the report. A cabinet sub committee is examining the report now to work out the details to implement the recommendations.
- 4.82 Government of India and RBI have announced a set of measures to mitigate the crisis. More proactive steps both short term and long term are required to tide over the crisis in the state. The effect of the crisis is expected to be quite longer.

Box 4.1 Implications of the Global Financial Crisis on agriculture in Kerala

- ?? Quantity of export of pepper more than halved between September 2007 and September 2008.
- ?? Price of rubber has come down by 40% due to decline in demand from tyre industry.
- ?? At least 15 % reduction in export of cashew in the short run affect employment of 18000 workers.
- ?? As the export dependence of cashew and spices are relatively higher, the slackening of demand in the USA and Europe might reduce the prices of these commodities. In the short run the exchange rate depreciation might partially offset the revenue loss from the lower export price. However in the medium term these crops may suffer loss because exchange rate depreciation may not persist beyond the short period.
- ?? Decline of 20% in export of coir and coir products resulting in loss of direct employment to at least 32000 in the short run.
- ?? The decline in marine exports is about 25-30 % across all major destinations except South East Asia. The employment loss projected is at least 20,000.
- ?? There will be significant effect on the livelihood of small farmers engaged in commercial crop productions, agricultural labourers, workers in the cashew processing industry, fish processing industry and plantation labourers.
- ?? There can be a decline of growth rate of Kerala economy by around 2-3 per cent during the next couple of years.

Source: CDS, 2008

Livestock Development

Trend in Livestock Population

The livestock population of the country has been estimated at 187.38 million cattle in 2003, which are about 14 per cent of the world cattle population. Out of this, 22.63 million were crossbred, which is 12.07 per cent of the total cattle population. Between 1997 and 2003, crossbred population increased by 12.6 per cent. The states of Tamilnadu, Maharashtra, Kerala, Uttar Pradesh, Karnataka and Punjab account for about 60 per cent of the crossbred cattle population. The country has 96.62 million buffalo population, which is about 56.5 per cent of the world buffalo population. Between 1997 and 2003, the buffalo population increased by 7.5 per cent.

- 4.84 Kerala's cattle population which accounted for 1.75% of the total cattle population in the country during 1987 declined to 1.61 % by 1996 and 1.13 % by 2003 . The cross bred cattle population which stood at 12.26 lakhs and 68% as per 1996 Census decreased to 7.73 lakh Nos and in percentage terms increased to 83% by 2003. This increase in proportion of cross bred population was made possible by expanded health care facilities and AI services available in the State.
- 4.85 Over the Census periods buffalo population is the most affected one. Concerted efforts are to be undertaken for implementing buffalo development programme. KLD Board has been producing frozen buffalo semen and the same is made available through AI units for artificial insemination. Goat population is also on the decline mainly due to indiscriminate slaughter, shrinking of grazing lands and urbanisation. A programme for the development of buffaloes was started during 2005-06 to include buffaloe calves under SLBP Programme.
- 4.86 Of the total cattle population, Palakkad district accounts for 12.4 per cent (highest) and Wayanad for 4.89 per cent (lowest). Higher number of buffaloes is concentrated in Malappuram (19%), goat in Thiruvananthapuram (12%) and pig in Idukki (30%). Regarding poultry Malappuram accounts for 13 per cent of fowls and Alappuzha for 38 per cent of ducks.

Trend in Production of Major Livestock Products

- 4.87 As per the latest estimates of the value of output from livestock sector to Indian economy during 2001-02 at current price was about Rs.1470.07 billion which increased to Rs.2106.29 billion during 2006-07 i.e., an increase of 43.27 percent over five years showing a compound growth rate of 7.4%. The major contributor during the period is the milk group of which the percentage share staggered between 68.29% and 68.54%. During 2001-02 the contribution of meat was 14.43 per cent which increased to 16.29 per cent during 2006-07.
- 4.88 Poultry meat is the biggest contributor to meat group followed by mutton. The contribution of egg is stagnant around 3.30 % all over the period. Over the period 2001 07 there was no remarkable change in percentage share of contribution of egg to the value of output. Contribution of major components to total value of livestock products is given in Table 4.18.

Table 4. 18
Value of Output from Livestock sector (All India) (2001-02 to 2006-07)
(At current prices in Rs. Billions)

Item *	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
1 Milk Group	1004.54	1043.47	1104.47	1215.05	1306.31	1443.86
2 Meat Group	249.83	265.47	273.37	318.05	310.69	343.10
2.1 Meat	212.31	225.71	232.23	275.70	266.00	297.06
2.1.1 Beef	22.92	25.10	26.30	28.05	29.93	33.66
2.1.2 Mutton	78.99	87.89	91.79	97.21	104.15	118.44
2.1.4 Poultry Meat	98.53	98.42	100.10	117.62	116.71	126.58
2.2 Meat Products	8.41	9.05	9.51	9.37	9.86	11.31
3 Eggs	48.79	50.49	51.86	59.65	61.34	71.23
4 Dung	107.90	120.21	128.68	131.76	144.45	155.96
Total of All Items	1470.97	1540.56	1629.21	1802.31	1906.08	2106.29

Source: Central Statistical Organisation, GOI * only details of Major items are included.

Dung include dung fuel and dung manure

- 4.89 The share of Agriculture sector to GDP (all India) declined from 21.09% in 2001-02 to 16.74% in 2006-07 while the decline in the share of Livestock sector is only to 4.36% from 5.21%.
- 4.90 Regarding the index number of whole sale price of all commodities (all India) compared to 2001-02 there was an increase of 28% during 2006-07(the terminal year of X Plan), 19.5% in food grains, least in the case of dairy products i.e., 16%. A higher percentage increase was recorded by milk 18% and egg, fish and meat 19%. The highest hike is in the index number of oil cakes i.e., 37%. Compared to 2001-02, during 2007-08, the first year of XI plan, the whole sale price index of the above commodities had shown a record increase ie. 33.7% for all commodities, 25% for food grains, 27.8% for milk, 25% for egg, fish, meat and dairy products 24.16%. Similar to previous year the highest increase is in the whole sale price index of oil cake i.e., 74.7%.
- 4.91 Trends in requirement and availability (based on domestic production) of major livestock products in Kerala are given in Table 4.19. A wide gap is existing between the requirement and production of animal products.
- 4.92 With a view to enhance the availability of milk and egg , a major state food security project was launched during 2008-09. The aim is to enhance milk production by 70% from 2005-06 level and doubling of egg production from 2005-06 level.

Table 4.19
Requirement and production of Livestock Products in Kerala

Sl.		Milk (Lakh MT)		Egg (Millio	on Nos.)	Meat ('000 MT)		
No.	Year	Require	Producti	Require	Production	Require	Producti	
		ment	on	ment	Troduction	ment	on*	
1	2002	23.65	24.20	4217	1347	253	177.74	
2	2003	23.87	21.11	4258	1277	256	188.22	
3	2004	24.16	20.25	4314	1197	257	195.27	
4	2005	24.38	20.63	4341	1196	261	195.37	
5	2006	24.53	21.19	4362	1199	262	196.53	
6	2007	NA	22.48	NA	1379	NA	205.21	

Source: Animal Husbandry Department

4.93 The requirement of milk and egg is increasing as the population is increasing. But the total milk production of the State is showing a declining trend from 27.18 lakh tonnes in 2001-02 to 20.25 lakh tonnes during 2004-05 and increased to 22.48 lakh tonnes during 2007-08. At the same time over the period, at national level the milk production has been continuously increasing. Kerala's contribution to national milk production which stagnated around 3.2 per cent during 1993-94 to 2001-02 declined to 2.1 per cent during 2005-06 and increased to 2.2 percent by 2007-08. The gap between the production and requirement of egg is also increasing at an alarming rate. Due to the targeted efforts launched in the state the production of these two products is showing signs of improvement during 2007-08. An analysis over the years shows that meat production alone is increasing over the years to keep in pace with the demand. But there also exists a wide gap. The average annual growth rates of milk and egg production in Kerala and India for the period from 1950-51 to 2007-08 are given in Table 4.20.

^{*}including unauthorised sector ** Anticipated Requirement estimated based on projected population figures

Table 4.20 Average Annual Growth Rate of Milk and Egg Production

G1.3.7		N	Iilk	Eg	gg
Sl.No.	Year	Kerala	India	Kerala	India
1	1950-51 to 1960-61	2.50	1.64	NA	4.63
2	1960-61 to 1970-71	2.52	1.15	NA	7.91
3	1970-71 to 1980-81	12.52	4.51	NA	3.79
4	1980-81 to 1990-91	6.41	5.50	4.89	7.70
5	1990-91 to 2000-01	4.24	4.16	2.75	4.59
6	1997-98 to 2001- 02(IX Plan period)	3.78	4.32	(-) 0.22	7.09
7	2001-02 to 2006-07	- 4.86	3.64	-9.75	5.52
	(X Plan period)				
8	2001-02 to 2007-08	- 3.12	3.20	-6.02	NA

Source: Based on Sample Survey reports of Animal Husbandry Department

- 4.94 In spite of a shrinking fodder base, the dairy sector in Kerala could maintain a growth rate of 4.24 per cent in the 1990s, compared to India (4.16 per cent). But during the Ninth Plan period (1997-02) it came down to 3.78 per cent while that of India increased to 4.32 per cent. Compared to 9th Plan period during 10th plan period, a negative growth rate is reflected in the milk production of Kerala (- 4.86%) and at India level the growth rate declined to 3.64 per cent. Compared to this, by the end of 2007-08 the negative growth rate of milk decreased to 3.12%.
- 4.95 Compared to 2006-07, milk production in 2007-08 recorded a growth rate of 6.04% growth rate, the highest yearly growth rate during the last six years. (See Table 4. 21).
- 4.96 The egg production of Kerala, which recorded a growth rate of 4.89 per cent during 1980 90 period, declined subsequently and by ninth plan period it reached a negative growth rate of 0.22 % and declined further to -9.75% during 10th plan period. Now by end of 2007-08 the negative growth rate decreased to 6.02%. At all India level, compared to growth rate of 7.09 % during 9th plan period, 10th plan growth rate is only 5.52% at all India level.
- 4.97 Compared to 2006-07, the egg production in 2007-08, recorded an yearly growth rate of 15% and the production recorded is the highest during the last 6 years. (See Table 4.28)

Dairy development

- 4.98 Dairy industry in India has made significant progress from 8^h plan onwards. India continues to be largest producer of milk in the world with a total production of 102 million tones (provisional) in 2006-07 and the per capita availability of milk stood at 246gm/day.
- 4.99 Though the per capita availability of milk is low compared to world average and substantial increase in this regard was attained over a period of 10years, from 195gm/day to 246 gm/day. This increase together with attainment of near self sufficiency in milk and milk products has been achieved mainly on account of the tremendous amount of marketing support and technical inputs provided and the infrastructure developed in the country through the network cooperatives. More than 50 per cent of the milk in the country is produced by small and marginal farmers and landless labourers, producing about one to three litres of milk per day.

4.100 In spite of India's position as highest producer of milk, productivity per animal is very poor. At the national level it is only 987 Kg/lactation as compared to the world average of 2038 Kg/lactation. This is mainly due to poor level of nutrition as well as low genetic potential for milk production and health care. Among the major states in India, there are significant interstate differences in the productivity of cows and buffaloes. As per the available estimates milk yield/day of exotic cows were highest in Punjab(8.431 Kg), followed by Gujarat (8.057kg) Kerala(7.508 kg) and Andhra Pradesh (7.385kg). At the same time the yield/day of exotic breeds in Karanataka is 6.312kg and Tamil Nadu is only 5.890kg. Among these states highest yield of non descript cow is of Gujarat (3.401kg) followed by Tamil Nadu(2.762kg), Kerala (2.629 kg), Punjab (2.505kg), Karnataka (2.240kg) and Andhrapradesh (1.813kg). The average yield/day of buffaloes is highest in Punjab (7.425 kg) followed by Kerala (6.242 kg), Tamil Nadu (4.222 kg) and Karnataka (2.481 kg). In general the milk yield of both cows and buffaloes were lowest in Assam. The year wise estimate of production is shown in Table 4.21.

Table 4. 21 Year-wise Estimate of Milk production

			Milk Production (lakh tonnes)				
Sl. No.	Year	India	% change over previous year	Kerala	% change over previous year	% contributio n of Kerala	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1	2003-04	881	1.6	21.11	-12.8	2.4	
2	2004-05	925	4.9	20.25	-4.1	2.2	
3	2005-06	971	5.0	20.63	1.9	2.1	
4	2006-07	1009*	3.91	21.19	2.7	2.1	
5	2007-08	1020**	1.09	22.47	6.04	2.2	

Source: Economic Survey and Department of Animal Husbandry *provisional ** anticipated

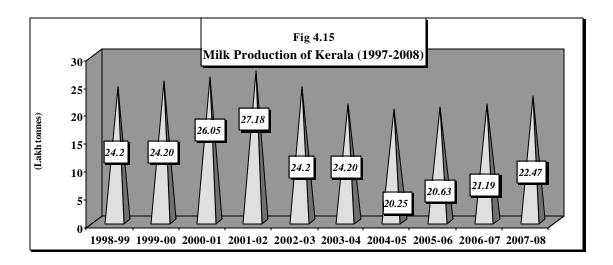
4.101 The season wise milk production from 2003-04 to 2007-08 are shown in Table 4.22. The maximum share in production is during the rainy season.

Table 4.22 Season wise Estimated Production of Milk (*Lakh MT*)

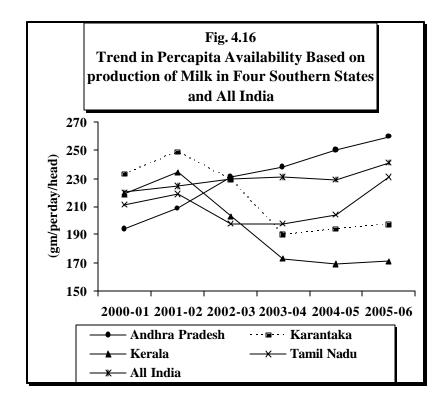
		Summer		Rain	ıy	Wir	iter	
Sl. No.	Year	Quantity	% to total	Quantity	% to total	Quantity	% to total	Total
1	2003-04	6.88	32.59	7.46	35.34	6.77	32.07	21.11
2	2004-05	6.68	32.99	7.25	35.80	6.32	31.21	20.25
3	2005-06	6.65	32.23	7.27	35.24	6.71	32.53	20.63
4	2006-07	6.68	31.52	7.31	34.50	7.20	33.98	21.19
5	2007-08	7.26	32.31	7.79	34.67	7.42	33.02	22.47

Source: Integrated Sample Survey

4.102 Trend in Year-wise milk production for the period from 1997-98 to 2007-08 is given in Fig.4.15



4.103 Regarding the per capita availability of milk based on 2006-07 figures for the southern states viz., Andhra Pradesh, Karnataka, Tamil Nadu and Kerala, Andhra Pradesh ranks first with an availability of 269g/day and Tamil Nadu ranks second with 232g/day. (Trend from 2000-01 to 2006-07 is shown in Fig.4.16). Among the four states, Kerala has the lowest figure of 172g/day (See Appendix-4.31). D Among the major states at all India level Punjab ranks first with 961g/day and the lowest in the case of Assam with 70g/day. During 2007-08 the per capita availability of milk/day in Kerala increased to 181gm/day.



Better Management of Young Calves

4.104 The calf rearing programme by subsidising cattle feed for rearing cattle up to 32 months along with health cover and insurance has been under implementation from Eighth Plan onwards. During 2006-07 the scheme was extended to buffalo calves also. During 2006-07 period 21350 calves were enrolled under the programme of which 350 were buffalo calves and during 2007-08, 23604 calves were enrolled of which the number of buffalo calves were 2000. Details are furnished in Table 4.23.

Table 4.23
Year-wise Details of Calves Enrolled under Special Livestock
Breeding Programme (2003-04 to 2007-08)

Sl. No	Year	No	of calves enroll	ed
51. 140	1 ear	Total	Cow	Buffalo
1	2003-04	23683	23683	
2	2004-05	17941	17941	
3	2005-06	21819	21819	
4	2006-07	21350	21000	350
5	2007-08	23604	21604	2000

Source: Animal Husbandry Department

Milk Marketing

- 4.105 In Kerala there are 3382 dairy co-operatives including 2546 Anand pattern societies functioning under KCMMF. Including non functional APCOS the total number of APCOS is 2853. The newly registered Societies during 2007-08 is 63.
- 4.106 Of the 22 dairies functioning in the State 12 are in the Co-operative Sector(Milma) and the remaining 10 are run by private/charitable societies which handle 64000MT milk per annum. There are also about 25 small dairies which are not registered and they handle 10000 litres of milk/day. The important societies functioning under the Co-operative Sector are viz., Malanadu, Nirmalgram, PDDP, Perambra and PDDP, Kalady are working under Charitable Institutions.
- 4.107 MILMA represents more than 7.77 lakh dairy farmers who have organised 2546 Anand Pattern Cooperative Societies It has helped in ensuring better returns to the dairy farmers. The dairies under Milma is handling 9.90lakh litres of milk/day, 14 chilling plants, two cattle feed plants, a milk powder plant, an established training centre and 5000 distribution outlets. Of the total 2853 APCOs registered, only 2546 are functional. The average milk procured per day by APCOs during the year 2008 was 7.40 lakh litres against the previous year average of 7.95 lakh litres.
- 4.108 The procurement /day/society is 384 litres during 2007 and during 2008, it is 355 litres/day. Over a period of last 7 years the highest average procurement /day is during 2007.
- 4.109 In Kerala, where the production of milk is concentrated in the small farm sector and ultimate supply is dependent on seasonal factors, maintaining uninterrupted supply particularly during lean period is very difficult. The Federation is thus forced to import milk from the neighbouring states during lean periods when the internal supplies used to shrink. Presently the

milk was imported from AAVIN and KMF. The procurement of milk by KCMMF stood at 2508, 2788 and 2925 lakh litres respectively against the sale of 3047,3270 and 3378 lakh litres during 2005, 2006 and 2007. During 2008, procurement and sale of milk by KCMMF stood at 2734 and 3475 lakh litres respectively as on Nove. 2008. showing a wide gap between procurement and supply. Data on procurement and sale of milk by different dairies of KCMMF during 2004 to 2007is presented in Appendix 4.41.

- 4.110 The veterinary services rendered by KCMMF are noteworthy. They have a well established Veterinary Wing at Thiruvananthapuram and Ernakulam Regional Milk Unions. But during the last two years their number decreased by 50% to 6 Nos and 0.45 lakh animals were treated. KCMMF has sold 0.75 lakh MT of cattle feed during 2008 (as on Nov) . It also produced 2947 MT and sold 2913 MT of ghee during the year 2008(as on Nov.2008). Year wise details for the period from 2002 to 2008 are furnished in Appendix 4.40.
- 4.111 Besides milk, a variety of milk products are manufactured by KCMMF. Details of products and a comparison of sales by KCMMF from 2005-06 to 2007-08 is given in Appendix 4.45 The products viz.,t butter, and peda, curd and cream decreased in sale during 2007-08 compared to previous period. The sale of milk increased by 13% during the year.

Kerala Dairy Farmers Welfare Fund Board

- 4.112 The dream pension to dairy farmers was realised through promulgation of an ordinance to form Dairy Farmers Welfare Board. on August 24th, 2005 this being the first one in India itself.
- 4.113 At present 1.6 lakh members (75% of total pouring members) have already enrolled in the fund. Now 23535 eligible dairy farmers (of over 60 years of age and minimum 10 years as qualified milk pouring years) are receiving regular pension @ of Rs.250/month. Also 534 nominees of deceased pensioners are receiving family pension at the rate of Rs.125/month. As per the KDFWF Act 2007, the Board has formulated a comprehensive social welfare scheme for the members called 'Ksheera Deepam'.

Weak Feed and Fodder Base

- 4.114 With the shift in cropping pattern of Kerala, the area under rice has come down by more than 50 per cent over the last two decades leading to drastic reduction in the availability of straw for feeding cattle. It is estimated that the state produces only 60 per cent of the roughage requirement for cattle in Kerala. Special focus has been given to fodder and feed production in Kerala to over come the situation during Eleventh plan period. Popularisation of high yielding fodder varieties like *CO3* and large scale intercropping in coconut holdings are to be taken up with the support of local governments.
- 4.115 Perennial fodder varieties like Hybrid Napier and Guinea are widely acceptable to farmers, and the department is supplying the planting material free of cost to the farmers. Fodder and feed development in is of prime importance in reducing cost of production and optimising economic return from the dairy activity and KLD Board and dairy development department have taken up fodder development as an important activity right from the beginning. They produced only 46.80MT of fodder seeds during 2007-08 against 14.80 MT of seeds 2006-07. The quantity of seeds supplied by KLD Board during the period was 44.41 MT against 15.518 MT during 2006-07. Also they had produced and supplied 40.41 lakh fodder stem cuttings/root slips during 2007-08 against 36.88 lakh slips during 2006-07(See Table 4.24).

Table 4.24 Production and Sale of fodder seeds by KLD Board

Sl.No.	Year	Quantity of Seeds Produced (MT)	Quantity of Seeds Supplied* (MT)
1	2003-04	10.80	15.65
2	2004-05	13.89	10.88
3	2005-06	6.53	24.36
4	2006-07	14.80	15.52
5	2007-08	46.80	44.41
	Stem cutting/	root slips produced and	d sold(Lakh Nos)
1	2006-07	36.88	36.88
2	2007-08	40.41	40.41

Source: KLD Board Annual Reports

- 4.116 During 2007-08, under department programmes 2.55 lakh MT fodder is produced using fodder slips/stem cuttings and the area covered is 1770 ha. The total area covered is 2391 ha. An increasing trend is prevailing over the last two years in the total area brought under fodder cultivation through department programmes. Also the preference of slips over seed is increasing. The area cultivated with maize is 288 ha and Sorghum 333 ha. Also 1.40 lak fodder tree seedlings, 42 fodder slip multiplication units and 7000 azola kits were supplied during the period.
- 4.117 The data from the department and KLD Board shows farmers' interest in using fodder slips instead of seeds.

 ${\bf Table~4.25} \\ {\bf Procurement~\&~Supply~of~Fodder~seeds~/~Root~Slips~and~Area~Covered~under~Fodder~Cultivation}$

SI. No.	Year	Procurement of seeds	Total quantity of seeds supplied to farmers	Area covered	Fodder root slips/stem cuttings supplied (No)	Area covered	Total area covered under fodder cultivation
		(in MT)	(in MT)	(in Ha)	(in lakh)	(in Ha)	(in Ha)
1	2003-04	4.80	4.48	1798	282.5	1412.5	3210.5
2	2004-05	Nil	Nil	Nil	375	1840	2230
3	2005-06	Nil	Nil	Nil	240	1600	1600
4	2006-07	22.5	22.5	250	246	1640	1890
5	2007-08	NA	NA	621	NA	1770	2391

Source: Dairy Development Department

- 4.118 Regarding the cattle feed concentrate, which will have to supplement the shortage in quality fodder production, the production is not enough to satisfy the requirement. Now KCMMF and Kerala Feeds Ltd., are taking conscious steps for facing this challenge.
- 4.119 Kerala farmers have adjusted to the situation by restricting the number of cattle and that too by preferring high yielding cross breds. This is evident from the steady increase in the proportion of crossbred animals, which Kerala achieved during the last three decades. (see Appendix 4.23).

Breeding Support

- 4.120 Regarding breeding infrastructure, India is among the countries having the largest breeding infrastructure in the world with 159 bull semen stations, 152 frozen semen banks and more than 50000 AI Centres. Due to poor quality semen produced by most of the semen stations in the country, the conception rate ranges from 20 per cent to 45 per cent only where as in the developed countries the rate is more than 50 per cent.
- 4.121 As per the data available during 2007 (as on 31/3/2007) of the 38833 AI Centres under Animal Husbandry department in the Country 2469 are in Kerala.
- 4.122 Kerala Livestock Development Board (KLDB) is involved in the production and distribution of frozen semen. Compared to 2006-07, semen production decreased by 24.80% to 24.47 lakh doses. The distribution inside the State is almost at the same level and sale outside the State decreased by 16%. There is a steady decrease in sale during the last two years. Details are furnished in Appendix 4. 35.
- 4.123 The number of AI centres under Animal Husbandry Department during 2007-08 is 2498 (including centres in all Veterinary institutions the total numbr is 2550) along with 515 centres operated by other agencies and 10 by department of Dairy Development, the total number of AI centres operational is 3023. (Appendix 4.36)
- 4.124 The number of inseminations done during 2007-08 was 10.75 lakh and calving recorded was 3.58 lakh. This is against 3.83 lakh calving recorded out of 12.04 lakh AI during 2006-07. Correspondingly the average number of insemination done by one centre decreased from 474 i to 443 in 2007-08. The average number of inseminations needed for producing one calf is around 3 (between 3.40 -3.00) over the last 5 years (Table 4.26). The quality of AI is improving slowly over the last 5 years.

Table 4.26
Number of Artificial Inseminations Conducted and recorded Calving

Sl. No.	Year 2	No. of artificial Insemination Centres	No. of Artificial Ins eminations done	No of AI Done Per centre	Recorded Calving	No of insemination s per calving
		<u> </u>			•	,
1 2 3 4 5	2003-04 2004-05 2005-06 2006-07 2007-08	2538 2445 2445 2541 2550	1231407 1176318 1179801 1204000 1075000	485 481 483 474 443	353764 357718 355011 383000 358457	3 3 3 3

Source: Animal Husbandry Department

4.125 Apart from the frozen semen technology, KLD Board is also engaged in research and development activities like progeny testing, embryo transfer, production of liquid nitrogen, fodder seed and training programmes. During the year, the Board has produced 228 Malabari kids, 12 boer goats, 1733 piglets, collected 50 embryos and trained 592 personnel. During the year under review, they distributed 2010 pigglets and sold 91.77 MT of green grass. Other activities of the Board are given in Appendix 4.37

4.126 Herd Book Scheme is operated complementary to the Progeny Testing Programme. This would help to assess the improvements happening in the field with respect to traits to support the field progeny testing programme. So far against the target of 80000 animals, 120344 animals have been identified and registered under the programme. During 2007-08 against the target of registering 5000 calves, 3707 calves were registered under the programme. The Scheme covers a breedable population of about 60000 cross bred females spread around 83 AI Centres. Under the programme farmers are provided with deworming medicines and advice on scientific aspects of calf rearing.

Cattle Feed

- 4.127 At present the State has three cattle feed plants functioning at Pattanakkad and Malampuzha with a combined production capacity of 600 MT/day and Kerala Feeds Ltd., Kallettumkara with a production capacity of 650 MT/day. The third one is operating under a separate management. Also there is a custom packing arrangement at Erode under KCMMF. The per day production capacity of Kerala Feeds Ltd., increased from 500 MT to 650 MT during 2005-06. The production of the three plants is insufficient to meet the demand of cattle feed in the state.
- 4.128 During 2007-08, the two plants under KCMMF produced and sold 1.14 lakh MT of cattle feed. The major customer is APCOS (55%). The price of feed supplied to APCOS is kept lower than the open market price.
- 4.129 The production of cattle feed by Kerala Feeds Ltd., increased to 1.81 lakh MT in 2007-08 from 1.41 lakh MT in 2006-07. The Company has a good marketing network which includes 400 dealers and 450 Co-operatives. During the year the production of mineral mixture stood at 265.43 MT against 690.6 MT during 2006-07 and sale at 246.15MT against 709.6 MT during 2006-07. Compared to 2005-06, there is a decrease in the sale of mineral mixture. The company has evolved a growth plan "Vision 2010" to enhance the production capacity to 1500 MT per day by 2010. Production details of the above cattle feed plants are given in Table 4.27.
- 4.130 During the year under review, the raw material price recorded unprecedented price increase and shortage and KCMMF have to depend on outside source for nearly 100% of the raw material requirement.

Table 4.27 Production of Cattle Feed

(in lakh MT)

		Production							
Factory	2002- 03	2003-04	2004-05	2005-06	2006-07	2007-08			
Pattanacaud (KCMMF)	1.08	1.07	0.58	0.60	0.66	0.58			
Malampuzha (KCMMF)	1.00	1.07	0.34	0.18	0.52	0.56			
Erode CPA	-	-	0.18	0.30	-	_			
Kerala Feeds Ltd.	1.06	1.16	1.26	1.39	1.41	1.81*			
Total	2.15	2.23	2.37	2.47	2.59	2.95			

*including production at Erode Source :Annual Reports of KCMMF

4.131 During 2008, MRCMPU had outsourced 48.015 MT of straw pellet from the Animal breeding centre of NDDB and feed had been supplied to 12 Societies of Kannur and Kozhikode districts for use in summer season.

Egg and Meat

- 4.132 As per estimates available, the per capita availability of egg is very low at 41 eggs/year and poultry meat is 0.9 kg/year against the world average of 147 eggs and 11 kg poultry meat /year in the country. Government of India has set a target for achieving production of over 52 billion eggs by 2011-12, at a growth rate of 4.3 per cent.
- 4.133 Poultry farming for egg production relaying on purchased feed are uneconomic in Kerala. Poultry rearing on commercial lines is therefore largely confined to broiler production. The egg production which reached 2054 million in 1999-2000 is continuously showing declining trend.
- 4.134 An alarming factor to be noted in this regard is that over the last three years the domestic production of egg is declining to a lower level than that of 1984 85 (See Appendix 4.33). The decline in poultry population and hike in cost of feed were the major reason for the decline in production. During 2006-07, the production increased by 0.25% to 1199 million Nos and in 2007-08, increased by 15% to 1379 million Nos.
- 4.135 The per capita availability of egg based on production is only 36/year during 2006-07. The per capita consumption of egg during 2006-07 is 61/year. The gap is filled by importing eggs from neighbouring State. During 2006-07, 1021 million numbers of egg is imported to the State. The export during the year is 4.3 million numbers. Trend in Egg production during the period from 1997-98 to 2007-08 is given in Fig. 4.17

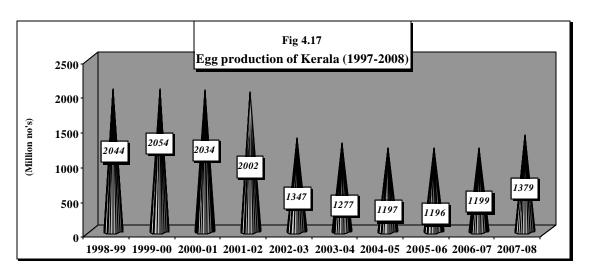


Table 4.28 Year-wise Estimate of Egg production

Sl.			Egg Production (million numbers)					
No.	Year	India	% change over previous year Kerala		% change over previous year	contribution of Kerala		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1	2003-04	40403	1.46	1277	- 5.20	3.2		
2	2004-05	45201	1.87	1197	- 6.26	2.9		
3	2005-06	46166	2.13	1196	- 0.08	2.6		
4	2006-07	50663	9.74	1199	0.25	2.4		
5	2007-08	NA	NA	1379	15.0	NA		

Source: Economic Survey and Department of Animal Husbandry

Back yard poultry

4.136 Backyard poultry system has good potential in the state. Around 810 lakh chicks are being introduced every year in the state. Apart from Animal Husbandry department and KSPDC, a few NGOs and private farms are also involved. But the system is yet to develop to the required extent.

Poultry Rearing and Kerala State Poultry Development Corporation

- 4.137 Kerala State Poultry Development Corporation was established in 1989 to give special attention for the revival of poultry farming. The Corporation had built up a broiler breeding farm and hatchery at Kudappanakunnu in Thiruvananthapuram District with a total investment of Rs.5.95 crore. Now the Corporation is producing and supplying 45000 day old chicks per week for distributing to the farmers. During 2005 a modern meat processing plant was commissioned in Pettah with a capacity to process 1200 birds/day. They also had a feed mill with a capacity of 20 T/day and now they are producing on an average 6-10 T/day and are supplying feed for all the farms of Animal Husbandry Dept.
- 4.138 As a part of 'Women development" the Corporation is implementing the scheme viz., Support to Training and Employment programme (STEP) for the development of women of economically weaker sections and SGSY giving emphasis to backyard rearing of layer chicks. So far nearly 21800 women are given training and assistance under the programme and supplied around 7 lakh birds. During 2007-08 as a part of government intervention for promoting backyard poultry farming, a project for the development of poultry as a part of State Food Security Project was launched in the state and is gaining momentum.
- 4.139 During 2007-08 11 broiler integration farms and 11 layer integration farms were started under KSPDC

Broiler Production

4.140 Nearly 10-15 Private hatcheries, working as satellite hatcheries also contribute to this local production of chicks and chicken meat. Approximately 40000-50000 direct employment is generated through broiler production. Apart from this, around 30000-40000 MT of chicken meat, which includes broilers, layer chicks, broiler and layer parent culls etc. is being imported from neighbouring state.

Meat production

4.141 India is endowed with more than 11 per cent of worlds' livestock population comprising a variety of meat animals such as buffaloes, goat, sheep, pigs, cattle and poultry, The per capita animal protein availability is about 10g against world average of 25g. The minimum requirement targeted is 20g per capita/day of animal protein of which 4g will come from meat. The estimated demand for meat would be 7.7 million tonnes against the present production of 5.7 million tonnes. Meat production in Kerala comprises of beef, mutton, pork and broiler chicken. Out of this, beef is almost entirely from the culled animals brought from the neighbouring states. The rearing of goat and pig is concentrated in selected pockets. As in the case of poultry, meat production under stall-fed condition in general is not economical in Kerala. However, there is scope for fostering this activity in selected areas largely by utilising the bio wastes available. The annual production of meat is shown in Table 4.29

Table 4.29 Year-wise Estimate of Meat production (2002-03 to 2007-08)

	Kerala									
			oultry Meat	Meat other than Poultry Meat						
Sl. No.	Year	Production (tonnes)	%age increase over previous year	Production (tonnes) @@	%age increase over previous					
					year					
1	2003-04	39327	-14.04	142992	14.27					
2	2004-05	32704	-25.25	162567	13.69					
3	2005-06	27609	-16.84	167763	3.20					
4	2006-07	16184	-41.38	180342	7.50					
5	2007-08	24630	52.19	180579	0.13					

Source: Economic Survey and Department of Animal Husbandry

@ from 2003-04 onwards spent chicken production data is not available

@@ including unauthorised sector

- 4.142 Total quantity of meat and poultry meat produced during the period 2003-04 to 2007-08 are furnished in Table 4.29. From 2003-04 onwards qty of meat from spent chicken is not included. Production of Poultry meat declined by 41.38 per cent during 2006-07. From 2003-04 poultry meat production is declining and compared to previous year it decreased by 41.38% during 2006-07. With in one year the trend has been reversed and 2007-08 witnessed a sharp hike in the poultry meat production by 52%. Production figures for meat other than poultry meat is on the increase and the increase during 2006-07 is 7.21% compared previous year. But the rate of increase during 2007-08 only 0.13%. The percapita availability of meat during 2006-07 is 17.62gm/day compared to 16.07gm/day during 2005-06.
- 4.143 In Kerala beef is the cheapest meat costing only 50 per cent of the prices elsewhere till 2004-05. This is because of the migration of large number of cattle and buffalo from the neighbouring states for slaughter. But the price trend has changed and now the price of beef is showing a steady increase and by 2007-08 reached Rs.90/kg.
- 4.144 There is no authentic data regarding the number of cattle and poultry slaughtered in the State and hence the total value and quantity of meat produced in the state not accessible. As per survey conducted by dept. of Economics and Statistics in 2006, there are 4904 slaughter houses in

Kerala of which the authorised slaughter houses were only 1490(30.38%. Also of the total 6489 poultry stalls registered were only 2124 (32%). About 93% of the slaughter houses in Ernakulam district are unauthorised. Category wise number of animals slaughtered and quantity of meat produced during 2002-03 to 2007-08 are given in Table 4.30

Table 4.30
Meat Production under Authorised Sector in Kerala

Type of Meat		Year							
(Nos in'000/	2002-03	2003-04	2004-05	2005-06	2006-07	2007-			
Qty in Tonne)						08			
Cattle: (Nos)	524.25	598.30	627.57	606.00	594	536			
:Quantity	25897	29864	33181	31358	31059	28073			
Buffalo: (Nos)	151.53	162.99	182.12	256.00	376	447			
:Quantity	8637	8620	9846	13478	19457	23789			
Goat : (Nos)	665.74	748.92	684.72	732.00	626	579			
:Quantity	6276	6696	6677	6709	5554	5129			
Pig : (Nos)	44.50	53.14	95.81	95.	88	80			
:Quantity	1994	2484	4485	4378	4044	3202			
Total : (Nos)	1386.02	1563.35	1590.22	1689	1684	1642			
:Quantity	42804	47664	54189	55923	60114	60193			
Chicken:(Nos)	41241.40	28091	27253	17624	9572	15262			
:Quantity	52611	39327	32704	27609	16184	24630			

Source: Integrated Sample Survey for Estimation of Production of Milk, Meat & Egg * data for spent chicken was not collected from 2003-04 onwards and hence not included

- 4.145 Compared to previous year's meat production (excluding chicken) under authorised sector, share of beef decreased from 56 percent to 52 per cent in 2006-07 and to 46.63 per cent in 2007-08, buffaloe meat increased from 24 to 32 per cent during 2005-06 and to 39.5 percent in 2007-08, mutton decreased from 12 per cent to 9 percent in 2006-07 and further to 8.5% during 2007-08 and pork to 6.7% and 5.3 per cent over the same period. A shift in the meat consumption pattern from beef to buffalo meat may be observed from the above data.
- 4.146 The production of broiler was on the increase till 2002-03. From 2003-04 onwards the production is continuously declining and it reached 16184 MT in 2006-07. The outbreak of bird flu in other countries and States had an adverse impact on the consumption of poultry meat and thereby affecting production. But thanks to bird flu controlling measures, the consumption tastes of the public might have changed and the production of broiler increased 52% during 2007-08.

Pig Rearing

4.147 High quality piglets will be produced in the pig farm at Kappad and pig breeding units at Kudappanakkunnu, Mundayad and Central Hatchery, Chengannur. MPI and KLD Board are also engaged in Pig Development.

Meat Products of India Ltd.

4.148 Meat Products of India Ltd., is engaged in production and marketing of meat and meat products derived from pork, beef, chicken, mutton, rabbit, quail etc. It also and produces feed for the poultry and pig farms of AH dept.

Animal Health Care

- 4.149 In order to reduce morbidity and mortality, efforts are being made by the State/UT Governments to provide better health care. For it, a network of 9009 polyclinics/hospitals and 19162 dispensaries and 26443 veterinary aid centres (including stockmen centres/mobile dispensaries), supported by about 250 disease diagnostic laboratories are functioning in the country. For the production of vaccines, there are 26 veterinary vaccine production units. The primary emphasis is on clinical services and as a result, endemic diseases such as Foot and Mouth Diseases (FMD) are still prevalent in India.
- 4.150 There is a strong network for veterinary health care now in the State comprising 210 Veterinary hospitals, 883 veterinary dispensaries, 47 veterinary poly clinics, 14 District Veterinary Centres, 9 mobile hospitals/dispensaries at district level, 13 district level clinical labs, four diagnostic labs and other related health care institutions.
- 4.151 The state is implementing a programme for Foot and Mouth disease control with the assistance of Government of India. Also Brucellosis has now emerged as a new threat to the livestock wealth of the State. Helminthiasis control also needs attention. Worms and other internal parasites cause considerable economic loss to the farmers. Data regarding outbreaks, attacks and deaths of major contagious diseases of animals in Kerala for the period from 2001 to 2007-08 are given in Appendix. 4.46.
- 4.152 Even though vaccinations were carried out, frequent outbreaks were reported which lead to production loss to farmers. Compared to last 3 years FM outbreaks are more in 2007-08, but attack are death are very low. A project for the creation of disease free zone with assistance from NDDB, FMD CP with 100 per cent Central assistance and ASCAD has been under implementing in the State and now the diseases are under control.
- 4.153 During the period of last six years from 2001 onwards the attack of black quarter ranges between 1 and zero and no death is reported. But during 2006, 160 attacks were reported and the disease is showing a sign of creeping back. During 2007-08 one attack and 10 deaths are reported. The reports of minor attacks of major diseases like Anthrax, and Hemorrhagic Septicemia are also reported. The State has already eradicated the dreadful disease of Rinderpest and no outbreak was reported after 1994.
- 4.154 Among the other diseases the major one affecting cattle, buffaloe, goat, pig and poultry are digestive system disorders(34% of the total cases), parasitism(40%), reproductory disorders(5%) etc. According to report on Animal Disease Surveillance Scheme, 2006 the economic loss due to various diseases arrived at Rs.620.94 Cr. ie., 23% of total worth of Livestock populatin in State. Of the total loss, 66% is for cattle.

Production of Vaccine in Veterinary Biological Institute, Palode

4.155 The Veterinary Biologicals, Palode is the sole agency engaged in the production and distribution of animal vaccine in the State. The production details of vaccines manufactured here are shown in Table 4.31. Apart from the production of vaccines, the institute is engaged in the manufacture of diagnostic reagents and other animal health products.

Table 4.31
Production of Vaccine by Veterinary Biological Institute (2002-03 to 2007-08)
(lakh doses)

Sl.	Name of Vaccine	2002-	2003-	2004-05	2005-06	2006-07	2007-08
No.		03	04				
1	RDVK	54.45	120.06	104.02	69.46	159.50	80.86
2	RDVF	17.61	31.16	19.86	10.01	16.98	3.18
3	FPV	0.45	0.20	8.17	1.97	5.87	0
4	DPV	10.64	28.25	2.48	27.84	23.36	20.33
5	HS Oil adjuvant	0.41	1.14	1.47	0.77	2.04	3.80
6	HS Broth	0.67	2.67	1.03	0.27	1.34	1.26
7	BQ	0.67	1.39	0.32	0	0.28	0
8	Anthrax	0.28	0.14	0.48	0.79	1.02	1.72
9	FMD Vaccine*	12.15	Nil	Nil	Nil	Nil	Nil
10	Duck Pasteuurella oil adjuvant Vaccine					3.21	6.66

Source: Animal Husbandry Department

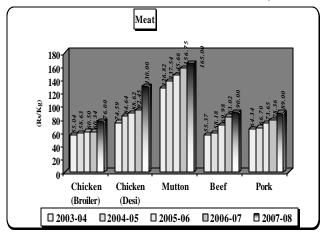
- 4.156 Compared to previous year poultry vaccine production during 2007-08 decreased by 47% from 208.92 lakh during 2006-07 and livestock vaccine increased by 54% from 4.39 lakh doses during 2006-07. Number of vaccinations done during the year was 23.12 lakh doses for livestock and 72.51 lakh doses for poultry respectively. Compared to previous year, vaccination to cattle decreased by 15 per cent and vaccination to poultry 17.2 per cent. Details are given in Appendix 4.34
- 4.157 Compared to 2006-07 production of RDVK, RDVF, DPV and HS Broth vaccines recorded a decrease and there is no production of FPV and BQ vaccines during 2007-08.

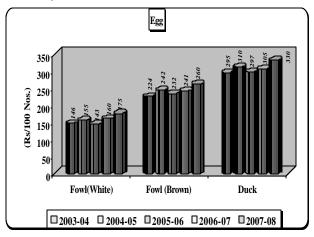
Prices

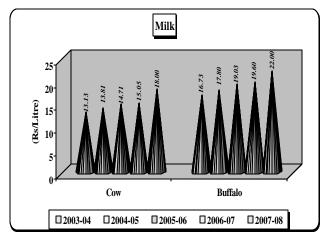
- 4.158 Average price of important inputs and products of livestock sector for the last five years is presented in Appendix 4.38 and all the products are recording increase in prices during the last two years. Compared to 2005-06 there was increase in the price of all categories of meat during 2006-07 and 2007-08. During 2007-08, the highest increase is in the case of Chicken(desi) (39.78%), followed by Chicken(broiler)(24.59%). The hike in the price of beef during the year is 12.50% and pork is 13.58%. Compared to 2006-07, the price of fowl-white egg increased by 9.38 per cent, brown egg by 8.33 per cent and duck egg by 8.20 per cent during 2007-08. Corresponding increase during the previous year is 11.8%, 3.45% and 2.7%.
- 4.159 During 2007-08, the price of milk (cow) increased by 19.6% and buffaloe milk increased by 15.8% in the State.
- 4.160 On the input side, the price of grass which recorded 7.6% hike during 2006-07 remained at the same level and of straw which recorded an increase of 6.7% during previous year increased by 14.6% in 2007-08. Compared to previous year, the price of gingili oil cake increased by 14.4%, coconut oil cake by 18% and ground nut cake by 19.7% during 2006-07 and the increase in the price of inputs is a serious threat to dairy farming. The trend in average price of livestock products are shown in Fig. 4.18.

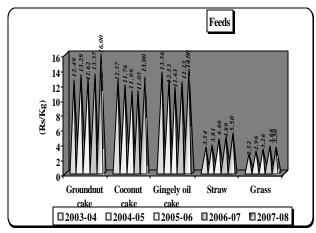
^{*}Supply from other Sources

Fig.4.18 Average price of livestock products and feeds in the state (2003-04 to 2007-2008)









Annual Plan 2007-08: A Review

Financial Performance of Annual Plan 2007-08

4.161 The budgeted outlay for the livestock sector during 2007-08 is 59.85crores. This includes Rs.54.35 crores provided for Animal Husbandry and Rs.5.5crore for Dairy Development. against this the total expenditure is 40.71 Cr. ie., 74.9% of the budgeted outlay of which Rs.34.91 Cr. is the expenditure in Animal Husbandry Sector and Rs.5.80 Cr. in Dairy Development Sector.

4.162 Substantial outlays have been were earmarked by them for livestock development. The activities, by and large, are centered around assistance to dairy co-operative societies for infrastructure development and purchase of equipment, fodder cultivation and development of farms transferred to them. Outlay and expenditure of some of the major schemes are given in Table 4.32

Table 4.32
Outlays and Expenditure for Major Schemes under Annual Plan 2007-08
(Rs. lakh)

Sl. No.	Name of Scheme	Approved outlay	Actual expenditur e	Expd. as % to Total
1	Strengthening of Veterinary Service	1732.50	1208.05	70
2	Expansion of Cross Breeding facilities	576.50	521.18	90
3	Special Livestock Breeding Programme	825.00	296.68	36
4	Commercial Fodder Production Programme	190.00	189.87	99.9
5	Poultry Farms and Expansion of Poultry			
	Production Incl. Farms under KSPDC and			
	Poultry Development through KSPDC	170.00	244.18	143.6
6	Commercial Dairy and Milk Shed			
	Development	500.00	499.27	99.9

4.163 Flagship project on State Food Security has been launched in 2007-08. As a part of flagship project on State Food Security, under Animal Husbandry Sector, three schemes viz., expansion of cross breeding facilities, SLBP, scheme for the promotion of fodder are provided with additional support. A new scheme on Poultry production is included and had launched a major project for the development of poultry as apart of the State Food Security Project. The objective of flagship scheme is to increase milk production by 70 percent from the base level and doubling of egg production in the Plan period with the support of local governments. The total amount earmarked for flagship project is Rs. 9.00 crore during 2007-08, the first year of the Eleventh Plan. Another new scheme is included as flagship scheme linked to State Food Security Project for the promotion of Commercial dairy under Dairy Development. A provision of Rs.500 lakh is provided in the Annual Plan 2007-08 for the project. Through the programme, a transition from subsistence dairy farming to viable commercial diary farming, with technology support which is imperative for enhancing production and productivity is expected.

Fisheries Development

The demand for fish and fishery products are increasing considerably in the country, both in domestic and export fronts. The projected demand for fish in the country by 2012 is 9.74 million tonnes with a projected supply of 9.60 million tonnes. The major share of 5.34 million tonnes is expected from inland aquaculture followed by 3.10 million tonnes from marine fisheries (Planning Commission 2007). The global production of fish from aquaculture has grown rapidly during the past four decades. Aquaculture, now accounts for nearly 45 per cent of the world's food fish and this share is expected to reach 50 per cent in 2015. China accounts for 67.3 per cent of the food fish aquaculture production followed by India (5.9%) and Vietnam (3.0%)

Resource base

4.165 India is endowed with vast fisheries resources in terms of a coast line of 8118 km and 2.02 million sq.km of exclusive economic zone, including 0.53 million sq.km of continental shelf. The inland fisheries include rivers and canals (1.95 lakh km), reservoirs (3.15 million ha), flood plain wetlands (0.30 million ha), estuaries (0.26 million ha), fresh waters (2.41 million ha) and brackish water bodies (1.24 million ha). These resources are one of the main sources of livelihood for the rural poor, particularly the fisher community. The sector provide livelihood for over 90

lakh people at subsistence level of annual income. At present, an estimated 140 lakh people are engaged in fishing, aquaculture and ancillary activities in the country.

- 4.166 The state has all the requisite natural endowments for building a strong and vibrant fisheries economy in tune with the national strategy. They include a stretch of coastal belt extending over 590 km. and an extensive inland water spread of around 4 lakh hectares. The exclusive economic zone (sea spread upto 200 metres) lying adjacent to Kerala coast is spread over 36000 square kilometres which is almost equivalent to the land area of the state.
- 4.167 The state has a total fresh water area of 158358 ha consisting of reservoirs (42890 ha), private ponds (21986 ha), irrigation tanks (2835 ha), Panchayat ponds (1847 ha) and 44 rivers having water spread area of 85,000 ha. The brackish water resources consist of 65213 ha of estuaries and backwaters and 12873 ha of prawn filtration fields. The polders of Kuttanad having a water spread of 35000 ha and 17,000 ha of kole lands of Thrissur are also very ideal for various aquaculture development activities.
- 4.168 The estimated fisher folk population of Kerala during 2007-08 is 11.22 lakh, which include 8.64 lakh in the marine sector and 2.58 lakh in the inland sector. Out of this the number of active fishermen is estimated as 2.28 lakh which comprises of 1.98 lakh marine and 0.30 lakh inland fishermen. Alappuzha district is in the first place in the number of fisher folk with a population of 1.88 lakh followed by Thiruvananthapuram(1.85 lakh). The district wise details of fisher folk population are given in Appendix-4.47. There are 222 fishing villages in the marine and 113 fishery villages in the inland sector, where fishing and relative activities provide livelihood to a vast majority of the population.

Income from fisheries sub sector

4.169 The Gross State Domestic Product of the State has increased about 83 per cent during the period from 1999-00 to 2007-08 and the share of fisheries sector in the State Domestic product has declined from 2.21 to 1.24 per cent in the same period (See Table-4.33). Even though the value of primary sector has increased about 20 per cent in the period, the share of Primary sector in GSDP has declined from 22.88 to 14.96.

Table 4.33 Contribution of Fisheries sector to Gross State Domestic Product (1999-00 Prices)

	Period								
Category	1999- 00	2001-02	2004-05	2005-06	2006-07 (Provisional)	2007-08 (Quick)			
Gross State Domestic Product (Rs. Crores)	69168	75309	94421	103081	114521	126453			
Fishing (Rs. Crores)	1526	1547	1536	1469	1549	1565			
Share of fisheries sector in GSDP	2.21	2.05	1.63	1.43	1.35	1.24			
Share of Primary	22.88	21.54	18.23	17.27	16.12	14.96			

sector in GSDP			

Source: Directorate of Economics and Statistics

Species-wise Composition of Fish Landing

4.170 The Kerala Marine Fisheries Regulation Act was enacted with a view to enforce strict regulatory measures following the induction of more number of crafts and consequent increase in the level of unrestricted fishing. According to this Act, the inshore area coming within the depth range of 50 meters has been demarcated for fishing by the traditional fishermen using country crafts and the area beyond the limit in the economic zones can be utilised by motorized boats and large vessels. As this restriction is not being strictly followed, monsoon trawling has been banned as a preventive measure. The ban on monsoon trawling has been in force from 1980 onwards.

4.171 Although the fish catches from the Kerala coast include more than 300 different species, the commercially important number about forty only. The high value species among the fish catches are still few; prominent among them are seer fish, pomfret and prawn. Ribbon fishes are also now a target group. During 2007-08 the catch of Ribbon fish was 16156 tonnes. The quantity of these high value species in the total catch ultimately decides the income of the fishermen. Unfortunately the share of these high value varieties in the total marine fish catch has been remaining stagnant. The catch of penaid prawn during 2007-08 was 49673 tonnes. The catch of oil sardine, the most important variety consumed mainly by the poorer sections of the society exceeded the potential in recent years. The catch of oil sardine during 2007-08 was 1.57 lakh tonnes. The species wise landings are shown in Appendix: 4.48.

Fishing Crafts

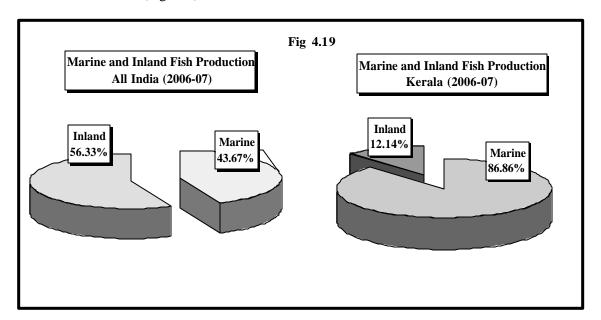
4.172 There was enormous increase in the number of fishing crafts operating in Kerala during the last decade. According to Marine Fisheries Census 2005, the total number of crafts in operation is 29177 of which 5504 crafts are mechanized and 14151 crafts are motorized and the rest non-motorised. Out of the 5504 mechanised crafts 3982 are Trawlers and 428 are Gillnetters. The District wise details are given in Appendix-4.50

Trend in Production

- 4.173 Among the maritime states in India, Kerala occupies the foremost position in marine fish production, accounting for about 20% of the total landings. Marine capture fisheries have always dominated the total fish production, compared to Inland fisheries in Kerala. Fish production in the marine sector over the last 10 years presents more or less a stagnant trend with an average production of 5.88 lakh tonnes. The marine fishery resource of the state has almost attained the optimum level of production. In this context there is no scope for further increase in fish production for inshore marine capture fisheries. However, the total inland fish production has shown an increasing trend in Kerala. The inland fish production reached peak share of 13% of the total fish production of the state during 2000-01 and thereafter declined slightly. At the national level more than 50% of the total fish production is contributed by the inland sector.
- 4.174 The National Agriculture Policy, which aims to attain a growth rate in excess of four per cent annum in the agriculture sector, stresses the importance of food and nutritional security

issues and the importance of animal husbandry and fisheries sectors in generating wealth and employment.

4.175 India is the third largest producer of fish in the world, and second largest producer of fresh water fish in the world. During 2006-07, India's total production was 68.69 lakh metric tonnes of which 30 lakh metric tonnes was from marine fisheries and 38.69 lakh metric tonnes from inland fisheries (Fig.4.19).



4.176 The marine fish production in Kerala is stagnant and seems to have achieved a saturation level whereas the inland fish production showed signs of improvement from 1999-00 followed by slight decline. During 2007-08, marine fish production has decreased to 5.86 lakh tonnes from 5.98 lakh tonnes of 2006-07 and inland fish production increased slightly (Table - 4.34 & Fig.4.20) . In the inland sector 0.81 lakh tonnes of fish is produced and which accounts for 12.14 per cent of the total fish production of the state during 2007-08.

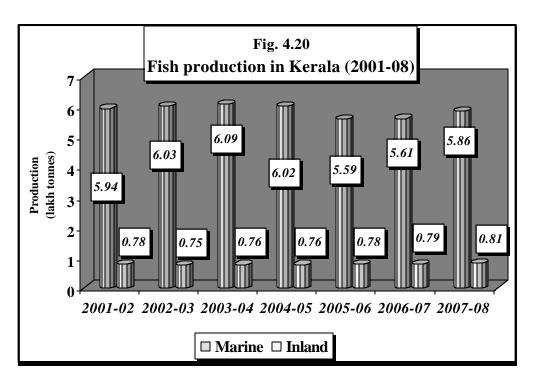


	Table 4.34								
Fish Production in Kerala during the last Six years									
			(lakh tonnes)						
Year	Marine	Inland	Total						
2002-03	6.03	0.75	6.78						
2003-04	6.09	0.76	6.85						
2004-05	6.02	0.76	6.78						
2005-06	5.59	0.78	6.37						
2006-07	5.98	0.80	6.78						
2007-08	5.86	0.81	6.67						

Source: Fisheries department

Export

- 4.177 The marine fisheries sector in the country contributes about 45% of the total fish production and is one of the major contributors to foreign exchange earnings through seafood export. The phenomenal growth in marine fisheries during the last decades was due to the introduction of innovative fishing practices, well developed harvest and post harvest infrastructure and increased demand for marine fish products both in domestic and export markets.
- 4.178 The total value of marine products export from the country was Rs. 7620.92 crores during 2007-08 and the quantity exported was 5.42 lakh tonnes indicating a decrease of 8.9 per cent in rupee terms, 11.6 per cent in volume and registering a growth of 2.5 percent in \$ earnings

compared to 2006-07. The major items of export are frozen shrimp fish, cuttle fish and squid etc.

- 4.179 European union is the largest group market for marine products from India accounting for a share of 34.96 percent in value followed by Japan (6.11%), USA (13.34%) and China (13.25%).
- 4.180 The marine products export from the state during 2007-08 was 100318 MT valued at Rs. 1430.94 crores constituting 18.52 per cent in terms of volume and 18.78 per cent in terms of value to Indian marine products export. The major export item is frozen shrimp which constitute 38.26 per cent in value terms of the total export from the state during 2007-08.
- 4.181 The State's share in all India exports has been declining in recent years. The share declined from 27 per cent in quantity terms in 1999-2000 to 20 percent in 2000-01 and for the last four years the share in quantity terms is stagnant at 18-19 percent and the share in value declined to 19 per cent from 22 per cent. Though the quantity exported during 2007-08 has decreased by 7.6 per cent, the share of Kerala has increased compared to that of the previous year (Table 4.35).

Table 4.35
Export of Marine Products from Kerala and India

(Q: Quantity in Metric Tonnes V: Value in Rs. Crore)

T 7		T 11	T 7 1	
Year		India	Kerala	Share of Kerala (%)
1999-00	Q	343031	92148	27
	V	5117	1147	22
2000-01	Q	440473	88852	20
	V	6444	1046	16
2001-02	Q	424470	72756	17
	V	5957	951	16
2002-03	Q	467297	81393	17
	V	6881	1046	15
2003-04	Q	412017	76627	19
	V	6092	1099	18
2004-05	Q	461329	87378	19
	V	6647	1158	17
2005-06	Q	512164	97311	19
	V	7245	1258	17
2006-07	Q	612643	108616	18
	V	8364	1524	18
2007-08	Q	541701	100318	19
	V	7621	1431	19

Source: MPEDA

4.182 European union accounted for the major share of exports from Kerala. As a single market Japan was the largest buyer from Kerala closely followed by USA. In rupee terms the export to European union is 56.56 percent of the total export of the state followed by Japan (10.85%) and USA (9.32%).

4.183 In the report of Global financial crisis and Kerala Economy by the Centre for Development Studies, it is pointed out that due to Global Financial Crisis, the decline in marine export would be about 25-30per cent across all the major destinations except South East Asia. Also Kerala is anticipated to suffer from a decline in the export by about one third in the short run and this could in turn lead to an employment loss of at least 20,000. One possible positive effect is expected from the reduction in the domestic price of diesel which is an important input into the fishing sector. However the net effect of the crisis is expected to result in serious livelihood issues for the fisher folk.

Infrastructure facilities available for processing

4.184 The infrastructure facilities available for processing seafood for export purpose are shown in the Table. 4.36. In Kerala 179 exporters are registered as against an all India number of 745.

Table 4.36
Infrastructure facilities of seafood industry in Kerala and All India

Sl.No	Facilities	All Inida	Capacity tons/day	Kerala	Capacity tons/day
1	Fishing Vessels	14283		4971	
2	Conveyance	305		164	
3	Freezing Plant	358	1332	106	2289
4	Canning Plant	8	30.5	3	11.5
5	Ice Plant	164	3216	61	207
6	Peeling sheds	545	6592.7	245	2926
7	Cold storages	477	169492	152	33566
8	Other storages	131	7464.5	3	27

Source: MPEDA

Debt Relief to Fishermen

4.185 The Kerala Fishermen Debt Relief Commission Act, 2008 is expedient to provide for urgent relief to the fishermen who are in distress due to indebtedness by constituting a Commission for recommending appropriate relief measures to such fishermen and for solving their problems. For exercising the powers and discharging the duties under this act, Government have constituted a Commission by name "The Kerala State Fishermen Debt Relief Commission" consisting of five members. The powers and duties of the Commission are given in Box 4.2.

Box 4.2 The Kerala State Fishermen Debt Relief Commission

Powers and duties:

to recommend to the Government on application or otherwise, after such enquiry as the Commission may deem fit, and on the basis of the general criteria as may be prescribed by the Government to declare any districts or district or fishermen zone forming part thereof as disaster affected area for a proposed period;

- to determine, in the case of creditors other than institutional creditors, a fair rate of interest and an appropriate level of debt, as the commission may consider just and reasonable to be payable by the indebted fishermen in the disaster affected area;
- to undertake conciliation for the settlement of disputes between the indebted fishermen and the creditors other than institutional creditors, on the basis of the fair rate of interest and appropriate level of debt determined;
- to adjudicate the disputes between indebted fishermen in the disaster affected area and the creditors, other than institutional creditor, and to pass awards which shall be binding on both parties; provide that before passing an award under this clause the creditor shall be given an opportunity of being heard;
- to enter into negotiations with the creditors for waiving loan, for granting interest rate relief, for rescheduling the loan or for providing loan moratorium to the fishermen in the disaster affected areas:
- to recommend the Government regarding the extent and the manner in which the debt relief to be granted to the fishermen;
- to recommend to the Government or Government agencies to take over the whole or part of the debt and exonerate the fishermen from the consequences of the debt;
- to recommend to the Government to do such acts as may be necessary to ensure that future debt relief's of the fishermen are met through such agencies, as may be prescribed;
- to furnish periodical reports to the Government generally on any matter pertaining to fishermen's indebtedness; and
- 4.186 An amount of Rs.1000.00 lakh has been provided in the budget for 2008-09, in order to initiate the activities of the Commission in the state.

Tsunami

- 4.187 In order to rehabilitate and reconstruct Public and community based infrastructure and restore the livelihood of the affected population, Tsunami Emergency Assistance Project at a total cost of Rs. 245.46 crores was approved by Asian Development Bank. In the project Rs. 38.62 crores has been provided for fisheries sector, out of this Rs. 29.07 crores has been expended for livelihood restoration activities up to December 2008. During 2007-08, an amount of Rs. 14.43 crore has been expended.
- 4.188 Planning commission has approved Tsunami Rehabilitation programme (TRP) for an amount of Rs 1441.75crore for reconstruction of damaged physical and social infrastructure and for the revival of livelihood. Under livelihood component Rs 6.23 crore has been utilised for various schemes up to December 2008.For the implementation of social infrastructure projects an amount of Rs 86.79 crore has been provided for Harbour Engineering Department and the implementation of the projects are in progress and up to December 2008 an amount of Rs 18.31 crore has been expended.

Major developmental Programmes

4.189 The major developmental programmes implemented during the Plan period in the state include, inland fisheries development, development of fishing harbours and landing centres and programmes ensuring social and livelihood security of fishermen. The developmental programmes undertaken in the marine sector include modernisation of country crafts,

popularisation of new generation crafts and distribution of suitable components of fishing gear, development of fishing markets, development of deep sea fishing etc.

4.190 During 2008-09, new schemes for providing interest free loan to fishermen to meet the working capital requirement and insurance coverage for fishing implements was launched. The scheme for insurance coverage of fishing implements, the premium is 1.8 per cent of the unit cost and amount assured is 75 per cent of the agreed value. The premium is met by Government and the beneficiary in the ratio 75:25. Government has initiated a new programme for the development of inland fisheries and aquaculture with the support of local self governments named Matsya Keralam..

Outlay and expenditure for 2007-08

4.191 The outlay and expenditure for various schemes implemented in the fisheries sub sector are shown in Table-4.37. The total expenditure of the state sector schemes up to March 2008 is Rs. 5243.23 lakh which accounts for 101.49 per cent of the original outlay of Rs. 5166 lakh. The expenditure exceeds the budgeted outlay due to providing additional amount under SDG and amount provided to NCDC scheme on Integrated Fisheries Development project as state share. Under fisheries sector there are 10 partially aided central sector schemes having plan outlay of Rs. 1322.50 lakh and the expenditure reported is Rs. 1803.16 lakh. Additional allocation was received for Ponnani and Thottappally harbours, modernisation and hygienic improvement harbours and for the scheme saving cum relief scheme and thus expenditure exceeds the original outlay of the central sector schemes.

Table: 4.37
Outlay and Expenditure during 2006-07 and 2007-08

(Rs. lakhs)

Name of Sector/Scheme	2006	5-07	200	07-08
Name of Sector/Scheme	BE	Expt.	BE	Expt.
State Plan Schemes	5888.00	6535.25	5166.00	5243.23
Integrated Coastal Area Development project under Special area Development- State Plan Scheme			727.00	727.94
Centrally Sponsored Schemes	1522.50	1455.28	1322.50	1803.16
NCDC assisted Integrated Fisheries Development Project (NCDC Loan)	936.05		1500.00	950.85
Total	2458.55	7790.53	8715.50	8725.18

4.192 Under Special Area Development Programme, a new project on coastal area development was initiated during 2007-08. The project converge resources and services of Department of Fisheries, Harbour Engineering, Ports, Health, Education and agencies like

Matsyafed, Kudumbashree as well as local governments. During 2007-08, the project was undertaken in Kasargod district and it is being implemented in 2008-09. The project include water supply, fisheries schools, Matsya vigyana kendras, biogas plants, roads, fish landing centres, fish markets and guide lights.

1. Integrated Development of aquaculture in Kuttanand

4.193 The Scheme Integrated Development of Scampi/ Fish farming in rotation with paddy in Kuttanad was started in 2003-04 with a target area of 3500 ha. Upto March 2008 an amount of Rs. 318.90 lakh has been expended as state share of the scheme and covered an area of 1390 ha and benefited 2124 beneficiaries. During 2007-08, 149 ha have been covered under the scheme. The total production from 2003-04 to 2006-07 under the scheme is 365 tonne scampi and 368 tonne fish. The harvest during 2007-08 is carried on October 2008 which was not included. During 2006-07 an amount of Rs.100 lakh was allotted as Additional Central Assistance for the implementation of one paddy one fish in kole lands of Thrissur and the project was started implementation in 2007-08 and covered an area of 396 ha and utilised an amount of Rs.16 lakh upto March 2008.

2. Integrated Development of Pokkali fields

4.194 The scheme sustainable shrimp aquaculture development in Pokkali field was targeted for an area of 2500 ha during the tenth plan period from 2002-03 to 2006-07. But the implementation of the scheme was not started during 2002-03 and thus the project period was extended to March 2008. The cumulative expenditure of the project was Rs.382 lakhs and the total area covered is 5700 ha. The total number of beneficiaries under the scheme was 1222 and 217 farmers have available a bank loan of Rs.190.4 lakh. The production reported was 1700 tonne with revenue of Rs.35.83 crores. During 2007-08, an area of 2000 ha is covered by expending an amount of Rs.78.32 lakh with a production of 198.4 tonnes.

3. Fishing Harbours and Landing Centres

- 4.195 Vizhinjam, Neendakara, Thankassery, Munambam, Puthiyappa, Mopla Bay and Chombal have been completed and commissioned. The progress of work in respect of the ongoing Harbours and landing centres is given in Appendix.4.51 and Table 4.38. All the harbours are constructed with 50% Central assistance.
- 4.196 Work on Muthalapozhy, Ponnani, Thottappally and Kayamkulam are progressing. The total revenue collected during 2006-07 and 2007-08 were Rs. 233 lakh and Rs. 251 lakh respectively. Neendakara fishing harbour contributed 38 per cent of the total revenue collected during 2007-08 and Puthiyappa fishing harbour collected 29 per cent of the total revenue collection. (See Appendix 4.52)

Table 4.38 Fishing Harbours in Kerala

(Rs. lakhs)

Sl. No.	Fishing (Rs. in Lakhs)		Year of starting	Year of completion/ Target	Expenditure upto March 2008 including RIDF	
		Original	Revised			
1	Vizhinjam	704.00	1583.00 *	1987	2004 II Stage	1599.92
2	Muthalappozhi	1366.00	-	2000	2005	1261.56
3	Kayamkulam	624.60	1970.32	1994	2005	2749.94
4	Ponnani	2759.40	-	2001	2008	1597.49
5	Thalai	1370.00	1925.74	2007	2011	130.28
6	Thottappally	1458.30	-	2004	2009	1197.55
7	Koyilandi	3545		2006	2009	487.36

Source: Harbour Engineering Department

4.197 Under RIDF XI, NABARD has approved an amount of Rs. 1062.54 lakhs for the balance work of Kayamkulam fishery Harbor and Rs. 895 lakh for the modernization of Neendakara Fishery harbour . In Kayamkulam Fishery harbour construction work of breakwater is completed and Rs. 1078.66 lakh has been spent. For Koyilandi Fishery harbour NABARD has sanctioned a loan of Rs. 1772.5 lakh under RIDF XII and the expenditure up to March 2008 is Rs.457.07 lakh.

4.198 There are 15 landing centres for traditional fishermen. Out of the fish landing centres for traditional fishermen, eight have been completed. The completed fish landing centres are Quilandy, Kattoor Pollathai, Vallikkunnu, Arthungal, Punnappra, Vellayil. Chalil Gopal Pettah and Moyilalikadappuram. Fish landing centre at Vizhinjam south has almost completed. Work at Kadapra has partially completed and construction of Groyne completed at Thikkodi. Two centres at Poovar in Thiruvananthapuram and Kanjanhad at Kasargod could not be commenced due to the resistance from local people and non availability of land. The proposed centre at Vizhinjam North has been abandoned due to local resistance and the one proposed at Quilon was dropped in view of the development of Thankassery Fishery Harbour.

4.199 The construction of fishing harbours and landing centres has to be done on a strict project mode with different methods of financing and participation, a prioritized action plan has to be prepared for the completion of all long pending infrastructure projects.

4. Social Security and livelihood support to fishermen Community

4.200 A number of programmes are under implementation for providing social security and livelihood support to the fishermen community. They include saving-cum-relief scheme,

^{??} Revised Estimates submitted to Government for sanction

NFWF housing, Group insurance to fishermen, insurance coverage for fishing implements etc. The major highlights are given in Appendix-4.53.

4.201 Under NFWF assisted housing scheme under the Model villages development Programme, 8729 houses were constructed spending Rs. 35.02 crores during Ninth Plan. During the Tenth Five year plan, 6445 houses were constructed spending Rs. 2577.87 lakhs. During 2007-08, 1500 houses were constructed by spending an amount of Rs.6 crores. All active fishermen are covered under group accident insurance scheme. About 2.28 lakh fishermen were insured under the scheme. Assistance is provided to accidental death/missing of fishermen while fishing, permanent and total disability and partial disability.

4.202 The Kerala Fishermen Welfare Fund Board is the implementing agency for welfare and relief schemes to the fishermen in the state. The Board has 227815 registered contributing fisher folk and 51477 registered contributory allied workers. There are 28519 old age pensioners and 4889 widow pensioners. Under allied workers welfare scheme, there are 2749 old age pensioners. Details are shown in Appendix. 4.54.

4.203 The saving cum relief scheme is for providing assistance to fishermen during lean period by mobilizing their savings during the peak season. This is a 50% CSS and during 2007-08, 128459 beneficiaries under marine sector and 9954 beneficiaries under inland sector were assisted and the total expenditure was Rs. 7 crores.

5. Society for Assistance to Fisher Women

4.204 Societies for Assistance to Fisher Women is a registered society for encouraging and strengthen locally organized social organisations among fisher women in coastal areas. At present nearly 5000 women SHGs are registered with SAF. Under the micro enterprises scheme upto March 2008, 692 beneficiary groups are formed by SAF. Interest free financial credits were given to 40,000 fisher women in the form of revolving fund for fish vending. The amount of loan is Rs.5000 per beneficiary. In TEAP/TRP schemes 800 beneficiary groups were formed by SAF. By utilizing TEAP share of Rs.38.97 lakh 60 dressed / dry fish unit were established and 31 units of production and marketing of hand made toiletries by utilizing TRP share of Rs.75.17 lakh.

6. Matsyafed

4.205 Matsyafed is an apex federation of 653 primary level Fishermen Development Welfare Co-operative Societies. Of the 653 primary societies 340 are in the marine sector 182 are in the inland sector and the rest 131 are women co-operatives. The total membership in these societies is more than 30 lakhs. These societies were affiliated since 1987-88 and the 393 societies are functioning well and the performance of the remaining societies require rejuvenation. The bad debt position of these societies are estimated to be around Rs 33 crores.

4.206 Under Matsyafed 10558 numbers of SHGs are formed with 127080 members and Rs.1332 lakh generated as thrift. Matsyafed is running 4 hatcheries with production capacity of

50 million prawn seeds and 3 fish farms for commercial production of fish and prawns. The achievement of various programmes implemented by Matsyafed is given in table 4.39.

Table 4.39
Major programmes of Matsyafed

Sl No.	Name of Programme	Cumulative Physical achievement upto March 2008	Cumulative financial achievement upto March 2008
1	Integrated Fisheries Development Project	57725 beneficiaries 500 societies	Rs.18752.77 lakh
2	TEAP / TRP	30467 beneficiaries	Rs.1464.43 lakh
3	Motorisation of country crafts	6696 No	Rs.562.78 lakh
4	Subsidy for suitable complements of fishing gear	1592 No	Rs.99.25 lakh
5	Bankable Scheme	875 beneficiaries	Rs.169.3 lakh
6	Value addition	11 societies	Rs.99.94 lakh
7	Deep sea fishing	20 units	Rs.488 lakh
8	Scheme with financial assistance of NBCFDC and NMDFC	5011 SHG's 33170 beneficiaries	Rs.2084.59 lakh
9	Loan to Women fish vendors	8600 beneficiaries	Rs.427.77 lakh

Co- operation

The Co-operative sector has been playing a distinct and significant role in the process of socio-economic development of the state with special focus on rural population and livelihood. Through sustained efforts, co-operatives have made impressive progress in various segments of Indian economy particularly in agriculture credit disbursement, fertilizer distribution, procurement and distribution of agricultural commodities, promotion of consumer activities, health, dairy, fisheries, handloom, coir etc. Attempts were made to develop the movement as a self reliant one by augmenting the resources through mobilization of savings in urban and rural areas.

4.208 The co-operative movement in Kerala has a strong foundation and impressive track record in terms of financial stability and sound infrastructure to generate adequate funds. The spread and growth of co-operatives in different sectors were nurtured under development plans with government initiative and government finance. Kerala has a wide network of co-operatives engaged in various promotional activities such as distribution of credit, marketing, agro processing, consumer activities, public health, education, insurance and infrastructure development. There are 13197 co-operatives under the control of Registrar of Co-operative Societies; of which 10449 are functional in the various promotional activities in the sector. The total number of co-operatives are classified into nine categories as shown in Table 4.40.

Table 4.40 Co-operatives under the control of Registrar of Co-operative Societies as on 31.3.08

Sl. No.	Type of Societies	No.	Functional No.
1	Credit Co-operatives – 3122 (Apex 28)	3150	2920
2	Marketing Co-operatives	552	303
3	Consumer Co-operatives	4765	4211
4	Processing Co-operatives	32	13
5	Housing Co-operatives	375	284
6	SC/ST Co-operatives	807	473
7	Health Societies	180	105
8	Women Co-operatives	919	690
9	Other Co-operatives (miscellaneous)	2417	1450
	Total	13197	10449

Source: Registrar of Cooperative Societies

Support by NCDC

4.209 NCDC has emerged as a developmental and promotional financing institution for the Cooperative sector in the country. The strategy of the Corporation is to strengthen and develop cooperative institutions to enable them to serve their members and to maintain a sustained growth in their income.

4.210 As on March 2008, the cumulative dsbursement of the Corporation was Rs. 1582.61 crores. During 2007-08 the flow of fund from NCDC to Kerala was all time high, as the amount released was Rs.330.73 crore against Rs.310.59 crore during 2006-07 showing a growth of 6.48%. An amount of Rs. 200.00 crore was provided as Working Capital assistance, directly to the Kerala State Co-operative Agricultural and Rural Development Bank and Rs.10 crore each to Malappuram and Wayanad District co-operative banks to meet short term micro finance requirement in Agriculture and allied sectors. Out of the total disbursement of Rs. 330.73 crores, Rs. 19.05 crore (5.76%) was for marketing and input distribution, Agro-processing Rs. 61.64 crore (18.64%) weaker sections Rs.13.97 crores (4.2%). Activity wise and year wise sanction and release of assistance from NCDC are furnished in Appendix 4.55. The major thrust areas financed by NCDC include agro-processing, agro-marketing, integrated co-operative development projects focusing on micro-level co-operatives, service co-operatives and promotion of fisheries in the co-operative sector. The NCDC has also sanctioned an amount of Rs.55.76 crore to the Government of Kerala for the revitalization of RUBCO.

4.211 The Year-Wise amount released by NCDC from 1962-63 to 2007-08 with rate of interest is given in Table 4.41.

Table 4.41
Year wise release of NCDC loans with interest rates.

(Rs.Crores)

Year	Release of fund	Interest rate(%)
1962-63 to 92-93	122.08	
1993-94 to 98-99	195.47	
1999-00	56.07	13.75

Total	1582.61	
2007-08	330.73	9.75
2006-07	310.59	10.25
2005-06	190.99	8.5
2004-05	109.24	8-8.5
2003-04	96-58	7-9
2002-03	50.18	11.50-10.5
2001-02	51.64	13-12.25
2000-01	69.04	13.75

4.212 Agency wise release of funds for Kerala by NCDC is shown in appendix 4.56.

Primary Agricultural Credit Societies (PACS)

- 4.213 The Co-operative Credit structure in Kerala comprise of 1594 Primary Agricultural Credit Societies (PACS) and affiliated Primary Co-operative Agricultural and Rural Development Banks supported by the Central and Apex Co-operative banks. As on March 2008, there were 1594 PACS out of which 1564 are functional, 28 are running on loss and 762 on profit. The 1594 PACS are functioning with a total membership of 3.20 crores, with a paid up share capital of Rs.1344.9 crores and reserves of Rs. 1478.22 crores.
- 4.214 The performance of the co-operatives during the year under report was slightly encouraging. The total loan disbursed in 2007-08 was Rs. 20755.9 crores against that of Rs. 16079.84 crores in 2006-07. Compared to the last year, there was increase in the disbursement of all types of loans. Out of the total loan disbursement, major share (55%) was for short term, followed by medium term (41%) and long term (4%). In the case of loan disbursement, for agricultural purposes, though in real terms, the disbursement was higher than that in the previous year, a notable increase was made in the percentage of long term (Agriculture) credit disbursement. Credit for non-agricultural purposes in all types has comparatively increased. Though the co-operatives are disbursing loan for non agricultural purposes for making good margin for their business, a good number of societies are working on loss.
- 4.215 The Selected indicators of the credit operations of the Primary Agricultural Credit Societies shows that, during the year, deposits of the societies increased to Rs.18128 crores. The average deposit per member is also increased to Rs.5665 from last year's level of Rs.4951. Similarly the working capital position of the societies also increased to Rs.24561 crores against Rs.20392 crore during 2006-07. Selected indicators and credit operations of PACS are given in Appendix 4.57 and Appendix 4.58.

Self Help Groups linkages and PACS

4.216 Kerala under Co-operative sector the SHG scheme was implemented through PACs. The district wise cumulative progress is given in Table 4.42.

Table 4.42
Progress of Self Help Groups Scheme as on 31.3.08
(Rs. in Lakhs)

Sl. No	Districts	No. of groups		Total loan outstanding	Groups working in profit	Groups working in loss
-----------	-----------	---------------	--	---------------------------	--------------------------------	------------------------------

1	2	3	4	5	6	7
1	Trivandrum	1426	916	537	746	680
2	Kollam	4138	334	621	3131	1007
3	Pathanamthitta	714	56	459	477	237
4	Alappuzha	3289	20	31	2478	811
5	Kottayam	1158	64	416	621	537
6	Idukki	9937	1208	1588	6678	3259
7	Ernakulam	998	28	166	133	865
8	Thrissur	6484	661	1228	2412	4072
9	Palakkad	404	30	283	56	348
10	Malappuram	198	49	85	136	62
11	Kozhikode	2249	139	126	1450	799
12	Kannur	6491	473	881	0	40
13	Wayanad	40	28	229	4767	1724
14	Kasaragod	1465	851	633	952	513
	Total	38994	4861	7283	2403724 043	14954

Source: Registrar of Co operative Societies

4.217 Under this scheme, 38991 Groups were involved in the implementation of SHGs upto March 2008. Idukki district formed maximum number of 9937 Groups followed by Kannur district. In the State 38991 Groups with a deposit collection of Rs.4857 lakhs were formed. The total loan outstanding to the groups was Rs. 7283 lakh. Out of the total Groups, 24037 were functioning on profit and 14954 on loss.

Deposit Mobilisation Campaign by Co-operative Societies

4.218 Deposit Mobilisation campaigns by co-operative credit institutions continued during the year under report also. The deposit mobilisation by the Co-peratives have shown an increasing trend over the years. During 2007-08, against the target of Rs.1000.00 crore, the co-operatives could mobilize Rs.2928 crore. Year wise target and achievement is given in Table 4.43.

Table 4.43
Targets and Achievements of Deposit Mobilisation Programme of Co-operatives in Kerala

(Rs. in Crores)

Year	Target	Achievement	Achievement (%)
2002	200.00	853.20	426.66
2003	400.00	909.61	226.00
2004	450.00	920.00	204.44
2005	400.00	1305.00	326.00
2006	400.00	1539.55	384.88
2007	600.00	1719.93	286.66
2008	1000.00	2928.23	292.00

Source: Registrar of Co operative Societies.

Performance of the Sector during the Tenth Plan

- 4.219 The strategy adopted for the development of Co-operative sector during X^{th} Plan was expansion and diversification of commercial ventures in selected areas such as agro processing, marketing, storage and promotion of SHGs.
- 4.220 The outlay envisaged for the sector during 10th Plan was Rs. 100 crores. Out of this, Rs. 72 crores have been budgeted for X Plan. Against this, the expenditure incurred was Rs. 46.90 crores, ie. 65.14% of the budgeted outlay.
- 4.221 Sub sector wise financial achievement during the Tenth Plan is given in Table 4.44

Table 4.44 Sub sector wise financial achievement during the Tenth Plan.

(Rs. Lakhs)

Sl.No	Sub sector	Financial outlay (Tenth Plan)	Achievement (Tenth Plan)	% of Expenditure to outlay.
1	Credit co-operatives	1173	671.92	57.28
2	Processing co-operatives	1170	887.58	75.86
3	Consumer co-operatives	550	409.07	74.38
4	Housing co-operatives	440	474.30	107.80
5	Research, Education & Training	250	241.25	96.50
6	Administrative Reforms	820.02	428.96	52.31
7	Modernisation	128	85.15	66.52
8.	Other co-operatives	268.98	274.76	102.15
9	Other schemes-			
	i).Expansion& diversification.	1250	233.30	18.66
	ii).Rehabilitation of weak but			
	potential co-operatives	1150	983.76	85.54
	Total	7200	4726.39	65.14

- 4.222 An analysis of the expenditure shows that the major share (33%) was incurred for the implementation of the two schemes viz., 'expansion & diversification of co-operatives and rehabilitation of weak but potential co-operatives. About 16% of the outlay was for assisting processing co-operatives, 16% for credit co-operatives, 11% for administrative expenses, 8% for providing assistance to consumer co-operatives and 6% for assistance to Housing co-operatives. Besides the plan outlay, NCDC has released Rs.757.56 crores during the Tenth Plan for the development of marketing, credit, consumer and industrial co-operatives in the State.
- 4.223 A three tier system consisting of primary consumer co-operatives, district wholesale stores, and consumer federation is engaged in providing consumer services to the public. Besides the consumer stores, 1000 Neethi stores and 197 Neethi medical stores are functioning in the State. Of these, 22 medical stores are run by the Federation and the remaining 175 stores are run by PACS. Neethi gas and 46 foreign liquor retail outlets are also run by the Federation. The sales turn over of foreign liquor during 2007-08 was 337 crore. Moreover, the Federation has a strength of 66 Triveni Department stores.

Miscellaneous types of Co-operatives

4.224 Miscellaneous types of co-operatives has been organised in the state mainly for the purpose of generating employment opportunities to the unemployed youth and the weaker sections. Co-operative Hospital and Dispensaries, Education Co-operatives, Vanitha Co-operative Societies, Motor Transport, Autorikshaw and Taxi Drivers Co-operative Societies,

Tailors Co-operative Societies, Washermen Co-operative Societies, Chethuthozhilali Co-operative Societies etc. are some of the co-operative societies which are organised for the purpose of employment generation. There are also Social Welfare Co-operative Societies, Cultural Co-operative Societies, Farming Co-operative Societies, Leprosy Patient Co-operative Societies, Matsya Thozhilali Co-operative Societies, Photographers Co-operative Societies, Tailors Co-operative Societies etc. Government extend financial assistance to these societies by way of share capital contribution, grant, loan and subsidy.

- 4.225 State has given marketing support to major Co-operatives. The major production, procurement, export and Sales turn over of the major Co-operatives given in Appendix 4.59.
- 4.226 A programme for the overall development of the co-operative movement in the state namely "Sahakarana Navarathnam Keraleeyam" was launched during 2007-08. The programme includes the following developmental activities shown in table 4.45.

Table 4.45 Achievement under Sahakarana Navarathnam Keraleeyam during 2007-08

Sl no.	Name of Component	Achievement 2007-08 (Rs. in crores)
1	Deposit mobilization	2928
2	Arrear collection	1290.19
3	Distribution of commodities at reduced prices	53.00
4	Loans with reduced interest rates distributed to paddy and vegetable cultivators	158.08
5	Distribution of Royalty to writers	1.65

Source:RCS

Integrated Co-operative Development Project (ICDP)

- 4.227 Integrated Co-operative Development Project (ICDP) focuses on over all development of selected districts through co-operative efforts in the area of agriculture and allied sectors with the financial assistance of NCDC. ICDP covers all the districts in the state by providing financial assistance to PACS, PAMS, SC/ST co-operatives for infrastructural facilities such as godown, retail outlet, cash counters, iron safe, strong room, furniture etc.
- 4.228 The Project was successfully implemented in Wayanad, Palakkad, Kottayam, Idukki, Thrissur, Pathanamthitta, Malappuram, Kasaragod and Kannur districts. Scheme is under implementation in Kollam, Kozhikode and Thiruvananthapuram districts. During 2007-08, an amount of Rs.6.32 crore was expended for various activities under ICDP scheme in Kerala.

Kerala State Co-operative Union

- 4.229 State Co-operative Union, Kerala is the main agency for imparting Member Education Programme. There are 20 Member Education units functioning under State Co-operative Union, consisting of 12 units as general wing and 8 units as women wing.
- 4.230 During 2007-08, 26682 persons were trained by conducting 1313 classes. They conducted Leadership Development Programmes, Management Development Programmes and State Level Seminars for Dairy, Industries, Handloom, SC/ST and women co-operatives. Kerala Co-operative Journal is published by the State Co-operative union every month.

4.231 Thirteen co-operative training colleges and 10 co-operative training centres are run by the union conducting Higher and Junior Diploma courses in Co operation.

Kissan Credit Cards (KCC)

- 4.232 Kissan Credit Card scheme was introduced in 1998-99 as an innovative scheme for issuing short-term loan for seasonal agricultural operations and purchasing agricultural input for their production. The scheme has helped in augmenting ground level credit flow for agriculture. At the National level during 2007-08, Co-operative Banks and RRBs issued 20.91 lakh and 17.73 lakh cards respectively. A total number of 714.68 lakh cards were issued by the banking system during the last seven years under the scheme.
- 4.233 Agency wise ,Year wise Kissan Credit Cards issued at the national level are given in the following Table 4.46.

Table 4.46 Agency – Wise, Yearwise Kissan Credit Cards Issued.

(Lakhs Nos.)

Year	Co-operative	RRBs	Commercial	Total
	Banks		Banks	
2003-04	48.78	12.74	30.94	92.46
2004-05	35.56	17.29	43.95	96.80
2005-06	25.98	12.49	41.65	80.12
2006-07	22.97	14.06	37.67	74.70
2007-08	20.91	17.73	-	38.64
Total	154.2	74.31	154.21	382.72

Source :- Annual Report NABARD 2007-08

- 4.234 The KCC scheme has since been established as a major source of crop loan, but the investment credit requirement of farmers remained out side the ambit of the scheme. Keeping this in view, NABARD enlarged the scope of the scheme to cover term loans for agriculture and allied activities and a reasonable component for consumption needs.
- 4.235 District wise cumulative issue of KCC through PACs in Kerala as on 31.3.2008 is given below in Table 4.47.

Table 4.47
Progress on Kissan Credit Card issued through PACS as on 31-03-2008
(Rs. In lakhs)

Sl. No	District	No. of Societies	No of cards issued	Loan Outstanding
1.	Thiruvananthapuram	90	26467	41953
2.	Kollam	124	34310	4250
3.	Alappuzha	103	27217	6455
4.	Pathanamthitta	79	3235	1366
5.	Kottayam	121	72383	19440
6.	Idukki	71	144834	11637
7.	Ernakulam	49	17385	2827
8.	Thrissur	159	78833	13709
9.	Palakkad	89	90569	12288
10.	Malappuram	102	100819	3817

11.	Kozhikode	69	28705	9310
12.	Wayanad	119	202486	20159
13.	Kannur	27	4531	9624
14.	Kasaragod	63	89731	7744
	Total	1265	921505	164579

Source: RCS

- 4.236 In the State as on March 2008, 9.21 lakh. KCC have been issued through PACS with an aggregate credit outstanding Rs.1645.79 crores. There were 1265 PACS involved in the issue of KCC. Amongst Thrissur, Kollam and Kottayam districts contribute 159, 124 & 121 societies respectively. To enlarge the coverage of KCC scheme it is proposed to take care of full crop production, consumption needs and working capital under allied activities so far.
- 4.237 The Credit cards could be utilized effectively to channelize investment credit to the farm sector to promote capital formation. The flexi credit approach adopted by NABARD has to be popularized to address this issue.

Swarozgar Credit Card Scheme

4.238 The Swarozgar Credit Card Scheme (SCC) was introduced by NABARD in 2003 to take care of investment and working capital requirements of small borrowers. As on 31/3/08, various banks issued 8.34 lakh cards involving credit limit of 3379.35 crore.

Co-operative Development Fund

4.239 NABARD had constituted Co-operative Development Fund (CDF) during 1992-93 with the objective of supporting co-operative credit institutions for undertaking various developmental activities such as Human Resource Development (HRD), building up Management Information System (MIS), infrastructure creation, setting up of Business Development Department with technical personnel etc. The fund is augmented every year through contributions from NABARD surplus. Disbursement during the year 2007-08 was Rs.6.27 crore including drawal of sanctions in the previous years. Cumulative sanctions and disbursement under CDF aggregates to Rs.82.03 crore and Rs.73.92 crore respectively, as on 31 March 2008. The support provided through the fund resulted in the increase in deposit mobilization in the primary societies, improved MIS and availability of trained manpower in co-operative banks contributing to over all efficiency of the structure.

Agricultural Finance

4.240 The flow of credit to the agricultural sector exceeded the target for the fourth consecutive year during 2007-08. As against a target of Rs.2,25,000 crore during 2007-08 the banking system has disbursed Rs.2,25,348 crore as on 31/3/08. The share of ground level credit flow from Commercial Banks, Co-operative Banks and RRBs accounted for 70, 19 and 11 percent respectively to total credit flow in the country. The details are given in Table 4.48. The Government of India budget has set the total agricultural credit target for 2008-09 at Rs.2,80,000 crores. The budget also provided for the continuance of the short term crop loans at 7 per cent per annum and made an initial provision of Rs.1600 crore for interest subversion in 2008-09.

Table 4.48 Agency-wise Ground Level Credit Flow in India

(Rs.crore)

Agency	2003-04	2004-05	2005-06	2006-07	2007-08 (P)
Co-operative Banks	26,875	31231	39404	42480	43684
Regional Rural Banks	7,581	12404	15223	20435	24814
Commercial Banks	52,441	81481	125477	166485	156850
Others	84	193	382	-	-
Total	86,981	125309	180486	229400	225348

Source: Annual Report – NABARD 2007-08 (P) Provisional

- 4.241 During the year 2007-08, 82.68 lakh new farmers were brought under institutional fold and 38.64 lakh fresh KCCs were issued, in India.
- 4.242 The scope and extent of priority sector lending has undergone a significant change in the post reform period with several new areas and sectors being brought under its purview. Based on the recommendations of an internal working group set up by RBI chaired by Shri.C.S.Murthy, the sectors of the economy /society that impact large segments of the population, the weaker sections and the sectors which are employment intensive such as agriculture, micro and small enterprises have been retained as priority sectors in the revised guidelines which came into effect from April 30 2007. Agriculture, small enterprises, micro credit, retail trade, education and housing loan up to Rs.20 lakhs are the broad categories included in the priority sector. The priority sector lending targets were retained at 40% for domestic banks and 32% for foreign banks. However from April 2007, these were calculated as a percentage of adjusted net bank credit or credit equivalent amount of off balance sheet exposures which ever is higher, instead of as a percentage of net bank credit earlier. The change in definition and computation have to be taken into account when analyzing the achievement of priority sector lending in the state. The total priority sector advance disbursed during 2006-07 was Rs.27724 crore in the state and for 2007-08 was Rs.32657 crore with an increase of 18%.
- 4.243 Agency-wise disbursement of the annual credit flow in the state is given in Table 4.49. In the disbursal of total advances, commercial banks stood at the first place disbursing Rs.20294 crore (62%) in 2007-08, followed by Co-operative Banks (29.7%) RRBs (7.9%) and KFC (0.4%). In the lending for agriculture also commercial banks dominated by disbursing Rs.9924 crore (62%) followed by Co-operative Banks (26%) and RRBs. (12%).

Table 4.49
Agency-wise Annual Credit flow to Agriculture and total priority sector in Kerala
(Rs. in crores)

Sl. No	Agency		P	riority Sec	tor				Agricultur	e	
		2003- 04	2004- 05	2005- 06	2006- 07	2007- 08	2003- 04	2004-05	2005- 06	2006- 07	2007- 08
1	Commercial Banks	8847	11871	14159	17181	20294	2579	3884	4988	6618	9924
2	RRBs	1108	1473	1797	2186	2544	755	1066	1290	1690	1931
3	Co- operatives including KSCARDB	3539	4975	7097	8310	9681	1215	1904	2873	3598	4105
4	Kerala Financial Corporation	102	68	250	47	138	0	0.36	1.13		-
5	Grand total	13596	18387	23303	27724	32657	4549	6854	9152	11906	15960

6	Percentage											l
	increase to	29%	35%	26.74%	18.97%	15.10%	29.44%	51%	35%	30.09%	25.40%	l
	previous	2970	33/0	20.7470	10.97/0	13.1070	29. 44 /0	31/0	33/0	30.0970	23.4070	l
	year											l

Source: State Level Banker's Committee

4.244 Under Annual Credit Plan 2007-08, the total advance to the priority sector was to the tune of Rs.32657 crore, of which the share of agriculture was Rs.15960 crore (48.8%) (Table 4.50). There is an increase of 34% in the agricultural credit disbursements during 2007-08 over that achieved during the last financial year. District wise analysis of total advance to priority sector reveals that out of total disbursement, Ernakulam advanced Rs.4380.36 crores (13%) followed by Kollam Rs.3749.7 crores (11.4%). In the case of disbursement of agricultural credit also Ernakulam district stands first with an achievement of 12% of the total disbursement (Rs.1936.12 crore), followed by Kollam 10.8% (1730.4 crore). Details are given in Appendix 4.60.

Table 4.50 Flow of Credit to Priority Sector and Agriculture (in percent)

	All Commercial Banks							
Year	Priority Sector L	Lending	Agriculture Credit					
1 cai	As a % of Total	As a% of total	As a % of Total	As a% of total				
	Credit	Deposits	Credit	Deposits				
2004	49.35	23.84	14.13	6.82				
2005	51.11	25.60	14.70	9.60				
2006	53.47	35.74	15.91	10.63				
2007	55.52	38.91	17.70	12.36				
2008	58.53	41.78	21.23	15.16				

Source: State Level Banker's Committee

4.245 The proportion of total credit to priority sector lending was 58.53% indicating an increase of 3% over the previous year. The achievements of the Commercial banking sector of the State under total priority sector advances (58.53%) and weaker section advances (12.91%) are above the National goal of 40% and 10% respectively (Table 4.50). In the case of agricultural lending, both in the private sector and public sector continued to fall short of the stipulated target of 18 per cent at the national level (RBI, 2007-08) while a higher achievement of over 20 per cent is reported by the SLBC in the state (Table 4.51) during 2007-08.

Table 4.51
Targets and achievements under advances of commercial banks in Kerala (Figures in percentage)

				`	U		0 /	
Sl. No.	Parameter	Target	March 2004	March 2005	March 2006	March 2007	March 2008	June 2008
1.	Priority sector Advances to Total Credit	40	49.35	51.05	53.47	55.52	58.53	58.35
2.	Agriculture Advances to Total credit	18	14.13	14.68	15.91	17.70	21.23	20.22
3.	Weaker Section Advance to Total credit	10	10.83	11.79	12.40	13.01	12.91	13.70
4.	DRI Advance to Total Credit	1	0.04	0.01	0.01	0.02	0.02	0.01

5.	C.D. Ratio	60	48.31	59.01	66.84	70.09	71.39	70.16

Source: SLBC

Credit flow to Agriculture in Kerala

4.246 The credit flow to agriculture sector during the last five years is given in Table 4.52. The share of investment credit to agricultural credit disbursement declined from 20 per cent during 2003-04 to 17 per cent during 2007-08. Out of the total credit flow, the share of production credit has marked an increase of 2% over last year.

Table 4.52 Flow of Credit to Agriculture Sector

(Rs. Crores)

			(,
Year	Production Credit	Investment Credit	Total
2003-04	3620 (80%)	929 (20%)	4549
2004-05	5672 (83%)	1182 (17%)	6854
2005-06	7493 (81.87)	1659 (18.13)	9152
2006-07	9664 (81%)	2262 (19)	11906
2007-08	13203 (83%)	2757 (17%)	15960

Source: SLBC

4.247 In the agency-wise analysis, it is seen that the major portion of short term and medium term credit requirements in the state are met by the Co-operative banking sector consisting of the State Co operative Banks, District Co-operative banks and Primary Agriculture Credit Societies which covers 1/5th of the activities. The share of co-operatives in the disbursal was 87 per cent in production credit and 13 per cent in investment credit (Table 4.53). The share of RRBs in production credit and investment credit was 98 per cent and 2 per cent respectively.

Table 4.53 Agency wise flow of credit during 2007-08

(Rs. Crores)

Agency	Produ ction Credit	Investment Credit	Total Agricu Iture Credit	% Production Credit to total Agri: Credit	% Investment Credit to Total Credit
Commercial banks	7733	2192	9925	78	22
Co-operative Banks	3568	535	4103	87	13
RRBs	1902	30	1932	98	2
Other Agencies				-	
Total	13203	2757	15960	83	17

Source: SLBC

Agricultural Debt Waiver and Debt Relief Scheme (ADWDRS)

4.248 The Kerala State Farmers Debt Relief Commission has been functioning in the state since 9.4.07. The commission conducted suomoto enquires and made recommendations regarding Wayanad, Idukki, Alappuzha, Kasaragode and Palakkad districts. Government have approved the recommendations of the commission regarding Wayanad package and issued orders in August 2007 declaring the district as Distress affected by taking over loans upto Rs.25000 taken by farmers holding less — than one acre of land from co-operative institutions. An amount of

Rs.14.11 crore has also been sanctioned for such take over. As on 31.10.2008, the commission has received four lakh applications. Out of this, as on 31.1.2009, the commission has disposed 26611 applications and awarded debt relief to the tune of Rs.20.63 crores through co-operative banks.

4.249 The scheme on Agricultural Debt waiver and Debt Relief Scheme for farmers was announced in the Union budget for 2008-09 for the implementation by all scheduled commercial banks, RRBs and co-operative credit institutions. The total value of the overdue loans being waived was estimated at Rs.50,000 crores and a one time settlement relief on the over due loans at Rs.10,000 crores. The revised estimate of the scheme is Rs.71680 crores. The scheme covers direct agricultural loans extended to small and marginal farmers and other farmers. The entire eligible amount in the case of small and marginal farmers and 25 per cent of eligible amount in the case of other farmers will be waived. The loan disbursed prior to March 31, 1997 except those which are restructured and rescheduled under special package of 2004 and 2006 was not covered under the scheme. The guidelines were issued in May 2008. It is expected to benefit about 30 million small and marginal farmers and about 10 million other farmers.

4.250 The cumulative position of the scheme and the eligible amount for assistance in the state are shown in Table 4.54. The scheme will benefit 11.60 lakh accounts and the amount expected is Rs.2520 crores. The share of commercial banks is 41 percent and the remaining amount is through RRBs and co-operatives. In terms of accounts the commercial banks account for only 32 percent. Till December 2008, an amount of Rs.831.31 crores has been released to the co-operatives and RRBs, under the scheme. The benefit to other farmers is very small accounts for only 0.38 percent of the total amount in the state.

Table 4.54 Cumulative position of Debt Waiver and Debt Relief by RRBs, Cooperative Banks and Commercial Banks

(Rs.in lakh)

ъ .	N	o.of Account	ts	Amount crystalised for DW/DR			
Bank	SF/MF	OF	Total	SF/MF	OF	Total	
SMGB	53522	389	53911	15887.89	123.21	16011.10	
NMGB	73147	176	73323	20247.39	34.02	20281.41	
KSCB	524958	4756	529714	91755.48	971.79	92727.27	
KSCARDB	126723	5901	132624	18294.49	1162.27	19456.76	
Commercial Banks	352550	17158	369708	96200	7300	103500	
Total RRBs, Co- operative & Commercial bank	1130900	28380	1159280	242385.25	9591.29	251976.54	

Source: NABARD

Performance of State Co-operative banks and District Co-operative banks

- 4.251 State Co-operative Bank as the apex bank of short term credit structure in Kerala, it provides strong and sound guidance, supervises, coordinates, monitors and controls all the 14 District Co-operative Banks and Primary Agricultural Credit Societies. It also provides ST, MT, LT loans to various activities as per their requirements and also acts as a central balancing centre to absorb surplus funds from DCBs and PACs and other Co-operative institutions.
- 4.252 State Co-operative banks and District Co-operative banks channelise their own fund and fund of NABARD for disbursal The total deposit of State Co-operative Bank in 2007-08 was Rs.3831.00 crore against Rs.2901.00 crore in 2006-07. The total loans and advances stood at Rs.2186.21crore, the NPAs of the bank stood at Rs.480.00 crore as on 31.03.08. The interest spread has become 25.61 crore during 2007-08. The operational expenses has made a tremendous increase of Rs.42.93 crore during 2007-08 against previous year level of Rs.27.07 crore.
- 4.253 The operations of the SCB are shown in Appendix 4.61. During the year under report, the deposit position of the Bank had increased considerably compared to the last year. The borrowings from other institutions had again increased to Rs.725.00 crore from Rs.545.00 crore.
- 4.254 The purpose wise disbursal during 2007-08 was Rs.2231.97 crore against that of Rs.1791.31 crore in 2006-07 showing an increase of 24%. The credit disbursement was mainly for agriculture, marketing, cottage & small scale industries, consumer business, consumption purposes, housing etc. Disbursal on agriculture, consumption purpose, housing etc. had increased by the bank considerably.
- 4.255 The working results of SCB shows a steep rise in borrowings, from Rs.545.77 crore in 2006-07 to Rs.725.62 crore in 2007-08. The purpose wise cumulative loan disbursed by the State Co-operative Bank is furnished in Appendix 4.62. During 2007-08, out of total loans and advances disbursed, Rs.890.50 crore i.e.39.89 per cent was for agriculture. The share of flow of credit to agriculture was relatively higher than the previous year.
- 4.256 During 2007-08 the total deposit of District Co-operative Banks had gone to Rs.11151 crore against that of Rs.9149 crore in the previous year with an increase of 22%. The amount disbursed as loans and advances was Rs.8475.25 crore, which was 76 per cent of the total deposits. During 2007-08 Ernakulam, Thrissur, Kozhikode, Kannur, Palakkad, Malappuram and Thiruvananthapuram districts had earned a considerable progressive net profit. Kollam district ranks a higher rate of NPA (Rs.163 crore) followed by Kottayam (Rs.109 crore). The operational indicators of DCBS show that total Deposits and working capital are much higher in Ernakulam District, followed by Thiruvananthapuram, where as in the case of loans and advances, it is higher in Thiruvananthapuram followed by Ernakulam. The indicators are given in Appendix 4.63.

Long term credit:

4.257 A net work consisting of the Kerala State Co-operative Agricultural and Rural Development Bank (KSCARDB) at the Apex and 46 Primary Co-operative Agricultural and Rural Development Banks at Taluk Level is responsible for long term credit disbursement for rural development in the state. Various activities covered by KSCARDB's lending in scheme loan include Minor Irrigation, Plantation and Horticulture Agricultural machinery, Land Development, poultry, fisheries etc., where as under ordinary loan include construction of Wells/Tanks, construction of Godowns/cattle, Barbed wire or stone fencing, Construction of

drainage channels etc. The Bank raises funds through floating of debentures issued on government guarantee; NHB, LIC, SBI and SBT etc., are the financial institutions which invest in the debentures floated by the KSCARDB. The total long term loan disbursed during 2007-08 by KSCARDB was Rs.470.77 crore against that of Rs.510.73 crore in 2006-07 registering a fall of 8%. In the purpose-wise disbursal, the major share of total disbursement is availed by Rural Housing (35%) and the share for non farm sector is13%. The share of disbursement of non-farm sector has increased marginally during 2007-08. The details of loan disbursement is given in Appendix 4.64. Purpose wise classification of long term loans issued by Primary Co-operative Agricultural and Rural Development Banks is shown in Appendix 4.65.

4.258 The Non farm sector lending scheme intends to provide financial assistance to meet the credit needs of individual artisans, craftsmen, handicraftsmen and small entrepreneurs who undertake manufacturing and processing activities as approved by the Development commissions of SSI, Government of India. Small Road and Water Transport operators scheme for public goods carriage and passenger vehicles/boats, Integrated Loan Scheme for new industrial ventures/modernization of existing SSI, Educational Loan for higher education in India and abroad as recognized by Central and State Government are also introduced under the long term loan disbursement scheme. The Bank has also financing tourism related activities with the assistance of NABARD to promote farm tourism / home stay which enables the farmers to generate additional income. A new scheme in the name of Card Bank Jewel Scheme was introduced by the Bank to the member borrowers to acquire asset in the form of gold coin or ornaments to meet the future requirements as marriage of their daughter / son.

Refinance Support by NABARD

- 4.259 Investment credit facilitates necessitate capital formation in agriculture, which considered to be a pre-requisite for up grading the technology and improving resource use efficiency in agriculture. NABARD provides refinance for investment credit at concessional rates of interest, facilitates augmenting the flow of investment credit at the ground level through various policy initiatives/programmes.
- 4.260 At the national level, the total refinance disbursement during 2007-08 stood at Rs.9046.27 crore as compared to the disbursement of Rs.8795.02 crore during previous year. During the same period in Kerala the total disbursement of refinance from NABARD was Rs.570.88 crores. The total refinance disbursement during the year increased in the country. Commercial Banks accounted for the highest share of 49% in the total refinance disbursed in the state. This was followed by KSCARD Bank Rs.206.07 crore (36%) and RRBs Rs.85.73 crore (15%). Agency wise and purpose wise disbursement of refinance assistance by NABARD in Kerala is given in Appendix 4.66.
- 4.261 Under purpose wise disbursement refinance, non-farm sector received higher share (41.3%) followed by Land Development (21.65%) and Self Help Groups (10.93%). Details are given in Appendix 4.67.
- 4.262 The purpose-wise analysis of the refinance by NABARD reveals that as in the previous years, the major share of assistance was availed by the non-farm sector (41.3%), and under farm sector, the refinance disbursement has shown a declining trend. In the disbursement, the major share was for land development (21.65%), Minor irrigation (1.21%), Plantation and Horticulture (3.3%). The amount of refinance for the sectors like fisheries and poultry which are very important in the rural economy of Kerala remained to be low compared to the previous year.

Rural Infrastructure Development Fund (RIDF)

4.263 The RIDF was set up in NABARD with contribution from the Commercial banks which were not able to fulfill the commitment of channelising at least 18 per cent of their total lending to agriculture. RIDF has been instrumental in strengthening the rural infrastructure in the State. The RID Fund started in 1995-96 with a corpus of Rs.2000 crores has emerged as a popular and effective mechanism for financing rural infrastructure projects and its corpus from RIDF I to XIII stands at Rs.72,000 crore. The corpus of RIDF XIII increased to Rs.12,000 crore (including Rs.4000 crore exclusively for rural roads) during 2007-08, and further to Rs.14000 crore under RIDF XIV during 2008-09.

Assistance to Kerala

4.264 Kerala has been receiving assistance under RIDF for the last twelve years. The major projects for which refinance has been disbursed include watershed development projects, rural bridges, rural roads, reclamation of waterlogged area, inland navigation, tourism oriented roads and rural market yards.

4.265 The cumulative sanction amount as on 31.3.08 was Rs.2073.44 crore and the disbursement was Rs.1322.23 crore (64%) for the implementation of 2911 projects. Out of 2911 projects 1763 have been completed. Under RIDF, an amount of Rs.287.03 crore was sanctioned to Kerala for 2007-08 and disbursement for the period was Rs.56.99 crores. The purpose wise cumulative sanction and disbursement on projects as on 31.3.08 is given in Table 4.56. The amount sanctioned for PWD roads and bridges accounted for 56 percent and irrigation accounted for 20 percent of the total amount sanctioned under RIDF in the state.

Table 4.55
Tranche wise Sanction & Disbursement under RIDF

(Rs. Crores)

RIDF	Kerala a	s on 31.3.08	India as	on 31/3/08
	Sanction	Disbursement	Sanction	Disbursement
I	95.93	86.26	1906.21	1760.87
II	86.91	73.13	2636.08	2397.95
III	89.29	73.88	2732.69	2453.50
IV	64.00	56.73	2902.55	2482.00
V	126.77	117.23	3434.52	3054.96
VI	172.51	159.02	4488.51	4072.14
VII	181.87	158.59	4582.32	4038.16
VIII	193.97	166.49	5996.97	4975.47
IX	89.94	50.16	5649.09	4513.74
X	219.46	135.80	8077.21	5635.52
XI	205.24	88.85	8412.07	4395.22
XII	260.50	99.10	10460.18	3466.62
XIII	287.03	56.99	12795.01	2348.70
Total	2073.42	1322.23	74073.41	45594.85

Source : Annual Report 2007-08, NABARD

Table 4.56
Purpose wise loan sanctioned and disbursements under RIDF (I to XIII)

(Rs. Crores)

Sl. No.	Purpose	No. of Projects	Sanctioned Amount	Disbursed Amount
1.	Irrigation	1146	409.15	244.15
2.	Soil and Water Conservation	259	112.49	75.29
3.	Drainage and Flood Protection	62	129.91	55.23
4.	Rural Roads PWD	854	579.39	387.07
5.	Rural Bridges	331	581.30	465.79
6.	Rural Market Yards	108	9.72	7.30
7.	Boat Jetties	4	0.28	0.02
8.	Inland Navigation	1	10.00	7.87
9.	Rural Drinking Water Supply	9	47.55	20.07
10.	Health	6	38.27	17.44
11.	Education	116	35.89	5.95
12.	Fish Harbour	4	47.56	18.32
13.	Animal Husbandry	2	12.82	5.91
14.	Hydel Power	1	7.79	1.56
15.	Information Technology	1	50.00	10.00
16.	Cashew godown	7	1.32	0.26
	Total	2911	2073.44	1322.23

Source: NABARD

CHAPTER 5 WATER RESOURCES

The World Water Day 2009 will be celebrated on March 22, 2009. The theme of the World water day 2009 is "shared water – shared opportunities" and special focus will be placed on 'Tran boundary waters'. The world's 263 trans boundary lakes and river basins include the territory of 145 countries and cover nearly half of the Earth's land surface. Over the last 60 years there have been more than 300 international water agreements and only 37 cases of reported violence over water. The 5th World Water Forum (WWF) scheduled from 16.03.2009 to 22.03.2009 at Istanbul will resolve around the theme of bridging 'divides for water' underlying not only the geographical crossroads but also the conceptual barriers between developed and traditional water culture, between the rich and the poor and between developed and developing regions of the world. The concept of bridging waters implies creating enhanced understanding and improved information exchange between and amongst water users, decision makers and water practitioners at local, regional and global levels which is indeed key to solving water problems. At the root of the problem is the fact that all of the country's main river basins are to be found across more than one state.

- 5.2 The basic premise of water resource management is that river basins are best managed and developed as an integrated whole, this is always legally and politically complex due to the challenges of allocation between users and between uses. In many cases the need for river infrastructure such as weirs, dykes, regulators and other storage structures are primary drivers for adopting institutional solutions. The investment in storage structures is essential to optimize water use as well as to address the growing number of water conflicts
- 5.3 The surface irrigation constitute major chunk of irrigation infrastructure in the state. There are 18 dams in the state intended for irrigation. Out of this, 13 have storages and 5 are barrages.

Live Storage Capacities of Irrigation Reservoirs

5.4 The live storage position of the reservoirs during the beginning and end of the monsoon period during 2006, 2007 and 2008 are given in Table -5.1

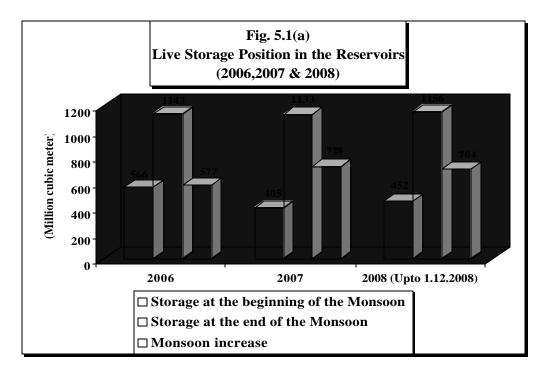
Table 5.1 Live Storage Position in the Reservoirs

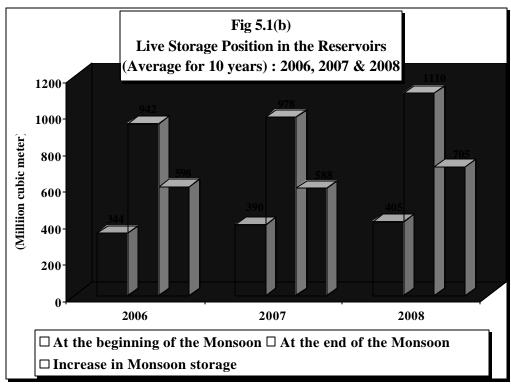
 (Mm^3)

Sl. No	Item	2006	2007	2008
1.	Storage at the beginning of the Monsoon	566	405	452
2.	Storage at the end of the Monsoon	1143	1133	1156
3.	Increase due to Monsoon	577	728	704
4.	Average for 10 years			
	(i) at the beginning of the monsoon	344	390	405
	(ii) at the end of the monsoon	942	978	1110
	(iii) increase in monsoon storage	598	588	705

5.5 In the beginning of the Monsoon (in 2008) the total storage was 452 Mm³ and at the end of the monsoon the level of the storage was 1156 Mm³, against the storage level of 405 Mm³ at the beginning of the Monsoon and 1133Mm³ at the end of the monsoon period during the previous year. The current year's storage of 1156 Mm³ is greater than the ten year average of 1110 Mm³ on the

date. The storage capacities of reservoirs are deteriorating due to silting in reservoirs. Sedimentation or silt removal need be done periodically for the proper upkeep of the reservoirs. The storage position at the beginning and at the end of the Monsoon during 2007 & 2008 are given in Fig.5.1 (a) and 5.1(b). The Live storage capacities of the Irrigation Reservoirs is given in Appendix 5.8





Dam Safety

- 5.6 Safety of the existing dams is one of the items emphasized in the National Water Policy. Almost all of the 18 dams in the State were completed in the 1950's and are constructed of masonry/earth or a combination of both. Excessive seepage/leakage, mal functioning of gates etc. caused distressed conditions as noticed by the State level Dam Safety Committee. Besides this, the storage capacity of the reservoir gets depleted due to excessive siltation. As per the provisions of Dam Safety Act 2000, 'Dam Safety Organisation' was constituted for (i) Monitoring the post was constituted and pre-monsoon inspections of dams (ii) maintenance and surveillance (iii) safety activities of the dams, (iv) Hydrological review to check the adequacy of design flood, (v) preparation of emergency action plan, (vi) prioritization of dam for rehabilitation purposes, (vii) interaction with the Dam Safety Organization of the Central Water Commission, (viii) conducting structural analysis, and (ix) checking the safety of dams once in 10 years.
- 5.7 During 2007-08, Dam Safety Organisation along with Dam Safety Committee inspected the Pazhassi Barrage, Kuttiyadi Dam, Vazhani, Walayar, Chulliar Dam, Meenkara Dam and Malampuzha Dam.

Investment in Irrigation

- 5.8 Irrigation development in Kerala is mainly centered on the development of surface water resources mainly on the development of major and medium irrigation projects. In each Plan, priority in allocation was given for the development of major and medium irrigation projects. Out of a cumulative expenditure of Rs. 4241.35 crores, Rs. 2992.01 crores (71%) is invested for major & medium irrigation. About 60 to 70 percent of the investment in each plan was made for this purpose. Rice is the major crop benefited through irrigation infrastructure. Even in the case of this crop, the incremental yield, which the irrigation support could bring, is not significant. With the fast changes taking place in the farm front of Kerala with notable reduction in the area under rice cultivation, even the distribution systems already developed for gravity irrigation to service rice cultivation now require realignment.
- 5.9 During the Tenth Plan period (2002-07) against the agreed Plan outlay of Rs. 930 crores, an amount of Rs. 816.63 crores was budgeted and the expenditure came to Rs. 866.82 crores. A major portion (74%) of the outlay on Water Resource Sector was budgeted for Major and Medium Irrigation Sector and the expenditure recorded for Major & Medium for the Tenth Plan was 77% of the total expenditure. Over and above the State plan outlay a substantial amount has been invested for Minor irrigation and Flood Management from the schemes of Local Self Governments.
- 5.10 During the first year of Eleventh Plan, an amount of Rs. 215.27 crores was budgeted and the expenditure came to Rs. 196.31 crores. A major portion (45%) of the outlay on Water Resource Sector was budgeted for Major and Medium Irrigation Sector and the expenditure recorded for Major & Medium for the period was 62 percent of the total expenditure. The Out lay and expenditure for Irrigation and flood control during Tenth Plan is shown in table 5.2

Table 5.2

Outlay and Expenditure for Irrigation & Flood Control during Tenth Plan and
First Year of XI Plan

(Rs. Lakhs)

Sl		X Pl	an Total	2007-08		
No	Sub Sector	Budget Estimate	Expenditure	Budget Estimate	Expenditure	
1	Major & Medium Irrigation	60789.00	67027.87	9733.00	12172.16	
2	Minor Irrigation	8920.00	12009.22	6414.00	2875.39	
3	Command Area Development	4615.00	2672.36	915.00	479.01	
4	Flood Management & Coastal Zone	7339.00	4972.54	4465.00	4104.87	
	Total (Irrigation & Flood control)	81663.00	86681.99	21527.00	19631.43	

5.11 Public investment in irrigation has fallen significantly over successive Plan periods. This is largely due to resource constraints faced by governments both at the Centre and the States. At the All India level also, there is decline in the percentage of funding for irrigation.

Accelerated Irrigation Benefit Programme (AIBP)

- 5. 12 The accelerated Irrigation Benefit programme (AIBP) was introduced by Government of India for providing assistance to acceleration of irrigation projects. The pattern of assistance has been revised in 2006 and as per the revised pattern the central government will provide 25% as grant (CSS) and the loan component has to be raised by States. Central assistance is given to those projects having investment clearance by Planning Commission.
- 5.13 The release of Central assistance to Kerala under AIBP is very low compared to other states. There has been a decreasing trend in the funding during the last few years and there was no funding during the year under report. The details of release of central assistance under AIBP are shown in the table 5.3

Table 5.3
Central Assistance / Grant Released under AIBP to States

Year		States			Total
i eai	Andhra Pradesh	Karnataka	Kerala	Orissa	IOtai
2000-01	95.020	171.000	22.400	100.320	1856.200
2001-02	281.660	492.500	11.275	168.475	2601.981
2002-03	33.186	620.850	5.665	179.570	3061.704
2003-04	205.530	266.478	31.000	154.685	3128.501
2004-05	87.540	396.290	49.440	24.230	2867.300
2005-06	311.382	140.776	9.359	151.374	1900.314
2006-07	843.422	160.373	16.647	133.885	2301.972
2007-08	987.769	349.900	0.000	624.359	5445.705
Total	2845.51	2598.17	145.79	1536.90	23163.677

Source: Ministry of Water Resources, GOI

5.14 The total assistance under the AIBP to the state during the period from 2000-01 to 2007-08 is Rs.145.79 crores against the total assistance for the entire states, which works out to Rs. 23163.667 crores. It is only 0.63 per cent of the total assistance under the scheme during the same period.

The assistance under AIBP to Kallada was Rs.32.51 crores and Rs. 2.7188 crores to Karappuzha.

- 5.15 The Government of India has already released an amount of Rs. 2.7188 crores as grant part of the 1st instalment for the year 2006-07 in respect of Karapuzha project under AIBP assistance.
- 5.16 During the period from 1997-98 to 2007-08, Government of India had sanctioned Rs.26686 crores to various states. The assistance sanctioned to Kerala was Rs.160.79 crores (0.60 %). The details of release of assistance under AIBP from 1997-98 to 2007-08 is shown in the Appendix 5.2
- 5. 17 The percent coverage of irrigated area under important crops across the states are shown in table 5.4

Table 5.4

State-wise Percent Coverage of Irrigated Area under Principal Crops
During 2005-06 (Provisional)

Sl	States	Paddy	Total area
No	States	-	under all crops
(1)	(2)	(3)	(4)
1	Andhra Pradesh	96.6	44.9
2	Assam**	4.6	4.3
3	Bihar**	51.1	57.0
4	Chhattisgarh	30.3	23.9
5	Goa	32.7	22.2
6	Gujarat**	57.5	38.0
7	Haryana	99.9	83.7
8	Himachal Pradesh**	61.0	18.8
9	Jammu & Kashmir**	90.9	41.6
10	Jharkhand**	5.6	10.0
11	Karnataka	75.8	27.9
12	Kerala	57.9	15.4
13	Madhya Pradesh	13.6	30.0
14	Maharashtra	28.7	18.8
15	Orissa**	42.6	30.8
16	Punjab**	99.3	96.6
17	Rajasthan	40.3	36.0
18	Tamil Nadu	93.0	56.3
19	Uttarakhand**	64.9	44.2
20	Uttar Pradesh**	73.0	73.1
21	West Bengal**	49.8	57.5
	All India	56.0	42.9

Source: Agriculture Statistics at a glance, 2008, GOI

5.18 The target set for the realisation of additional irrigation potential during Tenth Plan was 1.40 lakh hectares (gross) comprising of 0.90 lakh hectares under major irrigation and 0.50 lakh hectares under minor irrigation. The actual achievement aggregates to 1.08 lakh hectares. Overall

^{**} The figures related to irrigated area are either estimated based on the data for the latest available year received from the State/UT or are estimated/taken from Agriculture Census.

performance of the Major and Medium Irrigation sector was not encouraging during the Tenth Plan period. Additional irrigation facility could be created only in Muvattupuzha Irrigation Project. The physical targets and achievements under Irrigation during the Tenth Plan is given in Table 5.5

Table - 5.5
Physical Targets and Achievements under Irrigation during the Tenth Plan period (gross)
(000 ha)

Sl. No	Sector	Cumulative coverage up the end of 9 th Plan	Tenth Plan Target	Achievement 2002-07	Actual Achievement 2007-08
1	Major& Medium	225	90	60	8
2	3.6		50	48	20
Total		427	140	108	28

Review of Major Projects

5.19 The overall performance of the major and medium irrigation sector during 2007-08 was not encouraging. The cumulative area brought under irrigation through major and medium irrigation projects is 2.83 lakh hectares. (gross). The details of the progress of implementation of ongoing projects as on 3/2008 are given in Table - 5.6.

Table 5.6 Project-wise Details of Ongoing Projects

(Rs. lakhs)

Sl.	Name of Project	starting	estimate	estimate	revision	escalation (%)	ure upto 1 2008	_	area to be ted (Ha)	achieve	sical ement as 08 (Ha)
No.	Name of Project	Year of	Original	Revised	Year of	Cost esc	Expenditure March 20	Net	Gross	Net	Gross
1	2	3	4	5	6	7	8	9	10	11	12
1	Muvattupuzha	1974	4808	79300	2008	1550	66600	19237	37737	14972	29346
2	Idamalayar	1981	904	60000	2008		12881	14394	29036	-	-
3	Karapuzha	1979	760	49800	2008	6453	25946.6	5221	8721	-	-
4	Banasurasagar	1999	1137	12700	2008	1017	2165.22	2800	4740	-	-
5	Chamravattom	1983	7000	11349	2008	62	744.87	3170	4344	-	-
6	Palakkappandy	2004	910	1367	2008	50.22	826.72	3500	7000	-	-

Source: Chief Engineer, (I&A) Department of Water Resources

Irrigation Status

5.20 The source-wise and crop-wise area irrigated as on March 2008 is given in Table -5.7 and Table - 5.8

Table 5.7 Net Area Irrigated (Source wise)

(in Ha.)

Sl. No.	Source	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
1	Government canals	94859	101397	104669	98664	88318
2	Private canals	5754	4729	4965	4300	4324
3	Tanks	47856	43983	45062	42064	41580
4	Wells	109360	108445	110000	114477	131002
5	Other sources	123469	134802	135227	125900	122321
6	Total	381298	393356	399923	385405	387545
7	Area irrigated more than once	782892		918341	-	_
,	in a year					_
8	Gross irrigated area	426765	455391	464765	475231	455310
9	Net area irrigated to net area				17.52	18.41
	Sown(%)	17.36	18	19		10.41
10	Gross irrigated area to gross		·		16.29	16.44
10	cropped area (%)	14.35	15	15		10.44
11	Irrigated area under paddy to	40.00	40	38	45	40
	total irrigated area	10.00	.0	20	10	

Source: Directorate of Economics & Statistics

5.21 As per the assessment of the Directorate of Economics and Statistics the net irrigated area in the state as on 3/08, is 3.88 lakh ha. and the gross area irrigated is 4.55 lakh ha. The net area irrigated has increased from 3.85 lakh ha. during 2006-07 to 3.88 lakh ha during 2007-08. Only 18.41 per cent of the net cropped area is irrigated

Table 5.8 Gross Area Irrigated (Crop-wise)

(in ha.)

Sl. No	Crops	2003-04	2004-5	2005-06	2006-07	2007-08
1	2	3	4	5	6	7
1	Paddy	169829	183601	174600	173068	154400
2	Tubers	1020	2253	2958	5158	7281
3	Vegetables	9657	14274	25075	24434	16924
4	Coconut	159113	157768	158630	177734	171336
5	Arecanut	32990	36858	35131	34625	34090
6	Nutmeg/clove	2884	6285	6913	10527	10155
7	Other Spices and contiments	3245	3403	3788	4312	6431
8	Banana	28100	30265	33730	40852	42116
9	Betel leaves	947	891	850	590	435
10	Sugarcane	3567	1630	2000	1156	2361
11	Others	15413	18163	21070	17552	9781
	Total	426765	455398	464745	490008	455310

Source: Directorate of Economics & Statistics

5.22 Among the crops, coconut tops the major crop supported by irrigation. It accounted for about 38 per cent followed by Paddy (33%) Banana (9.25%) Arecanut (7.49%) and Vegetables (3.72%).

Minor Irrigation

5.23 Kerala has a wide network of rivers and rivulets and springs spread over the entire cropped area. Minor irrigation sector received considerable attention from Seventh Plan onwards and got a considerable boost during the Ninth Plan period consequent to the enhanced flow of funds from the grant in aid of the local bodies as well as special support received from the external agencies like European Economic Community, Dutch Government and assistance under RIDF of NABARD. With the introduction of decentralised planning, all minor irrigation works (having cultivable command area up to 2000 ha.) were vested with the Panchayat Raj Institutions (PRIs). But by the enactment of the new Act 'Kerala Irrigation and Water Management Act 2003' the definition of minor irrigation has been changed and works benefiting an area less than 15 ha. only come under the category of minor irrigation and are vested with PRIs. All other works having cultivable command area greater than 15 ha. have been taken over by the Water Resources Department as medium irrigation. The major works implemented under surface water are minor irrigation Class – I, II and Lift irrigation schemes. Construction of check dams, Vented cross bars, weirs, tanks etc are the various works executed under minor irrigation Class-I & II. Physical achievements under minor irrigation schemes during last 5 years are given in Appendix 5.3

5.24 The minor irrigation has always been a thrust area for NABARD not only in terms of providing increased refinance but also by introducing various developmental initiatives and financial incentives. So far 1146 minor irrigation schemes have been under taken till RIDF XIII and RIDF I to V has been closed.

Ground Water Development

5.25 The dynamic ground water resource (recharged annually by rainfall) of the country is 432 BCM. As much as 80per cent of India's population manage to get their own domestic water supply and three fourth of the irrigated area in the country is through private sources – mostly through ground water. India is the largest user of ground water (200 BCM) followed by the United States (100 BCM) and China (90 BCM). However ground water resources are either over exploited or are in the critical zone in certain pockets –Tamil Nadu, Haryana, Punjab, Gujarat and Rajasthan. The provision of free or subsidised power to agriculture sector in many states is one of the factors responsible for indiscriminate use of groundwater.

5.26 The situation of Indian Irrigation especially in the backdrop of declining surface irrigation coupled with enormous increase in new investments in canals and due neglect of groundwater aquifers and their recharge has become a matter of great apprehension for administrators and economists. Though the threatened blocks as percentage of India's threatened blocks is no so disappointing, percentage of State's Blocks under threat of over-exploitation is not up to scratch. The introduction of Ground water Recharge Master Plan (GRMP) by the Central Government could sort out the issue in a more meaningful way. (see Box 5.1)

5.27 The systematic approach to the management of ground water requires a sustainable legal framework. Government of India has also pointed out the necessity of legislation by the State Governments for the regulation of ground water exploitation. In this circumstance, in order to regulate the over exploitation of groundwater resources Government of Kerala have brought in a law The Kerala Ground Water (Control and Regulation) Act 2002 which envisages conservation of ground water and regulation and control of its use. The Act has to be implemented by an authority named 'State Ground Water Authority' consisting of 13 members and the Secretary (WRD) as the Chairman and Director, GWD as the Secretary.

Box 5.1 Ground water Recharge Master Plan

Ground water extraction for cultivation has amplified from 20 billion cubic meters to around 230 billion from 1960 to 2000, consequential to condensed use of surface storages and canals both in relative and absolute terms. This silent but profound transformation taking place in Indian irrigation scenario i.e., more and more government spending on canals and other surface irrigation means with its reduced utilization for farming use and increased exploitation of ground water pretense major threat not only to the running down of ground water but also to the irrigation structures launched so far. Belated recognition of growing criticality of the situation and subsequent introduction of Ground water Recharge Master Plan (GRMP). The central Government aims to raise Post-monsoon ground water level to 3 mtrs below ground level, through annual "managed artificial recharge" of 34.6 Km³.

Upsetting over-exploitation of Ground water by different states and funds allocated for ground water recharge is shown in table below:

Groundwater Over-exploited States and GRMP Fund Allocation for Groundwater Recharge

	Available	Proposed	% of State's Blocks	Threatened Blocks
State	Water	Outlay	under Threat of	as % of India's
	(Million m ³)	(Rs.Million)	Over-exploitation ^a	Threatened Blocks
1. Andhra Pradesh	1,95	16,970	38	29.2
2. Tamil Nadu	3,040	23,858	61	14.4
3. Rajasthan	861	11,400	86	12.6
4. Punjab	1,200	5,280	82	6.9
5. Gujarat	1,408	11,547	50	6.9
6. Karnataka	2,157	12,330	47	5.1
7. Haryana	684.5	1,593	63	4.4
8. Kerala	1,078	12,780	33	3.1
9. Madhya Pradesh	2,320	19,085	16	3.0
10. Maharashtra	3,171	25,620	9	1.9
Key problem states	17,014.5	1,40,463		87.5
Non-problem states ^b	19,528	1,04,537		12.5
India	36,543	2,45,000	29	100

Source: Economic & Political Weekly, Dec.20, 2008

The Central Ground Water Board, Government of India proposed to take up 75 demonstrative artificial recharge studies under the scheme "Ground Water Management and Regulation" in XI Plan at an outlay of Rs. 100.00 crores. For implementing the scheme in Kerala, a State Level Technical Co-ordination Committee (SLTCC) was constituted with Additional Chief Secretary (Water Resource), Government of Kerala as the Chairman. Six demonstrative artificial recharge schemes, three from Kasaragod and three from Palakkad district with emphasis on creating replicable models under different Hydrological situations based on scientific studies is under the consideration of the Central Ground Water Board. It will result in capacity building of various agencies involved in construction of such structures and is intended to implement with greater people's participation

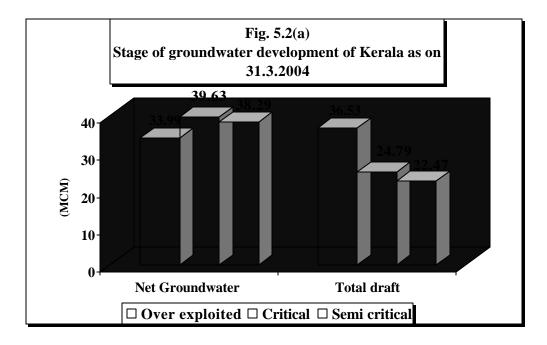
The scheme involves installation of recharge structure in the existing irrigation open wells of the beneficiary farmers in the affected areas to facilitate groundwater recharge.

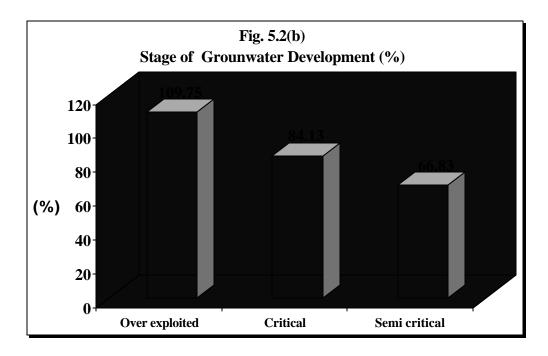
^a Of the total of 5,723 blocks under groundwater assessment in India by the Central Groundwater Board (Planning Commission 2007:59),4,078 were found "safe"; in 550 blocks, groundwater resources were found under "semi-critical state", in the sense that 70% or more of the known resource was already developed; 226 more blocks were "critical" where 70-100% of the resource is already developed. 839 blocks were declared over-exploited because their annual groundwater draft exceeded long-term rate of annual recharge. Threatened blocks include "semi-critical", "critical" and "over-exploited".

^b Include Assam, Himachal Pradesh, Jammu and Kashmir, Uttar Pradesh, Uttarakhand, Bihar, Jharkhand, Chhattisgarh, West Bengal, Orissa, Sikkim, Delhi, Chandigarh, Pondicherry and seven north-eastern states.

- 5.28 The Kerala Ground Water (Control and Regulation) Act, 2002 came into effect in December 2003 and the Kerala Ground Water Authority was constituted a month later. A permit from the Authority will be required for constructing a new well or deepening or enlarging an existing well (except dug well used for domestic purposes). Permit is also required for energising an existing unenergised well if the horsepower exceeds 1.5 HP in the case of dug wells and 3 HP in the case of bore wells. The request is processed after site inspection
- 5.29 It is time India recognizes its dependency on groundwater resources, which is only going to increase in the coming years, partly because of growing urbanisation and industrialisation. In view of the growing seriousness of the problem, it is necessary that a political consensus build up quickly on a management strategy, which takes into consideration domestic and international experience. Delay in this matter could spell crisis of a much larger scale than has been experienced so far.
- 5.30 The National Water Policy, 2002 has advocated that groundwater recharge projects should be developed and implemented for improving both the quality and availability of ground water resources. The policy also advocated exploitation of ground water resources so as not to exceed recharge possibilities. The Ministry of Water Resources has already prepared and submitted, a part of the second green revolution project of the Ministry of Agriculture, a scheme for ground water development in 5.2 m. ha.(loan-cum-subsidy cost of Rs.15,310 crore) and another for artificial recharge of 3.9 BCM of water (at a cost of Rs.3,000 crore). Compared to 4,000 BCM rainfall/snowfall in the country and 1,869 BCM run off, recharge of this small quantity of groundwater will not adversely affect the existing hydrology of rivers and streams. The Ministry of Water Resources had also submitted a new state sector scheme costing Rs. 175 crore for artificial recharge in various parts of the country, which would serve as a demonstration exercise for various types of recharge structures.
- 5.31 The contribution of ground water in the total irrigation potential of the country has been estimated as 47 per cent. Although ground water is annually replenishable resource, its availability is non-uniform in space and time. Hence, precise estimation of ground water resource and irrigation potential is a pre-requisite for planning its development. The scientific assessment of the ground water resources of India has been made by the Central Ground Water Board in collaboration with concerned State Departments in 1997.
- 5.32 In Kerala, groundwater occurs under phreatic, semi-confined and confined conditions. The groundwater resources are largely concentrated in the sedimentary aquifers of the coastal regions. The groundwater resources are tapped mainly for drinking and irrigation purposes. The groundwater potential of Kerala is very low as compared to that of many other States in the country. The state has a replenishable groundwater resource of 6841 million cubic meters. The net groundwater availability is 6229 million cubic meters. The gross groundwater draft is 2920 million cubic meters and the net groundwater available for future use is 3221 million cubic meters.
- 5.33 A district-wise analysis of ground water resources of Kerala shows that Palakkad has the higher potential for ground water recharge (12%) followed by Thrissur (11%), Ernakulam (9%), Kannur (8%), Kottayam (7%) and Alleppey (6.8%). Thiruvananthapuram has the lowest (4%) potential for ground water recharge. The stage of development of groundwater is the highest in Kasargod district (79%) and the lowest is in Wayanad (25%). The overall stage of development in the State is 47% which is greater than the national level. The ground water resources of Kerala as on 31.3.2004 are given in Appendix.5.4.
- 5. 34 Ground water development is calculated in percentages and blocks are categorized in to four categories viz., over exploited, critical, semi-critical and safe category based in the stage of

development and trend of water level during pre-monsoon and post monsoon period. As per this classification, five blocks are categorized as over exploited, 15 critical, 30 semi-critical and 101 safe category. The stage of groundwater development of Kerala as on 31.03.2004 is shown in Fig.5.2 (a) and Fig. 5.2(b).





5.35 Artificial recharge and rainwater harvesting are the best-suited and cheapest methods to overcome this situation. A scheme for the construction of artifical recharge structures was introduced in the state with financial assistance from Government of India. Sub surface dams and dykes are the main structures built for the artificial recharge of ground water. The sub surface

dams constructed at Odakkali in Ernakulam district, Alanallur, Bavaji nagar in Palakkad district, Sadanandapuram in Kollam district, Ayilam in Thiruvananthapuram district, Neezhur in Kottayam district showed a considerable rise of ground water levels in the upstream side of these sub surface dams and prevention of the decline of water table in the areas. Hydro geologically suitable sites for sub-surface dams were located and works are in progress. For the rest of places detailed hydro geological investigation are underway for the construction of suitable recharge structures. The sources of pollution have to be properly surveyed and identified. The Central Ground Water Board is carrying out artificial recharge studies in high water demand areas with critical stage of ground water development and the Board's Pollution Cell has undertaken studies to find out the ways and means to check the effect and spreading of pollution.

- 5.36 As per the latest groundwater estimation carried out by the Central Groundwater Board, Government of India and Groundwater Department, Government of Kerala based on Groundwater Estimation Committee norms, 15 blocks of the State fall under overexploited, critical and semi critical categories and 33 blocks show more than 70% development. Blocks were categorised based on the stage of development and long term trend of groundwater levels during pre and post Monsoon seasons.
- 5.37 The State Ground Water Department is the nodal agency assigned with the responsibility of ground water development and utilisation. The main activities of GWD is to locate potential ground water resources for construction of ground water structures like open wells, bore-wells, tube wells and artificial structures like subsurface dykes and check dams. Technical guidance were given to local bodies for silting and construction of drilled wells and for the implementation of rainwater harvesting.
- 5.38 During the period under report (2007-08), an amount of Rs. 28.75 crores has been invested for minor irrigation out of which the share of ground water development was Rs. 4.83 crores ie., about 17% of the investment under minor irrigation.
- 5.39 During 2007-08 the Department has imparted technical assistance to identify sites for 4374 open wells, and constructed 1134 drilled wells. The additional area reported to be brought under irrigation was 8444 ha. Training was imparted to 23 personnel and analysed 3090 water samples, During the period under review 85 rain water harvesting structures were constructed. Under Rajiv Gandhi National Drinking Water Mission scheme, 119 schemes were completed and 72 schemes were partially completed. The physical achievement during the year under report is given in Appendix- 5.5

National Hydrology Project

- 5.40 The Hydrology Project Phase-II is a follow up project of Hydrology project and to be implemented with the assistance of World Bank. The project objectives are
 - i to extend and promote the sustained and effective use of the HIS by all implementing agencies concerned with water resources planning and management
 - ii Strengthening the capabilities of implementing agencies at state/central level in HIS data utilisation for efficient water resource planning and management.
 - iii Awareness building and outreaches services about HIS use.
- 5.41 The project covers 9 ongoing states of HP-I namely Andhra Pradesh, Gujarat, Maharashtra, Karnataka, Kerala, Madhya Pradesh, Chattisgargh, Orissa, Tamil Nadu and 4 new states Himachal

Pradesh, Goa, Pondicherry and Punjab and the Central institutes CWC, MOWR, CGWB, CWPRS, NIH,, IMD, CPCB and Bhakra-Beas Management Board (BBMB). Under HP-II it is proposed to enhance the current manual system of recording and reporting expenditures in the implementation by the Surface Water and Ground Water departments of two states by instituting a computerised Financial Management System. The total cost of the project for the country as a whole is Rs. 631.83 million. The three project components namely institutional strengthening costs 36% vertical extension cost (44%) and horizontal extension costs (20%) of the total project cost. The project would be implemented over a period of six years from 2005-06 onwards. The World Bank has approved the phase – II of the project in Kerala for a total cost of Rs.18.35 crores. The agreement for phase –II was executed in January 2006 and initiated implementation in April 2006.

5.42 Monthly data has been collected from 437 piezometres, 433 dug wells and 8 full climatic stations, besides collection of water samples from Piezometers and other observation wells. Analysis was done for 3090 water samples in the 3 labs of Thiruvananthapuram, Ernakulam and Kozhikode. During the year under report, 2994 samples were analysed for bacteriological studies using departmental lab at Thiruvananthapuram and other labs as part of the water quality monitoring programme.

Flood Management

- 5.43 India is prone to natural disasters. Due to its locational and geographical features, it is vulnerable to a number of natural hazards like cyclones, droughts, floods, earthquakes, fires, land slides & avalanches.
- 5.44 The reasons for the occurrence of the flood are not simple enough to comprehend in its true perspective. The short duration intense rainfall seems to create conditions leading to flood. The peculiar physiographic set up of Kerala with abrupt fall in slope from the Western Ghats to the midlands and the high rainfall pattern spread over two seasons and that too concentrated in a few days, are the major factors which make the state vulnerable to heavy floods of a recurring nature.

Coastal Zone Management

- 5.45 Coastal erosion is affecting most of the coastal states. The situation in Kerala is also not different. Kerala has a long coastal stretch of 590 kms. and more than half of it is subjected to sea erosion. Unlike other parts in the country, Kerala seacoast is thickly populated and as a result the loss due to sea erosion is relatively very high.
- 5.46 Construction of sea walls continued to be the sole intervention for coastal zone protection. In the area of protection of seashore, modern technologies like geo textiles, polyethylene fabrics/sheets, nourishment of foreshore with biomaterials, etc. are emerging. An amount of Rs.19.15 crores has been spent up to 30.09.2008 for construction and reformation of seawall. The physical and financial achievement under flood management and coastal zone management during 2007-08 are given in Table 5.9

Table 5.9
Financial and Physical Progress of Flood Management and Coastal Zone
Management Programmes during 2007-08

(Rs. lakhs)

Sl. No.	Item	Financial Achievement	Physical Achievement	Cumulative Physical achievement as on 3/2008
1	Flood Management	387.70	1292 ha	62738 ha
2	Anti-Sea Erosion Works New sea-wall constructed Reformation of old & damaged sea-wall	3751.38	0.425Km 10.44 Km	392.53 Km 135.97 km

Source: Water Resources Department

5.47 The Twelfth Finance Commission has awarded Rs.175 crores for the construction, maintenance and reformation of the sea walls. Kerala Coast is subject to severe erosion, which undermines the valuable coastal eco system and affects the lives of millions of people. Nearly 100 Kms. coastal zone, prone to severe sea erosion needs to be urgently protected on a long term basis. The amount allotted is for construction and reformation of sea walls for the protection of the coastal area and for establishing permanent bench marks in the coastal area and conducting pilot studies using new techniques. The target envisaged for the utilization of Twelfth Finance Commission Award is to construct new sea walls to a length of 47.77 Kms, 21 groynes and reformation of 63.10 Km. during 2005-10. The work, as envisaged in the action Plan for Rs. 64.05 crores, is in progress. The Government have accorded administrative sanction for implementation of the action plan for Rs. 89.452 crores, for the year 2007-10 for which works are being arranged. An amount of Rs.1091.19 lakhs has been spent up to September 2008.

Command Area Development

- 5.48 The Command Area Development Programme was launched with the main objective of bridging the gap between the irrigation potential created and utilised and improving agricultural production and productivity in the irrigation commands. The programme was restructured in 2003-04 and renamed as Command Area Development and Water Management Programme.
- 5.49 The restructured programme retains the components of the existing scheme which have been found to be beneficial to the farmers, include a few new components considered necessary for correction of deficiencies in the irrigation system and delete those components which have lost their utility overtime. Under the restructured Programme there is thrust on Participatory Irrigation Management (PIM). Central assistance for correction of system deficiencies upto distributaries of 150 Cusec capacity has been linked to formation of Distributaries Committees and handing over of the distributories to such Committees for maintenance in future. Kallada, Periyarvalley, Kanjirappuzha and Pazhassi are the ongoing projects under the restructured Command Area Development and Water Management.
- 5.50 Physical achievements of the existing CAD programme during 2007-08 are given in Appendix: 5.6 & 5.7

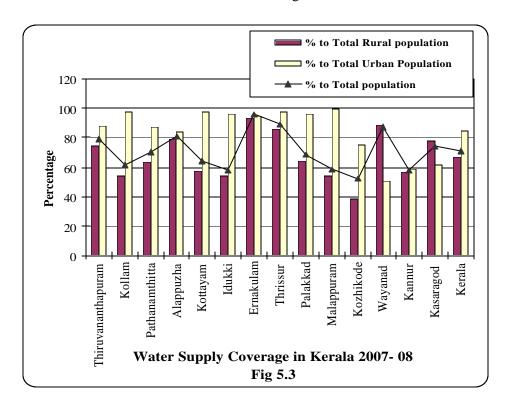
Drinking Water Supply

5.51 Water is a public good and every person has the right to demand drinking water. Water supplied for drinking and cooking should maintain high quality as per the prescribed potable standards and for other household and animal needs, the water should be of acceptable standard. Drinking water is less than one percent of the total water demand and should have the first priority among all uses of water. It is the vital activity of the government to ensure that this basic need of the people is fulfilled with highest priority.

Coverage

5.52 In Kerala, 71.06 percent of the total population has access to drinking water as at the end of March 2008. 69 percent of the total coverage is for rural citizens and 31 percent is for urban citizens. The total number of rural people having accessibility to drinking water is 156.32 lakh, which constitutes coverage of 66.31 percent to the total rural population. Similarly, 84.60 percent of urban population has drinking water facilities and the total number of urban people having such a facility is 69.94 lakh.

5.53 The increase in number of citizens having drinking water facility during 2007-08 is 341171, of which 308576 people are in rural area and 32595 in urban area. The percentage increases in total, rural and urban water supply coverage are 1.53, 2.0 and 0.47 respectively. During 2007-08 Ernakulam district had the highest rural water supply coverage (93.41%) and Kozhikode district had the lowest coverage (38.34%). In urban area, Malappuram district had the highest coverage (99.35%) and Wayanad district had the lowest with 50.10%, both of which were in the same position as that in the previous year. In the overall coverage also, Ernakulam and Kozhikode districts had the highest (95.46%) and lowest (52.53%) water supply coverage respectively. The district-wise details of population covered by water supply schemes in Kerala as on 31.03.2008 are given in Appendix 5.9. The percentage coverage in water supply facilities of rural, urban and total population in the districts and Kerala are shown in the Figure 5.3.



5.54 Nearly 30 percent of the population in Kerala is still living in the non-covered or partially covered area of drinking water facilities. Accessibility to drinking water facility is a critical determinant of public health outcome. To achieve this outcome, many drinking water supply schemes are being implemented in the State through various programmes, in partnership with the Central Government and External Agencies.

Bharat Nirman

5.55 Rural drinking water is one of the six components of Bharat Nirman, launched by the Government of India in 2005, to build rural infrastructure. The goal of Bharat Nirman is to have a safe source of drinking water in every habitation by 2009. In addition, all habitations which have slipped back from full coverage to partial coverage due to failure of source and habitations which have water quality problems are to be addressed. This programme is being implemented in the State through the Centrally Sponsored Scheme of Accelerated Rural Water Supply Programme, which is funded on a 50 percent matching share basis between Government of India and the State Government.

5.56 The number of habitations in India planned to be covered and addressed for water quality problems as on 01.04.2005 was estimated based on a habitation survey for the categories of uncovered villages, slipped back villages and villages affected with water quality problems. As per this survey, the target under Bharat Nirman was to cover 55067 uncovered habitations, 331604 slipped back habitations and 216968 quality affected habitations in India. The status of State-wise uncovered habitations under Bharat Nirman as on April 1, 2007 is given in Appendix 5.10. The initial target for Kerala was to cover 7553 uncovered, 421 slipped back and 867 quality affected areas. The achievements of India and Kerala during the first three years of Bharat Nirman are given in Table 5.10 and Table 5.11 respectively.

Table 5.10
Achievements of India under Bharat Nirman Rural Drinking Water Component

Annual Plan	Target	_
	55067 uncovered	
Bharat Nirman Target (From	3.31 lakh slipped back	Achievement
2005-06 to 2008-09	2.17 lakh quality problem	
	habitations	
Annual Plan 2005-06		
As per CAP '99	11897	13121
Slipped Back	34373	79544
Quality Affected	10000	4550
Total	56270	97215
Annual Plan 2006-07		
As per CAP '99	18120	12440
Slipped Back	40000	89580
Quality Affected	15000	5330
Total	73120	107350
Annual Plan 2007-08		
As per CAP '99	27664	2487
Slipped Back	90000	23020
Quality Affected	65823	2318
Total (upto October '07	183487	27825

Source: Annual Report 2007-08, Planning Commission

Table 5.11
Achievements of Kerala under Bharat Nirman Rural Drinking Water Component

	No. of Habitations							
Year	Target			Achievement (as on March)				
	U.C	S.B	Q.A	Total	U.C	S.B	Q.A	Total
Initial Target	7553	421	867	8841				
2005-06	650	0	181	831	1702	421	26	2149
2006-07	804	0	261	1065	853	557	95	1505
2007-08	2757	0	501	3258	906		288	1194
Cumulative achievement					3461	978	409	4848
					TD /	. ,	1 11'	20
Balance to be covered as at the end of March 08	4112	0	484	4596	Target was revised by adding 20 uncovered habitation and 26 quality affected habitations.			

Note: UC - Uncovered

SB - Slipped Back QA - Quality Affected

Source: Department of Drinking Water Supply, GoI.

5.57 Of the 867 quality affected habitations targeted, the water quality problems were addressed in 409 habitations. While prioritizing the addressal of the water quality problem, Arsenic and Fluoride affected habitations have been accorded priority followed by Iron, Salinity, Nitrate and other Contaminants. The contaminant-wise number of quality - affected habitations in Kerala as on 01.04.2005 is given in Table 5.12.

Table 5.12 Quality Affected Habitations in Kerala and India as on 01.04.2005

Sl. No.	Contaminant	No. of Habitations		
51. 110.	Contaminant	India	Kerala	
1	Arsenic	5029	0	
2	Fluoride	31306	34	
3	Iron	118088	564	
4	Salinity	23495	86	
5	Nitrate	13958	78	
6	Multiple	25092	105	
	Total	216968	867	

Source: Department of Drinking Water Supply, GoI

5.58 National Rural Drinking Water Quality Monitoring and Surveillance Programme has been launched under Bharat Nirman in February 2006 for strengthening the community participation in the drinking water sector for sustainability. Under this programme, five persons in each Grama Panchayat are to be trained to carry out regular surveillance of drinking water sources for which 100 percent financial assistance including water testing kits is provided. The details of water quality tests conducted and the number of officers trained in the Kerala Water Authority for the period from 2001-02 to 2007-08 is given in Table 5.13 below.

Table 5.13
Water Quality Tests Conducted in Kerala

Year	No. of Water Quality Tests Conducted	No. of Officers Trained
2001-02	19795	59
2002-03	20949	19
2003-04	22354	38
2004-05	23735	51
2005-06	33451	52
2006-07	23931	71
2007-08	26225	71

Source: Kerala Water Authority

Status of Water Supply Coverage in Habitations

5.59 According to the survey conducted by the Rajiv Gandhi National Drinking Water Mission in 1992, there were 9776 identified habitations in Kerala. Of these habitations, 2091 habitations were fully covered [potable water provided @ 40 lpcd (litres per capita per day) and above], 7444 were partially covered (potable water provided @ 10 lpcd to 39 lpcd), 228 were non-covered (potable water is not provided or provided @ less than 10 lpcd) and 13 were in the forest area. The present status of these habitations is given below in Table 5.14.

Table 5.14
Status of Water Supply Coverage in Habitations

Year	No. of Habitations (as per CAP 99)						
(as on March)	Fully Covered	Partially Covered	Non-Covere d	Forest Area			
2003	2091	7444	228	13			
2004	2125	7638	0	13			
2005	2365	7398	0	13			
2006	3892	5871	0	13			
2007	4745	5018	0	13			
2008	5283	4480	0	13			

Source: Kerala Water Authority

5.60 A fresh habitation survey was conducted in 2003 based on 2001 census population and the number of rural habitations/wards were increased to 12165. The details of another 1124 habitations were further added on 01.04.07 and the total number of habitations comes to 13289. The habitation-wise water supply level for these habitations as on 03/2008 and 09/2008 are given in Table 5.15.

Table 5.15 Habitation-wise Water Supply Level

Quantity of supply	No. of Habitations			
Quantity of supply	As on 03/2008	As on 09/2008		
Below 10 lpcd or Non Covered	145	140		
Between 10 lpcd and 40 lpcd	6659	4768		
Above 40 lpcd	6485	8381		
Non Covered Forest Area	Nil	Nil		
Total Habitations	13289	13289		

Source: Kerala Water Authority

Water Supply Schemes in Operation

5.61 Major implementing agencies of drinking water supply schemes in the State are Kerala Water Authority (KWA), Kerala Rural Water Supply and Sanitation Agency (KRWSA) and Local Self Government Institutions (LSGIs). KRWSA and LSGIs are ensuring community participation in the water supply schemes by sharing the financial costs and taking responsibility in management, operation and maintenance, to some extent. Besides these agencies, Department of Urban Development and Department of Town and Country Planning also act as the nodal agencies for water supply schemes under UIDSSMT and JNNURM respectively.

5.62 There are 2102 functional water supply schemes in Kerala, implemented by Kerala Water Authority, as on March 2008. Of these schemes, 65 schemes are newly completed during 2007-08. Of the total water supply schemes in operation, 2036 schemes are providing drinking water facilities to rural population and 66 schemes to urban population. Thrissur district has the highest (259) number of functioning water supply schemes and Wayanad district has the lowest (61). The district-wise and category-wise details of water supply schemes in operation within the service area of Kerala Water Authority are given in Appendix 5.11.

5.63 Kerala Rural Water Supply and Sanitation Agency has 3647 water supply schemes in operation for providing safe drinking water to 975834 people in the rural sector. Of these, 488 schemes are newly implemented during 2007-08 and 137359 rural people are additionally covered through these schemes. By implementing 3647 water supply schemes in the State, Kerala Rural Water Supply and Sanitation Agency provided 163219 domestic water supply connections and 172 non domestic connections. The total number of street taps installed in the State by KRWSA is 747 as on March 2008. The district wise details of water supply schemes in operation, water supply connections and population covered by water supply schemes implemented by KRWSA as on March 2008 are given in Appendix 5.19. The status of water supply schemes implemented by Kerala Rural Water Supply and Sanitation Agency during 2007-08 is given in the Table 5.16.

Table 5.16
Water supply Schemes implemented by KRWSA

Sl. No.	Name of District	No. of new Schemes	No. of Domestic water supply connections	Additional population covered
1	Thiruvananthapuram	28	1138	7877
2	Kollam	40	1667	8836
3	Pathanamthitta	18	856	4536
4	Alappuzha	0	0	0
5	Kottayam	41	2080	11107
6	Idukki	25	844	4473
7	Ernakulam	2	39	207
8	Thrissur	12	462	2277
9	Palakkad	20	2080	10778
10	Malappuram	116	6009	37922
11	Kozhikode	69	2810	20308
12	Wayanad	31	2468	13531
13	Kannur	61	1819	11422
14	Kasaragod	25	762	4085
	Total	488	23034	137359

Source: Kerala Rural Water Supply & Sanitation Agency

5.64 The present status of service connections and street taps provided by Kerala Water Authority is given in Appendix 5.12. The details of water supply schemes transferred to local bodies as part of decentralised planning is given in Appendix 5.18. Details of functional water supply schemes belonging to KWA, KRWSA and Local Bodies in Kerala as on March 2008 is given below in Table 5.17.

Table 5.17
Functional Water Supply Schemes in Kerala as on March 2008

Ownership	No. of Water Supply Schemes in Operation			
	Urban	Rural	Total	
Kerala Water Authority	66	2036	2102	
Kerala Rural Water Supply and Sanitation		3647	3647	
Agency				
Transferred to Local bodies	•		371	

Source: KWA & KRWSA

Ongoing Water Supply Schemes

5.65 The district wise details of ongoing water supply schemes being implemented by Kerala Water Authority by availing assistance from different sources are given in Appendix 5.17. As on March 2008, a total of 1434 water supply schemes are under implementation, of which, 1394 schemes are in rural areas. Palakkad district has the highest number of ongoing water supply schemes (297), followed by Ernakulam (201). Wayanad district has the lowest number of ongoing water supply schemes (23), followed by Kasaragod (40).

External Assistance in Water Supply Sector

5.66 Water supply schemes are mainly being implemented in the State with assistance from external agencies like Japan Bank, World Bank, Asian Development Bank etc.

(i) JBIC Assisted Kerala Water Supply Project (KWSP)

5.67 A package of five water supply schemes was approved for loan assistance by the Overseas Economic Co-operation Fund (OECF) of Japan (Now the Japan Bank for International Co-operation - JBIC) in 1996. The JBIC assisted Kerala Water Supply Project envisages the implementation of five water supply projects in Thiruvananthapuram, Cherthala, Meenad, Kozhikode and Pattuvam for a total estimated cost of Rs.1787.45 crores. The project cost was revised to Rs.2589.90 crores during 2007-08. The total amount received as external assistance for this project from 2003-04 to 2007-08 was Rs.357.60 crore and the cumulative expenditure as on March 2008 was Rs.715.68 crore. An amount of Rs.800.00 crore has been provided for the project during 2008-09 and an amount of Rs.314.55 lakh has been spent upto December 2008. Year wise receipt and expenditure of the project are given in the following Table 5.18.

Table 5.18
Financial Details of JBIC assisted KWSP

I manetal betains of sbie assisted RVVSI				
Year	External Assistance	Expenditure		
Tear	Received (Rs.lakh)	incurred (Rs. lakh)		
2003 - 04	950.00			
2004 - 05	849.00			
2005 – 06	873.00	8904.00		
2006 - 07	16756.00	14484.00		
2007 - 08	16332.00	48180.02		
Total	35760.00	71568.02		

Source: Kerala Water Authority and CPMU

(ii) World Bank Assisted Rural Water Supply Project (Jalanidhi)

5.68 Jalanidhi project was initially approved at an estimated cost of Rs.451.00 crores and targeted to cover 80 Grama Panchayats for improving the quality of rural water supply and environmental sanitation service delivery to achieve sustainability of investments. After its mid-term review, the project cost was revised to Rs.381.50 crore since impressive achievements were attained with a lower cost than the estimated. The pattern of funding is such that the external assistance is Rs.274.68 crore, which is 72 percent of the project cost, 7 percent each from GoK and Grama Panchayat and the remaining fund from Beneficiary Groups. Out of the total project funding of Rs.374.59 crores mobilised as at the end of August 2008, Rs.52.44 crores (14%) is community contribution and Rs.27.16 crore (7.2%) is contribution from the Grama Panchayats. The external assistance released as additional central assistance from Government of India during the period is Rs.24091.85 lakh. The actual expenditure incurred for the project as on 30.09.2008 is Rs.36862.44 lakh. Utilising this amount, 112 Grama Panchayats, spread over the districts of Kerala, except Alappuzha, have been covered under the project. Out of the 3712 schemes taken up under Jalanidhi programme, 3698 water supply schemes have been completed and the communities have been empowered for its operation and maintenance.

5.69 The Jalanidhi project has successfully carried out decentralisation by forming small micro-site groups of communities having need for water and willingness to be a part of the project into legally registered bodies called the Beneficiary Groups (BGs). There are 4099 active registered BGs in Jalanidhi with an average membership of 43 families per group. On an average, 52 percent of the general BPL population is included in these Beneficiary Groups. About 16 percent of the Jalanidhi beneficiaries are from SC/ST families. Apart from this, there are ten tribal panchayats in Jalanidhi project. The tribal population has contributed Rs.48.89 lakh in cash and Rs.34.72 lakh as labour to the capital cost contribution. There are 162 functional schemes in the tribal areas covering a population of about 35000. The achievements of Jalanidhi Project as on 30.09.2008 are given in Table 5.19.

Table 5.19 Jalanidhi Project - Physical Achievements

Sl. No.	Item	Unit	Achievement as on 30.09.08
1	Grama Panchayats Targeted	Number	80
2	Grama Panchayats covered	Number	112
3	Tribal Grama Panchayats covered	Number	10
4	Households participating for water supply schemes	Lakh Number	1.93
5	Population targeted for water supply schemes	Lakh Number	11.28
6	Participation of BPL households	Percentage	52
7	Participation of SC/ST households	Percentage	16
8	Households covered under completed water	Lakh	1.67
	supply schemes	Number	
9	Population benefited under completed water	Lakh	9.95
	supply schemes	Number	
10	Participation of NGOs	Number	51
11	Beneficiary Groups implementing water supply schemes	Number	4099
12	Water Supply Schemes started by the BGs	Number	3712
13	Water Supply Schemes commissioned	Number	3698
14	KWA schemes taken over for rehabilitation	Number	174
15	KWA schemes rehabilitated	Number	95

16	Rehabilitated schemes implemented through	Number	253
	Grama Panchayats		
17	Comprehensive Ground Water Recharge	No. of GPs	33
	activities (GWR)		
18	BGs implemented GWR	Number	1013
19	Rain Water Harvesting units constructed	Number	13304

Source: Kerala Rural Water Supply and Sanitation Agency.

(iii) ADB assisted Tsunami Emergency Assisted Project (TEAP)

5.70 Asian Development Bank has provided assistance for restoration of water supply which were devastated due to the Tsunami. The long term works taken up under TEAP are (1) Comprehensive Water Supply Scheme to Alappad, Clappana, Ochira and Karunagappally and (2) WSS to Kayamkulam Municipality and Arattupuzha Panchayat. During 2007-08, an amount of Rs.3925.00 lakh has been provided for three long term works and Rs.1465.44 lakh has been spent till March 2008.

Assistance from Government of India

5.71 The Government of India's major intervention in water sector started in 1972-73 through Accelerated Rural Water Supply Programme (ARWSP) for assisting States/UTs to accelerate the coverage of drinking water supply. In 1986, the entire programme was given a mission approach with the launch of the Technology Mission on Drinking Water and Related Water Management. This Technology Mission was later renamed as Rajiv Gandhi National Drinking Water Mission (RGNDWM) in 1991-92. In 1999, new initiatives in water sector had been initiated through Sector Reform Project, later it was scaled up as Swajaldhara in 2002. With sustained interventions, Department of Drinking Water and Sanitation (DDWS) is an important institution to support the States/UTs in serving the rural population with water and sanitation related services all across India.

(i) Rural Water Supply

- 5.72 Accelerated Rural Water Supply Programme (ARWSP) and Swajaldhara are the main programmes of the Central Government relating to rural drinking water supply. ARWSP is aimed at ensuring a minimum availability of 40 litres of water per capita per day (lpcd) to all rural people. Swajaldhara is a demand driven approach to augmenting water supply with a high degree of local participation. ARWSP is now part of Bharat Niraman approach, with a time bound strategy of tackling all habitations that are deficient in water supply.
- 5.73 In Kerala, 100 rural water supply schemes have been sanctioned under ARWSP of which 90 schemes are under execution with central fund and 10 schemes are in progress with State fund. During 2007-08, an amount of Rs.8346.25 lakh has been spent against the central release of Rs.8293.00 lakh and the corresponding state expenditure for the ARWSP schemes is Rs.32476.82 as on October 2008. Out of 395 taken up under swajaldhara for the period from 2002-03 to 2006-07, 295 schemes had been completed and the remaining schemes are targeted for completion during 2008-09.
- 5.74 The Central Government is also committed to provide 100 percent coverage of water supply to rural schools and anganwadies. The ARWSP includes school water supply also. For providing protected water supply to schools in rural areas, KWA had taken up 754 schemes during 2002 and 2003 and all these schemes had been completed. Out of the 925 schemes sanctioned by the State Level Sanctioning Committee (SLSC) on December 2005, 653 schemes had been completed and

the balance works are targeted to be completed by March 2009. During January 2007, water supply schemes to 479 Schools / Anganwadies amounting to Rs.238.31 lakhs have been sanctioned and 31 schemes had been completed. Balance works are targeted for completion before March 2009.

5.75 Government of India provides assistance under Technology Mission for implementing schemes in water quality affected areas. Upto 15 percent of the ARWSP funds are to be earmarked for new projects designed to address water quality problems. Fifteen schemes have been sanctioned so far for a total estimate cost of Rs.14081.00 lakhs. The water supply scheme to Kozhinjampara and adjoining village in Palakkad District and Water Supply Scheme to Uppala in Kasaragod District have been completed. The remaining schemes are in progress. As on October 2008, the cumulative central expenditure of Technology Mission schemes is Rs.28.47 crore and the corresponding state expenditure is Rs.14.84 crore.

Box 5.2 National Rural Water Supply Programme (NRWSP)

The present trend in ARWSP to measure coverage in terms of litres per capita per day underscores the principle of meeting the basic minimum need of drinking water of all the rural population on a sustainable basis. Based on the paradigm shift in policy from the conventional lpcd norms to the norms of ensuring drinking water security for all in the community, the 'Accelerated Rural Water Supply Programme' has been modified and renamed as 'National Rural Water Supply Programme'. In this programme, the maintenance of water supply systems, ensuring water quality, reliability and convenience of availability to every rural household in equitable manner has been given the priority. To meet the emerging challenges in the rural drinking water sector relating to availability, sustainability and quality, the components under the programme will be NRWSP (coverage), NRWSP (sustainability), NRWSP (water quality), NRWSP (DDP areas), NRWSP (natural calamity) and NRWSP (support). More details are available at the official website of Department of Drinking Water Supply, Ministry of Rural Development, Government of India.

(ii) Urban Water Supply

- 5.76 The coverage of urban population with water supply facilities in the past had not been very impressive due to various reasons including the fact that the investment made in the urban water supply sector had been inadequate. To extend financial support to the State Government/local bodies and to provide water supply facilities in towns having population less than 20000 (as per 1991 census), the centrally sponsored Accelerated Urban Water Supply Programme (AUWSP) was launched in March 1994. Since 2005-06, no schemes are being sanctioned under the programme, as the scheme has been merged with the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).
- 5.77 In Kerala, nine water supply schemes were sanctioned under AUWSP, with a total estimated cost of Rs.38.54 crores and two schemes were commissioned. The total expenditure committed from the central assistance released from 2002-03 to 2007-08 is Rs.13.35 crore and the corresponding state expenditure is Rs.14.99 crore. During 2007-08, no central assistance was received from Government of India, since the scheme was subsumed in UIDSSMT.

- 5.78 With a view to provide reform-linked infrastructure facilities including 100% water supply accessibility to the entire urban population by the end of the Eleventh Plan in 2012, Government of India has launched the two programmes, namely –
- (i) JNNURM covering 63 cities in India with population above one million as per 2001 census, including 35 metro cities and other State capitals and culturally important towns.
- (ii) UIDSSMT for the remaining 5098 towns having population less than one million to cover all the towns as per 2001 census, irrespective of the population criteria.
- 5.79 Water supply (including desalination plants) and sanitation is an admissible component of both of these schemes. Under JNNURM (Jawaharlal Nehru National Urban Renewal Mission), Thiruvananthapuram and Kochi were selected as two mission cities from Kerala State. To access infrastructure funds, Thiruvananthapuram and Kochi have prepared City Development Plans (CDPs) which have been approved and provided the basis for these cities to undertake urban sector reforms that help direct investment into city-based infrastructure and service delivery with focus on urban poor. The notable feature of JNNURM is that it is focused not merely on asset creation but also the sustainability of assets and achievement of service delivery outcomes. Towards this end the state and respective city are expected to enter into a Memorandum of Agreement with the Ministry of Urban Development, Government of India to commit timelines for implementation of reforms.
- 5.80 The funding pattern for Thiruvananthapuram is 80 percent Government of India share, 10 percent State Share and 10 percent ULB contribution and for Kochi Corporation, the funding pattern is 50 percent Government of India share, 20 percent State share and 30 percent ULB contribution.

Box 5.3 JUNNURM - Approved Projects

Thiruvananthapuram Corporation

- 1. Improvement to Water Supply Scheme Rs.87.16 crore
- 2. Improvement of Sewerage system Rs.215.41 crore
- 3. Solid Waste Management Rs.24.56 crore

Kochi Corporation

- 1. Solid Waste Management Rs.88.12 crore
- 2. Improvement of Water Supply System Rs.201 crore
- 3. Improvement of Sewerage System Rs.78.4 crore
- 4. Upgrading Surface Water Drainage Rs.9.78 crore

5.81 The programme UIDSSMT is for a period of seven years upto 2012. The sharing of funds would be in the ratio of 80:10 between Central Government and State Government and the balance 10 percent could be raised by the nodal/implementing agencies from the financial institutions. In Kerala, 54 towns (other than corporations of Kochi and Thiruvananthapuram and Municipalities of Kalamassery and Thrippunithura) are eligible for getting financial assistance under the scheme. Department of Town & Country Planning is the State Level Nodal Agency (SLNA) for UIDSSMT in Kerala.

5.82 During 2006-07, ten projects (six projects on solid waste management, three on water supply and one on sewerage) with a total cost estimate of Rs.316.84 crore were approved under UIDSSMT. During 2007-08, 17 DPRs (six on solid waste management, eleven on water supply) with a project cost of Rs.258.09 crore were technically sanctioned under the scheme. The status of water supply schemes sanctioned under UIDSSMT as on 30.10.2008 is given in Table 5.20.

Table 5.20 Status of Water Supply Schemes approved under UIDSSMT as on 30.10.2008 (Rs. lakh)

Sl.	Particulars	Wa	ter Supply Sch	emes
No.	Faruculars	Payyannur	Alappuzha	Thrissur
1	Approved project cost	4019	9194	11064
2	Central Share released to SLNA	803.8	1838.8	ent ore ion the
	as I instalment			nei noi ntio utio
3	1.5% incentive for DPR	60.29	137.91	ommitment re) is more allocation a State DPR of the
	preparation released to SLNA			mn all all St
4	State Share released to SLNA	100.475	229.85	
5	ULB share deposited in SLNA	100.475	126.74	ntral co 17 cro central Keral (), the]
	Account			ent 0.1 0.1 e ce or F re),
6	Total amount deposited in the	1065.04	2333.3	
	SLNA Account			5 K - 5 -
7	Total amount released to ULB	1065.04	1267.39	
	by SLNA			Since the tc involved (I than the ba availab (Rs.64.767 project
8	Amount utilized by ULB	Nil	Nil	inc nvc har Rs.

Source: Department of Town and Country Planning

5.83 Details of projects technically sanctioned under UIDSSMT during 2007-08 is given below in Table 5.21.

Table 5.21 Projects Technically Sanctioned under UIDSSMT during 207-08

Sl. No.	Town/Corporation	Cost of DPR recommended by SLNA (Rs. lakh)
1	Guruvayoor & Chavakkad	5045
2	Thalassery	4120
3	Vadakara	2292
4	Kalpatta	3217
5	Perinthalmanna	811
6	Chittur – Thathamangalam	650
7	Changanassery	392
8	Thiruvalla	628
9	Ottappalam	1800
10	Malappuram	1976
11	Kuthuparamba	3500
	Total	24431

Source: Department of Town and Country Planning.

(iii) Tsunami Rehabilitation Programme (TRP)

5.84 Kerala Water Authority has been allotted Rs.75 crore as grant from Government of India towards the implementation of Tsunami Rehabilitation Programme. Administrative sanction has been issued for 113 schemes amounting to Rs.67.56 crore in the Tsunami affected areas covering nine districts in Kerala. Details are given in Table 5.22. Twenty works have been completed and 78 works are in progress, 12 works retendered and three works dropped. Three more schemes (two in Thiruvananthapuram and one in Ernakulam) have been approved by SLEC. The date of completion of TRP schemes insisted by Government of India is 31st March 2009.

Table 5.22
Details of Schemes under Tsunami Rehabilitation Programme

Sl. No.	Name of District	Total Number of	Total Estimate Cost
		Schemes	(Rs Lakhs)
1	Thiruvananthapuram	39	372.17
2	Kollam	19	1467.80
3	Alappuzha	10	852.00
4	Ernakulam	19	963.34
5	Thrissur	3	300.00
6	Kozhikkode	10	549.00
7	Malappuram	2	110.00
8	Kannur	8	1479.00
9	Kasaragod	3	663.00
	Total	113	6756.31

Source: Kerala Water Authority

Assistance from Financial Institutions

- 5.85 Many rural and urban water supply schemes are being implemented in the State with assistance from financial institutions like LIC, HUDCO, NABARD etc. LIC assisted water supply schemes had started implementation in the State since 1967-68. LIC had provided an assistance of Rs.319.57 crore as loan in the water supply sector for the period upto 2003-04. From 2003-04 onwards, LIC had terminated the assistance and this affected the progress of implementation of the schemes badly. The repayment of loan amount received from LIC is Rs.143.34 crore as at the end of March 2008.
- 5.86 As on March 2007, there were 51 rural water supply schemes and 28 urban water supply schemes started with LIC assistance, which were under different stages of implementation. For completing these schemes, various possibilities were explored and as a result, 12 rural LIC schemes were sanctioned by the State Level Sanctioning Committee (SLSC) for implementation with central assistance under ARWSP. One LIC urban scheme was sanctioned under UIDSSMT.
- 5.87 Thirty three rural and 14 urban LIC schemes, reformulated into 22 schemes along with 17 other schemes were posed to NABARD for assistance. The urban schemes, originally formulated based on Census Towns were reformulated based on Panchayats to suit NABARD norms. NABARD had sanctioned 36 schemes for a loan amount of Rs.449.89 crores.
- 5.88 Eighteen urban water supply schemes were taken up for implementation with loan assistance from HUDCO. All schemes, except one viz. Augmentation of Palakkad Water Supply Scheme Stage II, were commissioned. Palakkad Water Supply Scheme, originally started with LIC

assistance, has been transferred to State Plan Schemes as LIC assistance was stopped. Total loan sanctioned by HUDCO was Rs.157.27 crore and a total loan amount of Rs.119.71 crore was released for the implementation of these schemes. As on March 2008, an amount of Rs.102.92 crore was repaid to HUDCO.

5.89 Three schemes held up due to paucity of funds were taken up for completion by availing term loan from banks. The total A.S. amount is Rs.264.51 crore and an amount of Rs.241.66 crore has been spent for these schemes as on 30.09.2008. Water Supply Augmentation to Parur Municipality and adjoining panchayats and Chowara Head Work Improvement has already been completed. The Adhoc Augmentation of Kochi Water Supply Scheme was completed and inaugurated on 5th October 2007. Bank loan has also been availed for implementing Water Supply Scheme to Thrippunithura and adjoining Panchayats. The scheme is expected to be completed during 2010.

Box 5.5 Water Supply Schemes with NABARD Assistance

(a) RIDF IX

No. of Schemes taken up for implementation - 8 RWSS

Initial Project cost - Rs.48.68 crore
Total loan sanctioned (initial) - Rs. 33.24 crore
Revised Project Cost - Rs.62.18 crore
Loan sanctioned (Revised) - Rs.44.45 crore

No. of schemes commissioned - 3 (RWSS to Azhikkode,

Edakkad and Ramanthali)

Cumulative Expenditure as on 30.09.08 - Rs.33.54 crore

(b) RIDF XIV (SPAN Projects)

No. of Schemes sanctioned - 36 RWSS

Total project cost - Rs. 670.16 crore
Loan sanctioned - Rs.449.89 crore

Cumulative Expenditure as on 31.03.08 - Rs.99.24 crore

5.90 The details of Water Supply Schemes sanctioned by NABARD under RIDF XIV (SPAN Projects) is given in the following Table 5.23.

Table 5.23 NABARD Aided Water Supply Schemes - SPAN RIDF XIV

Sl. No.	District	Location of Scheme	A.S Amount (Rs. crore)
1		Kazhakkoottam	7.62
2	- Thiruvananthapuram	Azhoor, Kizhuvilam & Keezhattingal	18.95
3		Karakulam	13.36
4		Kunnathukal	16.85
5		Pallichal, Balaramapuram and	38.62
		Vilavoorkal	
6		Melila	1.00
7	Kollam	Kareepra	5.63
8	Konam	Elamballoor (Punukkannoor Chira)	3.46
9		Kundara	12.66

10	Pathanamthitta	Konni – Thazham	11.23
11	r amanamunua	Pandalam	13.72
12	Kottayam	Vaikom - Pipe Replacement	10.96
13	Idukki	Alakkode & Adjoining Villages	43.76
14		Karukutty & Mookkannur	19.31
15		Paipra & Nellikkuzhi (Mulavoor -	12.01
13	Ernakulam	Asamannoor)	
16		Vazhakkulam - Kizhakkambalam	5.18
17		Edakkattuvayal	7.55
18		Eriad – Methala	39.82
19	Thrissur	Ooragan & Adjoining Villages	7.59
20		Cheruthuruthy - Nedumpuram	8.14
21		Sreekrishnapuram & Adjoining Villages	31.24
22	Palakkad	Karimpuzha	12.68
23	1 alakkau	Koduvayoor - Pudunagaram	9.27
24		Karakkurissi - Thachampara	19.03
25		Cheekode & Adjoining Panchayats	80.72
26	Malappuram	Anakkayam	8.66
27	Maiapparam	Areacode	7.38
28		Irimbiliam – Valancheri	12.46
29		Nadapuram	11.89
30	Kozhikode	Kuttiyadi	5.18
31		Kizhakkoth	2.30
32		Anjarakandy & Adjoining Villages	134.43
33	Kannur	Kolancherry I	9.70
34		Kolancherry II	7.02
35		West Eleri	11.54
36	Kasaragod	Enmakaje	9.23
	naa. Vanala Watan Authonitu	Total	670.15

Source: Kerala Water Authority.

Production and Distribution of Water

5.91 Kerala Water Authority produced water @ 1791 million litres per day (mld) and distributed @ 1254 million litres per day under piped water supply during 2007-08. The unaccounted for water (UFW) is 537 mld, which means that the estimated distribution loss of water produced is 30 percent. Production and supply of water by Kerala Water Authority for the last five years is given in Table 5.24 below.

Table 5.24 Production and Distribution of Water

Year	Production (mld)	Supply (mld)	Leakage (%)
2003-04	1583.60	1219.37	23
2004-05	1617.13	1245.78	23
2005-06	1635	1259	23
2006-07	1750	1400	20
2007-08	1791	1254	30

Source: Kerala Water Authority

5.92 The cost of production of water per kilo litre is Rs.8.61 during 2007-08 as against Rs.7.82 in 2006-07. The summary of cost of production of water during 2007-08 is given in table 5.25.

Table 5.25 Summary of Cost of Production of Water

Particulars	For the year	2007-08	
Faruculars	MLY	MLD	
Quantity produced	653,715	1791	
Quantity sold	457,710	1254	
	Total (Rs. crore)	Per KL (Rs.)	
Direct Variable Cost			
Operators Salary	63.02	1.38	
Power charges	134.40	2.94	
Chemicals	12.85	0.28	
Total Direct Variable Cost	210.27	4.60	
Indirect overhead cost			
Repairs & Maintenance	29.15	0.64	
Administrative Overheads	89.36	1.95	
Interest (excluding GoK Loan)	28.98	0.63	
Depreciation	36.00	0.79	
Total Indirect Overhead Cost	183.49	4.01	
TOTAL	393.76	8.61	

Source: Kerala Water Authority

Water Tariff and Revenue

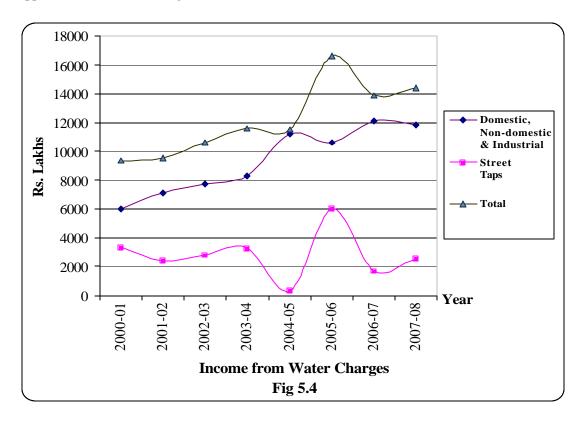
5.93 The water tariff prevailed on March 2008 was fixed on 01.04.1999 and no revision has been effected for the last ten years. But the cost of operation or production cost of water has been increased significantly over the years due to various reasons like increase in electricity charges, other input costs etc. Hence government have revised the water tariff now being levied by the Kerala Water Authority from the domestic, non domestic and industrial consumers for the water supplied by the Authority in its service area with effect from 01.09.2008. The revised water tariff is given in Appendix 5.13.

Box 5.5 Revised water Tariff - Concessions to BPL Families

- ?? No water charges will be collected from BPL families who consume upto 10,000 litre per month
- ?? The water charge arrears of BPL families upto 31.08.2008 will be written off.
- ?? The water connection charges for BPL families will be reduced to 50% of the existing rate

5.94 The Kerala Water Authority collected revenue of Rs.143.80 crore during 2007-08 as water charges from various urban and rural water supply schemes. The income from water charges has been increased by 3.78 percent when compared to the income of Rs.138.56 crore during 2006-07. 82.22 percent of the total water charges collected during 2007-08 was from domestic, non-domestic

and industrial consumers and 17.78 percent was collected from the local bodies by way of street tap connections. The details of income collected from water charges from 2001-02 onwards are given in Appendix 5.14 and in the Figure 5.4.



5.95 The details of income collected by Kerala Water Authority from various sources from 2000-01 onwards are given in Appendix 5.15 and the plan and non-plan expediture of Kerala Water Authority for the period from 2002-03 to 2007-08 are given in Appendix 5.16.

Arrears of Water Charges

5.96 The total arrears in water charges to be collected from various categories of consumers as on 31.03.08 is Rs.789.14 crores. More than 75 percentage of the total dues are the arrears of water charges from Local Self Government Institutions. The details of water charges to be collected from various category of consumers as on March 2008 is given in the following Table 5.26.

Table 5.26 Arrears in Water charges as on 31.03.2008

Sl.	Consumer Category	Arrears in water	Percentage
No.		charges	share
		(Rs. Lakh)	
1	Domestic	5509.79	6.98
2	Non-Domestic	9831.97	12.46
3	Industrial	2611.95	3.31
4	Panchayat	31036.22	39.33
5	Municipality	17605.30	22.31
6	Corporation	12318.67	15.61
	Total	78913.90	100

Source: Kerala Water Authority

Problems in Water Supply Sector

5.97 There are several factors contributing to the problems of non-sustainability of water availability and supply, poor water quality etc. Fully covered habitations slip back to not covered or partially covered due to reasons such as sources going dry or lowering of ground water, sources which are quality affected, systems working below their capacity due to poor O&M etc. Over reliance on ground water has resulted in the problems of sustainability and water quality. A shift from ground water resources to surface water resources can tackle this problem.

5.98 A large section of the people of Kerala is 'water illiterate' resulting in a consumption pattern that causes much wastage of treated water. A considerable portion of treated water is lost through leakages in the distribution system. A major portion (about 82 percent) of the leakages occurs in the household service connections and the remaining 18 percent occurs due to leakages in pipelines. Organizations and local bodies which operate water supply schemes do not take timely action for maintenance. Low water pressure at the supply point, frequent pump failure, leakages at public taps go unattended days long, breakage of distribution lines etc. are common problems in Kerala's water supply system. The operating organizations should have a proper vision in the formulation of strategies for operating and maintaining the existing schemes and water supply systems.

CHAPTER 6

ENVIRONMENT AND DEVELOPMENT

Inappropriate technologies and the mismanagement of resources are certainly responsible for environmental degradation. However the socio-political structure of the country is the root cause of this crisis. One important cause of environmental destruction is inequitable consumption of resources and sharing of responsibility for environmental well-being. Over-population in third world countries is often cited as the root cause of environmental degradation. However, an average person in developed country consumes 40 times more resources than an average person in an under developed country. On the other hand, how the environment should be treated and how natural resources should be managed and used is decided by a handful of powerful people in various walks of life. Adapted almost wholesale from the West and characterised by unrestricted, large-scale industrialisation, urbanisation, consumerism and materialism, today's path towards progress is quite evidently causing severe environmental destruction and resource depletion. It is a process that greatly benefits small sections of Indian society, has some trickle-down effects on a somewhat larger section, but almost leaves out a large section that becomes more and more impoverished.

6.2 Lack of integrated environmental planning also shares the responsibility for environmental deterioration in the country. Often departments, municipalities, local authorities and industries use environmental resources according to the priorities of their individual sectors, without much regard to the overall needs of the state or the question of sustainability. To proactively manage environmental resources, environmental resource planning will have to be made a central component of policy making in the state

World Environment Day

- 6.3 World Environment Day, celebrated each year on 5^h June, under the auspices of the United Nations stimulates world wide awareness of the environment and enhances political attention and action. The World Environment Day slogan for 2008 is CO_2 Kick the Habit! Towards a Low Carbon Economy.
- 6.4 The theme for World Environment Day 2009 is 'Your Planet Needs You-UNite to Combat Climate Change'. Mexico, a country at the crossroads of the Green Economy and one increasingly in the centre of regional and global affairs will host the International World Environment Day celebrations 2009. The agenda is to give a human face to environmental issues, empower people to become active agents of sustainable and equitable development, promote an understanding that communities are pivotal to changing attitudes towards environmental issues, and advocate partnership which will ensure nations and peoples enjoy a safer and more prosperous future. World Environment Day is a People's event with colourful activities such as street rallies, bicycle parades, green concerts, essays and poster competitions in schools, tree planting as well as recycling and clean up campaign.

Wet land Conservation

- 6.5 The area under natural coastal wetlands in the state is 85671.50 ha while manmade coastal wetlands extend to an area of 8059 ha. The total area under wetlands in the state is 127930.07 ha (Source: State of Environment Report- Kerala, 2007).
- 6.6 India is a signatory of the Ramsar Convention, which calls for the conservation of the ecosystems while ensuring benefits to the local communities. Under National Wetland Conservation Programme the wetlands identified from Kerala are Ashtamudi, Sasthamkotta, Kottuli, Kadalundi and Vembanad Kol (Source: Ministry of Environment & Forests, Annual Report 2006)
- 6.7 State has to prepare action plans for wetland project implementation. Immediate steps should be taken to protect them by changing their legal status to that of a protected category. Participatory methods are to be adopted with the involvement of PRIs, NGOs and local communities in the co-management of wetlands. The need for proper management of existing wetlands should be a priority of the state.

Water Quality

- 6.8 High fluoride concentration in ground water beyond the permissible limit of 1.5 ppm has come to stay as a major issue affecting a large segment of rural population to the tune of 25 million spread over more than 200 districts in 17 states of the country. The population at risk is estimated at around 66 million. Hand pump attached defluoridisation and iron removal plants have failed due to inappropriate technology, unsuited to community perception and community involvement.
- 6.9 Both organic and inorganic chemicals can contaminate the drinking water. The most commonly reported inorganic elements in water are Fluoride, Iron, Nitrates and mixed contamination of these three. Fluorides in water primarily produce effects on skeletal tissues such as teeth and bones. Fluoride can have an adverse effect on tooth enamel and give rise to mild dental fluorosis at drinking water concentrations between 0.9 and 1.2 mg/lit. Elevated fluoride intakes can also have more serious effects on skeletal tissues. There are 11 villages and 13 habitations in Kerala affected by high fluoride content. According to a survey in 2003, it is endemic in Idukki, Palakkad and Thiruvananthapuram Districts. In Kerala, 341 villages in 378 habitations have been affected by high iron content. Water systems, piping, fixtures etc. can become restricted or clogged by presence of iron. When iron exists along with certain kinds of bacteria it may create sanitation problems. The short term exposure to drinking water with a nitrate level at or just above the health standard of 10 mg/l nitrate –N is a potential health problem primarily for infants. In Kerala 59 villages from 67 habitations are affected by nitrate especially in Malappuram District.
- 6.10 The Kerala State Pollution Control Board maintains a network for monitoring of the ambient quality of rich and varied water resources of the state. There are 3 major schemes for ambient water quality monitoring with the Board. They are (i) Global Environmental Monitoring Scheme (GEMS) sponsored by the WHO the scheme covers 6 river stations and 3 ground water stations (ii) Monitoring of Indian National Aquatic Resources Scheme (MINARS) sponsored by CPCB the scheme covers 24 river stations 10 backwater/lake stations and 12 ground water stations (iii) Ambient Water Quality Monitoring Scheme (AWAQUMS). This extensive

monitoring network covers more than 90% of the inland water resources of the state. The ground water quality trends of selected monitoring stations in the state are given in Table 6.1.

Table 6.1
The ground water quality of selected monitoring stations in Kerala (2007-08)

Location	рН	Nitrate -N (mg/l)	BOD (mg/l)	Total Coliform (MPN/100 ml)	Faecal Coliform (MPN/100 ml)
Eloor	5.8	4.8	0.8	280	30
Chungappaly	6.0	0.85	0.8	125	30
Punalur	6.9	6.10	1.1	90	55
Pappanamcode	5.5	0.45	1.7	110	45
Nedumangad	6.1	0.85	2.4	85	40
Kundara	4.4	4.95	1.0	910	680
Cherthala	6.4	0.25	1.0	1235	215
Vytilla	7.2	1.05	1.0	425	60
Edayar	6.2	3.55	0.5	62	15
Kalamassery	4.8	8.20	0.5	100	30
Poomkunnam	5.7	3.90	1.4	65	7
Malappuram	5.9	3.80	0.9	350	100
Mavoor	5.9	2.50	0.7	270	85
Kannur	4.9	3.50	1.3	180	40
Payyannur	6.1	2.85	0.4	140	10

Source : Status of Water Quality in India,2007,CPCB, July 2008

- 6.11 The river water quality observed at selected locations of Medium and Minor Rivers of Kerala during 2007 is given in Appendix 6.1. Though there was not much deviation in the pH level of water, the total Coliform and faecal coliform organisms in these rivers were quite high indicating the poor quality. The total coliform and faecal coliform content of river Karamana was exceptionally high pointing out the threat of faecal contamination. The rivers Amaravila, Pampa and Thirurangady also showed higher coliform contents.
- 6.12 The ground water quality parameters of Metropolitan city Kochi assessed by CPCB is given as Appendix 6.2

Industrial effluents

- 6.13 A number of industries situated on the banks of rivers and backwaters discharge their effluents into the wet land system. These effluents contain a large number of toxic ingredients such as acids, alkalies, heavy metals, suspended solids and a number of other chemicals. Among various industrial pollutants, heavy metals require special considerations due to their non degradable nature. Analysis of particulate metal content indicates high concentration of Zinc, Chromium etc due to industrial pollution in Kochi backwaters. Highest concentration of heavy metals in sediments was observed during pre monsoon. Chromium content was higher in Ashtamudi and Vembanad and mercury content was high in Vembanad.
- 6.14 A recent study showed that pollution is concentrated among a few industrial sub sectors and that a sector's contribution to pollution is often disproportionate to its contribution to

industrial output. Petroleum refineries, textiles, pulp and paper and industrial chemicals produce 27 per cent of the industrial output in the country, but contribute 87 per cent of sulphur emission and 70 per cent of nitrogen emission from the industrial sector. Likewise, iron and steel and non-metallic mineral products produce about 16 per cent of the industrial output, but account for 55 per cent of the particulate emission.

6.15 Environmental concerns have assumed significance in the recent years. Commensurate with industrial expansion, a strong regulatory mechanism is required to ensure minimum environmental standards. State wise summary status of 17 categories of highly polluting industries (CPCB Annual Report 2006-07)) indicated that out of the total 2744 large and medium industrial units identified in the 17 categories of highly polluting industries in the country, 1991 industrial units have installed the requisite pollution control equipments, 339 units have closed down and the remaining 414 units are defaulting. Statewise Status of Highly Polluting Industries in 17 Categories is given in Table 6.2

Table 6.2 Statewise Status of Highly Polluting Industries in 17 Categories

Sl.No	State	Complying	Defaulting	Closed	Total
1	Andhra Pradesh	243	90	34	367
2	Assam	10	3	5	18
3	Bihar	25	4	19	48
4	Chhattisgarh	18	5	2	25
5	Goa	10	0	1	11
6	Gujarat	263	61	21	345
7	Haryana	73	31	23	127
8	Himachal Pradesh	14	3	2	19
9	Jammu & Kashmir	8	0	3	11
10	Jharkhand	8	7	6	21
11	Karnataka	98	5	40	143
12	Kerala	23	11	15	49
13	Madhya Pradesh	60	4	15	79
14	Maharashtra	454	42	69	565
15	Meghalaya	8	0	0	8
16	Orissa	38	12	2	52
17	Punjab	53	31	17	101
18	Rajasthan	94	9	8	111
19	Tamil Nadu	175	42	3	220
20	Tripura	10	0	0	10
21	Uttaranchal	16	18	2	36
22	Uttar Pradesh	234	13	27	274
23	West Bengal	49	18	20	87
24	Chandigarh	0	0	1	1
25	Daman	1	2	0	3
26	Delhi	2	3	0	5
27	Pondicherry	4	0	4	8
	Total	1991	414	339	2744

Source : CPCB Annual Report 2006-07

- 6.16 Legal action has been taken against all defaulting industrial units. In Kerala out of 49 units, 15 are closed and 23 are having adequate facilities to comply with the standards and 11 are defaulting.
- 6.17 According to the CPCB as of 2007, 72.6 percent of the 2744 units under 17 categories of highly polluting industries were in compliance, which is a decrease from 2004 when the rate was 84 percent. Table 6.3 provides a summary of the compliance status by industrial sector.

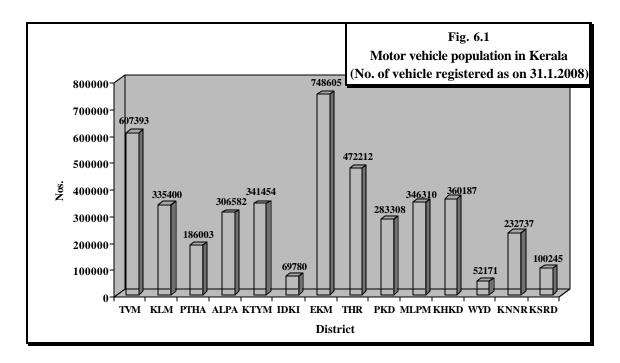
Table 6.3
Status (Sector wise) of Highly Polluting Industries in 17 categories

Sl.No	Category	Complying	Defaulting	Closed	Total
1	Aluminium	6	1	0	7
2	Cement	193	23	20	236
3	Chlor-Alkali	25	9	0	34
4	Copper	3	1	0	4
5	Distillery	195	35	41	271
6	Dyes and DI	87	9	23	119
7	Fertiliser	106	8	25	138
8	Iron and Steel	30	9	1	40
9	Oil Refineries	18	2	1	21
10	Pesticides	97	10	9	116
11	Petrochemicals	76	7	1	84
12	Pharmaceuticals	379	134	58	571
13	Pulp & paper	120	31	38	189
14	Sugar	428	65	95	588
15	Tannery	96	15	18	129
16	Thermal power	128	54	8	190
17	Zinc	4	1	1	6
	Total	1991	414	339	2744

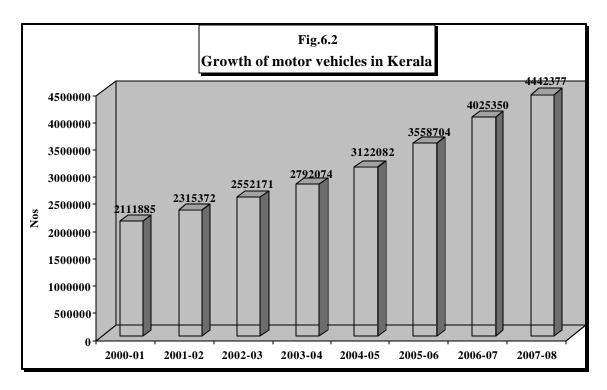
Source: CPCB Annual Report 2006-07

Air Pollution

6.18 The air in most of our cities is dangerously polluted. Average levels of suspended particulate matter in the four metropolitan cities (Mumbai, Delhi, Chennai and Kolkata) are over 360 micrograms per cubic metre, while the World Health Organisation has stipulated a safety level of 150 mg/ cubic metre. The main sources of pollutants are vehicular exhaust and industrial activity (energy sector, refinery and petrochemicals, iron and steel industry and others). A graph on District wise vehicle population in Kerala is given as Fig 6.1.



The growth of vehicle population in Kerala is indicated in Fig 6.2.



The measures taken by the Government to control air pollution from the industries is given in Box 6.1.

Box 6.1 Measures taken for controlling air pollution from the industries

- ?? Emission standards have been notified under the Environment (Protection) Act, 1986 to check pollution.
- ?? Industries have been directed to install necessary pollution control equipment in a time bound manner and legal action has been initiated against the defaulting units.
- ?? 24 critically polluted areas have been identified. Action Plan has been formulated for restoration of environmental quality in these areas.
- ?? Environmental guidelines have evolved for siting of industries.
- ?? Environmental clearance is made compulsory for 29 categories of development projects involving public hearing/ NGO participation as an important component of Environmental Impact Assessment process.
- ?? Environmental audit in the form of environmental statement has been made mandatory for all polluting industries.
- ?? Preparation of zoning Atlas for siting of industries based on environmental considerations in various districts of the country has been taken up.
- ?? Power plants (coal based) located beyond 1000 kms from the pit-head are required to use low ash content coal (not exceeding 34%) with effect from 1.6.2002. Power plants located in the sensitive areas are also required to use low ash coal irrespective of their distance from the pit head.

Source: National Ambient Air Quality 2007, NAAQMS 2008-09, CPCB

Ambient Air Quality

6.19 The ambient air quality standards of major cities of Kerala during 2007 as indicated by the National Ambient Air Quality Monitoring is given in Table 6.4

Table 6.4
Air Quality Levels in Selected Locations in Kerala, 2007

Pollution Standards	Annual Mean Concentration Range (? g/m3)								
	SO_2		NO_2		SPM ²	SPM*		RSPM**	
	I	R	I	R	I	R	I	R	
Low (L)	0-40	0-30	0-40	0-30	0-190	0-70	0-60	0-30	
Moderate (M)	40-80	30-60	40-80	30-60	180-360	70-140	60-120	30-60	
High (H)	80-120	60-90	80-120	60-90	360-540	140-210	120-180	60-90	
Critical (C)	>120	>90	>120	>90	>540	>210	>180	>90	
Kochi	L	L	L	L	L	M	L	M	
Kottayam	L	L	L	L	L	L	L	M	
Kozhikode	L	L	L	L	L	M	L	L	
Thiruvanathapuram	L	L	L	M	L	M	M	Н	
Palakkad	L	-	L	-	L	-	M	-	

Source: National Ambient Air Quality 2007, NAAQMS 2008-09, CPCB

^{*} Suspended Particulate Matter

^{**}Respirable Suspended Particulate Matter

Kerala Environmental Management Agency

- 6.20 In order to strengthen the Department of Environment setting up of an agency for Environmental Management within the Department of Environment which can render technical assistance to the Department and undertake consultation and formulation of programs in the sector was envisaged in the Eleventh Five Year Plan. Accordingly in the year 2007-08, the Environmental Management Agency Kerala was established in February 2008.
- 6.21 The functions of the agency include assessment of effectiveness of the environment programs in the state, formulate proposals for improving the environmental performance and coordinate Research and Development Programme of the Department of Environment. The agency will have seven functionaries including five technical/administrative personnel. The assessment of effectiveness of sectoral environment management programmes and formulation of strategies for undertaking key environmental initiatives will be the foremost task of the agency.
- 6.22 The Environmental Management Agency has also taken up co-ordination of research on environmental aspects. A committee has been set up to decide priorities and guidelines for environmental research through various research institutions/universities etc. The guidelines have been finalised by the Committee and proposals within priority areas have been invited. The scheme will include demonstration/pilot projects on innovative technologies for sanitation, treatment of waste and energy efficiency.
- 6.23 The Environmental Management Agency, Keralam is also formulating an action plan for Periyar under the River Action Plan scheme. Setting up of a mechanism at state level for Environmental Impact Assessment is under consideration of the Agency.

Kerala State Biodiversity Board

- 6.24 The Kerala State Biodiversity Board was constituted in 2005 with vision of Conservation of biodiversity and its sustainable utilization for the benefit of human beings. During the year 2007-08 the State Biodiversity Board has funded the project for preparation of directory of wetlands of Kerala at Panchayat level which is being executed through Salim Ali Centre for Ornithology and Kerala Forest Research Institute. The Board has conducted International Biological Diversity Day Celebrations on 22nd May 2007 and Earth Day Celebrations on 21st April 2007.
- A state level seminar was organised by the Kerala State Biodiversity Board during 2007on the topic "Biodiversity-Major Challenges for Conservation and Sustainable Utilisation" and a one day seminar to commemorate the 100th birth day of Dr. Salim Ali was also conducted. One of the mandates of Biodiversity Board is to create awareness on biodiversity conservation among different sections of the society such as students, teachers, professionals, NGOs, legislatures, bureaucrats, judiciary and media. To fulfill the above mandate, a one day workshop for the teachers and college students of Kerala was organised. The Kerala State Biodiversity Board has also released a 30 minutes Documentary Film on Kerala's Biodiversity.
- 6.26 As per the provisions of the Biological Diversity Act, all the panchayats in the state have been instructed to constitute the Biodiversity Management Committee(BMC). As a pilot project, five panchayats are selected representing different ecosystems and BMC's have been constituted.

- 6.27 The Kerala State Biodiversity Board has instituted Green Awards for recognising outstanding contributions of individual/organisations in the field of nature/biodiversity conservation. The award is specifically for
 - 1. An individual for his lifetime contribution in biodiversity conservation
 - 2. A school teacher who has contributed the most for nature education/biodiversity conservation for the children
 - 3. A school which has made substantial contribution for nature education/biodiversity conservation among the students
 - 4. An organisation which has contributed remarkably for the nature /biodiversity conservation and nature education.

Kerala State Pollution Control Board

- 6.28 Development, evaluation and approval of pollution control technologies are a statutory responsibility of the Kerala State Pollution Control Board(KSPCB). The scarcity of land, high pollution density, high water table, high density of dug wells, abundance of water body and high level of environmental awareness in the state often makes Kerala State Pollution Control Board to adopt standards more stringent than those at the National level.
- 6.29 The Board is monitoring water and air quality in the state at various locations systematically through National and State level programmes. A number of 169 water monitoring stations and 24 air monitoring stations are covered in this manner. It is proposed to do water quality monitoring at 16 more and air quality monitoring at 6 more stations in the problematic areas.
- 6.30 The public awareness centre functioning in the Board is intended to impart healthy environmental consciousness among the public. The centre will be making systematic efforts to communicate the Board's targets and achievements through different media. Another activity of KSPCB is survey and investigation works which is being supported by the CPCB. The Board also gives assistance to setting up of pollution control facilities in the Government sector to a limited extent. Conducting environmental public hearing was the responsibility of the Board under the Environmental Impact Assessment Notification. Though the activity is assigned to a separate committee as per recent amendment to the notification, the Board is continuing the conduct of public hearing in matters of high public concern.
- 6.31 The Environmental Impact Assessment Reports and Environmental Management Plans are prepared prior to implementation of major development programmes. The KSPCB is also proposed to conduct verification of reliability of the predictions and of the adequacy of the management measures in select cases so as to rectify the defects in those cases and to develop guidelines to prevent recurrence of the defects in similar cases in future.
- 6.32 The KSPCB is giving awards to industries /hospitals, hotels and local bodies installing, operating and maintaining pollution control facilities. These awards have created competitive spirit amongst the industries to protect the environment by adopting the best pollution control measures.
- 6.33 The KSPCB is proposed to establish an Environmental Training Institute at Thiruvananthapuram. The Institute is expected to be a common platform that offers training to pollution control board staff, industries, judicial officers, media, people's representatives, Government Officers and NGOs

Environmental Sanitation

6.34 Sanitation is a crucial factor in human welfare and sustainable development. The lack of adequate sanitation facilities has also led to severe health and environmental impact due to the presence of unhygienic conditions.

International Year of Sanitation -2008

6.35 The United Nations has announced 2008 as the International Year of Sanitation to accelerate the progress of 2.6 billion people world wide who are without proper sanitation facilities. Access to sanitation is deeply connected to virtually all the Millennium Development Goals in particular those involving the environment, education, gender equality and reduction of child mortality and poverty. If the current trend continues there will be 2.4 billion people without basic sanitation in 2015, with children continuing to pay the price in lost lives, missed schooling, in disease, malnutrition and poverty. Lack of toilets makes women and girls vulnerable to violence if they are forced to defecate only after nightfall and in secluded areas. The schools with decent toilet facilities enable children especially girls reaching puberty to remain in the education system. It is estimated that improved sanitation facilities could reduce diarrhea related deaths in young children by more than one-third. It has been estimated that investing approximately \$ 10 billion per year can halve the proportion of people without basic sanitation by year 2015 and if sustained the same investment could provide basic sanitation to the entire world within one or two decades. This sum is less than 1 % of the world military spending in 2005 and 1/3rd of the estimated global spending on bottled water. While funding needed for sanitation is not overwhelmingly large, the return on that investment is potentially great (Source: United Nations, 2007)

Community Perceptions and Local Government Initiatives

- 6.36 Sanitation is one of the subjects that has been transferred to the local governments at the cutting edge level, as part of the decentralization process. This has paved the way for improving the level of community participation in sanitation related services.
- 6.37 In the Ninth Plan about 300 Grama Panchayats gave top priority to sanitation and 50 of them achieved the goal of more than 95 per cent coverage of the household sanitary latrines. During the Ninth Plan about 5.71 lakhs household sanitary latrines were constructed under decentralized plan which is much more than the total achievement in the past 15 years through different governmental programmes. During the Tenth Five Year Plan, nearly 5.70 lakh house hold latrines were constructed.

School Sanitation

6.38 Conceptually school sanitation recognizes the potentialities of the child as a change agent more receptive to new ideas. The present status of schools with sanitation and drinking water facilities is given in Table -6.5 The TSC and Sarva Siksha Abhiyan (S.S.A) has provision for construction of school toilet. Apart from this, hygiene education is also an integral component of school sanitation for which school health clubs are formed.

Table 6.5
District wise Details of Government Schools having Drinking Water/latrines/urinal Facilities in Kerala 2007-08

		NO OF GOVT SCHOOLS			No. of Schools having								
Sl. No.	District				Drinking Water			Urinals/Latrines					
NO.		L.P	U.P	H.S	Total	L.P	U.P	H.S	Total	L.P	U.P	H.S	Total
1	Thiruvanan thapuram	300	98	119	517	297	94	119	510	296	95	119	510
2	Kollam	268	61	78	407	258	56	77	391	259	56	76	391
3	Pathanamthitta	168	42	48	258	168	42	48	258	167	42	48	257
4	Alappuzha	192	67	59	318	192	67	58	317	187	66	59	312
5	Kottayam	168	67	60	295	157	65	60	282	161	67	60	288
6	Idukki	85	40	55	180	69	37	51	157	82	39	47	168
7	Ernakulam	181	91	87	359	178	87	86	351	181	91	85	357
8	Thrissur	115	55	80	250	111	54	80	245	109	55	80	244
9	Palakkad	194	63	61	318	170	61	61	292	174	63	61	298
10	Malappuram	350	113	82	545	333	107	82	522	335	113	82	530
11	Kozhikodu	181	74	70	325	167	74	70	311	169	73	70	312
12	Wayanadu	91	34	40	165	88	34	37	159	89	34	40	163
13	Kannur	114	76	83	273	101	75	83	259	100	75	83	258
14	Kasaragod	141	72	77	290	127	71	73	271	137	72	74	283
	Total	2548	953	999	4500	2416	924	985	4325	2446	941	984	4371

Source: Directorate of Public Instructions, Thiruvananthapuram, 2009

Solid Waste Management

6.39 In the light of the Supreme Court Judgment, Government of India had notified comprehensive rules for Municipal Solid Waste Management.

Solid waste management -Kudumbasree

6.40 With the rapid urbanisation, the solid waste management in most of the cities in Kerala is posing a major environmental problem now a days. Rough estimates reveal that the quantity of waste generated from the Urban towns in the State comes to the tune of 2,800-3,000 **tonnes** per day. It is estimated that only 50% of the Waste generated is collected for disposal. Every day a quantity of about 1,500 tonnes of waste is left to decompose on road margins, drains, canals, water bodies and open space. The reason for poor waste management is due to the absence of segregation and primary collection from the source of its origin. To fill up this lacuna **Kudumbasree** – the State Poverty Eradication Mission has initiated an innovative enterprise namely, 'Clean Kerala Business'. Under this enterprise, women from the financially backward families who are the members of the Community Based Organisations (CBOs) of Kudumbashree are engaged in door to door household waste collection and transport to the transit points fixed by the Urban Local Bodies.

6.41 Now 155 Kudumbashree solid waste management groups are in operation in 18 urban local bodies in the State. The advantage of Kudumbashree model of solid waste collection group is that it can fill the existing gap of solid waste collection and segregation without any additional financial burden to the urban local bodies.

Suchitwa Mission

6.42 Suchitwa Mission was constituted by the Government of Kerala by integrating the Clean Kerala Mission and Kerala Total Sanitation & Health Mission vide G.O.(MS) No.31/2008/LSGD dated 31/01/2008. Suchitwa Mission will be the nodal agency for overseeing, advising and supporting the sanitation activities of the urban and rural local governments in the State. It is constituted as a Society registered under the Charitable Society's Act under the administrative control of the Local Self Government Department.

6.43 The local self-government institutions (LSGIs) have the primary responsibility for implementing integrated solid waste management systems in urban areas. The Clean Kerala Mission (Suchitwa Mission) is acting as a nodal agency of the state providing technical support and financial assistance for the effective implementation of solid waste management system . Accordingly 55 LSGI's have been identified for setting up solid waste processing facility and sanitary landfill. The present status of land availability with the Urban Local Bodies (ULB) for Solid Waste Management is as follows:

No. of ULB's with land - 55

No. of ULB's without land for SWM - 3

Total - 58

- 6.44 Thirty Grama Panchayaths submitted proposal for solid waste management system. The Clean Kerala Mission evaluated the proposal and given approval for Rs. 784.75 lakhs with mission support of Rs. 248.20 lakhs.
- 6.45 The physical achievements of solid waste processing plants under different LSG's (2007) are given in Table 6.6.

Table 6.6 Physical Achievements of solid waste processing plants under LSG's (2007)

Sl.No	LSG's which completed solid waste	LSG's whose Solid Waste Processing Plants are
51.110	processing plants	nearing completion.
1	Thiruvananthapuram Corporation	Adoor municipality
2	Kozhikkode Corporation	South Paravoor Municipality
3	Thrissur	Kanjangadu municipality
4	Malappuram Municipality	Kuthuparambu municipality
5	Palakkad municipality	Alappuzha municipality
6	Attingal municipality	Manjeswaram Municipality
7	Mattannur municipality	Nileswaram Grama Panchayat
8	Koyilandy municipality	Nadapuram Grama Panchayat
9	Manjeri municipality	Keezhoor Chavassery grama Panchayat
10	North Paravoor municipality	
11	Chalakkudy municipality	
12	Perinthalmanna municipality	
13	Vaikkom municipality	
14	Payyannur municipality	
15	Kottayam municipality	
16	Punalur municipality	
17	Changanassery Municipality	
18	Pala municipality	
19	Mangalpady Grama Panchayath	
20	Kattappana Grama Panchayath	
21	Ajanoor Grama Panchayath	
22	Pattambi Grama Panchayath	

Source: Clean Kerala Mission, 2007

Biomedical waste

- 6.46 The number of health care facilities in the State is highest among all the States. Its number and sophistication is also changing. More over, there is a trend that more and more foreigners are making use of the health care facilities in the State. This will in turn increase the quantity of biomedical waste generation and so more money to be found for waste management facilities, apart from planning for meeting the future scenario. At present the total number of beds is just about 1,05,152 and the biomedical waste generation is about 300gm/bed per day. Once the facilities in the health care establishments are improved it is estimated that the biomedical waste generation will be more that 500gm per bed per day.
- 6.47 Kerala is having the highest number of health care institutions as per the 1991 census. About 26 percent; of total health care institutions in India are located in Kerala. District wise details of health care institutions, number of beds and quantity of waste generated are given in Table 6.7

Table 6.7
District wise details of health care institutions, beds and waste generation

Sl. No	District	No. of health care institutions	No. of beds	Total waste generated (Kg/day)
1	Alappuzha	343	8835	11486
2	Ernakulam	546	15819	20565
3	Idukki	194	4096	5325
4	Kannur	392	5149	6694
5	Kasaragod	209	2107	2739
6	Kollam	704	7530	9789
7	Kottayam	440	9323	121209
8	Kozhikkode	342	9034	11744
9	Malappuram	327	5030	6539
10	Palakkad	316	4925	6403
11	Pathanamthitta	310	5096	6625
12	Thiruvananthapuram	411	12910	16783
13	Thrissur	434	12991	16888
14	Wayanad	127	2307	2999
	Total	5095	105152	136699

Source : ENVIS 2008

- 6.48 The total quantity of biomedical waste generated and handled in the State is about 82724 tons/year. The quantity of recyclable hazardous waste is 10725 tons/year, incinerable hazardous waste is 10725 tons/year, incinerable hazardous waste 2596 tons/year and for land disposal is 60538 ton/year. About 1.5 lakhs ton/day of solid waste is being generated from the hospitals and other health care establishments (State of Environment Report, 2005)
- 6.49 Minimum required facilities to be installed in a hospital for biomedical waste treatment include one Incinerator, one Autoclave and one Shredder. According to a rough cost estimate each hospital may have to make a capital investment of Rs.10 lakhs for acquiring these facilities.

Therefore, installation of Common Treatment Facility for a given consortium of hospitals appears to be a more viable option. In a 5,000 bedded hospital, 7.5 MT of waste is generated per day. Out of this 1.25 MT would be bio-medical waste. The estimated capital cost for establishing a common treatment facility for bio medical waste generated from 5,000 hospital beds comes to Rs. 50 lakh. The annual O&M cost will come to Rs. 30 lakhs.

E-waste hazards

- 6.50 E-waste consists of wastes generated from used electronic devices and house hold appliances which are not fit for their original intended use and are destined for recovery, recycling or disposal. Such wastes encompasses a large number of electrical and electronic devices such as computers, cellular phones, personal stereos, including large house hold appliances such as refrigerators, air conditioners etc. E-wastes contain over 1000 different substances many of which are toxic and potentially toxic to environment and human health if these are not handled in an environmentally sound manner.
- 6.51 The electronics industry has emerged as the fastest growing segment of Indian industry both in terms of production and exports. The share of software services in electronics and IT sector has gone up from 38.7 per cent in 1998-99 to 61.8 percent in 2003-04. In 2005-06, India had an installed base of 4.64 million desktops, about 431 thousand notebooks and 89 thousand servers. The e-waste inventory based on this obsolescence rate and installed base in India for the year 2005 has been estimated to be 146180.00 tonnes. This is expected to exceed 8,00,000 tonnes by 2012. (Source: Third Draft of guidelines for environmentally sound management of E- waste, CPCB, 2007)
- 6.52 The Cathode Ray Tubes (CRTs) have high content of carcinogens such as lead, barium, phosphor and other heavy metals. When disposed carefully in a controlled environment, they do not pose any serious health or environmental risk. However, breaking, recycling or disposing CRTs in an uncontrolled environment without the necessary safety precautions can result in harmful side effects for the workers and release toxins into the soil, air and groundwater.
- 6.53 Another dangerous process is the recycling of components containing hazardous compounds such as halogenated chlorides and bromides used as flame-retardants in plastics, which form persistent dioxins and furans on combustion at low temperatures (600-800°C) Copper, which is present in printed circuit boards and cables, acts a catalyst for dioxin formation when flame-retardants are incinerated. The PVC sheathing of wires is highly corrosive when burnt and also induces the formation of dioxins. A study on burning printed wiring boards in India showed alarming concentrations of dioxins in the surroundings of open burning places reaching 30 times the Swiss guidance level.
- 6.54 Land filling e-waste, one of the most widely used methods of disposal, is prone to hazards because of leachate which often contains heavy water resources. Older landfill sites and uncontrolled dumps pose a much greater danger of releasing hazardous emissions. Mercury, Cadmium and Lead are among the most toxic leachates. Mercury, for example, will leach when certain electronic devices such as circuit breakers are destroyed. Lead has been found to leach from broken lead-containing glass, such as the cone glass of cathode ray tubes from TVs and monitors. When brominated flame retarded plastics or plastics containing cadmium are land filled, both PBDE and cadmium may leach into soil and ground water. In addition, landfills are also prone to uncontrolled fires which can release toxic fumes.

Soil and Water Conservation

- 6.55 For the last three decades NGOs and development agencies have implemented watershed management projects with the aim of increasing agricultural productivity and reducing poverty. Many of the watershed management projects throughout the world have not taken into account land use capability. They have centred on activities mostly at plot level and do not add upto transformation at catchment level. Additionally they have been top down and have not accommodated the interests of resource users. In order to make a meaningful difference, local people have to be directly involved, trusted and enabled their knowledge appreciated and their skills used.
- 6.56 A number of schemes on rainwater harvesting and watershed management are implemented by various Ministries with different guidelines, like NWDPRA, Hariyali, WGDP, River valley projects etc. There are many issues of Inter Ministerial Coordination, commonality of approach, provision of support services, which need to be resolved to give a greater thrust to water harvesting and conservation.
- 6.57 The projects under RIDF I , RIDF II and RIDF III were completed. Under RIDF IV & V, there were no schemes for soil conservation department. The department is now implementing RIDF VII , VIII, IX , X , XI, XII and XIII schemes . Under RIDF VIII, 12 schemes were sanctioned with a financial outlay of Rs. 647.40 lakhs for covering an area of 6128 ha. Under RIDF IX, 7 projects were sanctioned with an outlay of Rs. 464.74 lakhs for covering an area of 3199 hectares. 51 projects having a project cost of Rs. 3552.21 lakhs were sanctioned under RIDF X for covering an area of 28537 hectares. Under RIDF XI, 3 projects were sanctioned for covering an area of 1200 ha with a project cost of 248.73 lakhs. Under RIDF XII, 25 projects have been sanctioned with a project cost of 1858.29 lakhs to cover an area of 10994 ha. During the year 2007-08 an area of 24087.29 ha. was brought under various soil and water conservation measures under both state sector and central sector schemes expending an amount of Rs. 2015.37 lakhs. Under RIDF XIII, 10 projects were sanctioned for covering an area of 4088 ha with a project cost of 714.47 lakhs. Details regarding RIDF projects are given in Table-6.8

Table 6.8
RIDF assisted Soil and Water Conservation Programmes

RIDF		No. of Watershed			Project	Project	Cumul Achiev	
Phase	Period	Sanct ioned	dropped	Completed/ ongoing	cost (Rs. Lakhs)	Area (Ha)	Physical (Ha)	Financial (Rs. Lakhs)
RIDF I	1995-97	40	3	37	1013.20	5902	5718	996.09
RIDF II	1996-99	32	6	26	1292.99	8725	7859	1087.45
RIDF III	1998-02	40	3	37	2161.50	13423	10890	1845.07
RIDF VI	2000-03	20	ı	20	1021.87	6220	4627.5	845.53
RIDF VII	2002-04	40	ı	40	1779.32	13694	9647	1593.6
RIDF VIII	2002-05	12	1	9	647.40	6128.13	3562.8	554.74
RIDF IX	2004 -06	7	-	2	464.74	3199	2247	336.64
RIDF X	2004-07	51	-	-	3552.21	28537	14522	2305
RIDF XI	2006-08	3	-	-	248.73	1200	574	6725
RIDF XII	2006-09	25	-	-	1858.29	10994	3452	637.94
RIDF XIII	2007-10	10	-	-	714.47	4088	552	107

Source: Soil Conservation Department

- 6.58 Stabilization of land slide areas scheme is being taken up by the state considering the frequent landslide occurring in different districts of the State. During 2007-08,under this project, Rs. 1.38 lakhs has been utilised for taking up scientific soil conservation measures in 11.1 ha. area affected by landslide in Idukki and Pathanamthitta Districts in the State.
- 6.59 The National Watershed Development Project for Rainfed Areas (NWDPRA), is being implemented in the state since VIII plan period. During the XI th plan period, 84828 ha of agricultural land comprising about 135 micro watersheds that fell under the delineated territories of 31 sub watersheds is to be treated at an estimated cost of Rs. 5012.99 lakhs. During 2007-08, an amount of Rs. 946.96 lakhs was expended for completing the spill over activities under Xth plan watersheds and taking up preliminary activities of the XI plan watersheds. An area of 16080 ha was protected under the programme during the plan period.
- An integrated watershed management approach is being adopted in Kabini River valley project. Total catchment area of Kabini is 1.635 lakh ha of which 1.05 lakh ha needs soil and water conservation measures. An amount of Rs.1606 lakhs has been spent upto 3/2008 for covering an area of 14861 ha. During the year 2007-08 the allocation under micromanagement was Rs. 363.9 lakhs. An amount of Rs. 242.89 lakhs has been expended for developing an area of 3113 ha and construction of 355 structures generating 1.3 lakh man days for rural employment. At present works are being implemented in watersheds which has been classified under high priority by the All India Soil and Land Use Survey.

Table 6.9
Progress of Soil Conservation Schemes during 2007-08

Sl		No.of	Target		Achievement		%
No	Sector	schemes	Physical	Financial	Physical	Financial	Achieve
110		schemes	(Ha)	(Lakhs.)	(Ha)	(Lakhs.)	Ment
1	State Sector	6	6600	1330	4894.29	825.52	63
2	Central Sector	2	19600	1375	19193.00	189.85	87
	Grand Total	8	26200	2705	24087.29	1015.37	75

6.61 The major schemes implemented under Western Ghats Development Programme (WGDP) include Integrated Development of watersheds in the Western Ghat region, Forestry based programmes, infrastructure development schemes for SC/ST development and Tribal Development under internal programmes NRM,PSM and Livelihood Support System. During the year 2007-08, Rs. 20.26 crores have been spent. The overall sectoral priority of investments under WGDP in the state are Integrated Watershed Development-80%, Forestry -10% and other activities such as administration, research and training, monitoring and evaluation etc. 10%. The main focus of WGDP is integrated development of Watershed within the Western Ghat area keeping in view the overriding priorities of eco restoration and eco preservation. The watershed component is further allocated to Natural Resource Management, Production System Management and Livelihood Support System. During 2007-08 under natural resource management an amount of Rs. 2008.95 Lakhs have been expended.

Forestry and Wild Life

Forest Cover

The total forest cover of the country as per State of Forest Report 2005 is 677088 sq.km which constitute 20.60 percent of the geographic area of the country. Of this 54569 sq.km (1.66%) is very dense forest, 332647 sq.km (10.12 %) is moderately dense forest and 289872 sq.km (8.82 %) is open forest cover. The mangrove area in the country is 4445 sq.km (0.14% of country's geographic area).By excluding the areas(18.6 million ha) not available for tree planting / afforestation due to climate, edaphic and physical reasons falling in mountainous regions under permanent snow and glaciers/rocks, the forest cover of the country comes to 21.81%.

- 6.63 The forest cover in the country according to 2003 assessment was 677816 sq.km. while the 2005 assessment showed a decrease of 728 sq.km. There is an increase of very dense forest cover to the tune of 51 sq.km and the open forest cover of 630 sq.km and moderate forest dense cover has decreased by 1409 sq.km compared to 2003 assessment.
- 6.64 Madhya Pradesh with 76013 Sq.km of forest cover has the maximum forest cover amongst all states/UTs, followed by Arunachal pradesh (67,777 Sq.km) and Chattishgarh (55,863 Sq.km). The forest cover of the Kerala state as per the 2005 assessment of FSI was 15595 sq.km. (very dense forest 1024 sq.km, moderate dense forest 8636 sq.km and open forest 5935 sq.km) and it is 40.13 percent of State's geographical area .
- 6.65 In Kerala Wayanad District has the maximum forest cover of 1677 sq.km and Alappuzha District has the lowest forest cover of 21 sq.km. The district wise details of forest cover in Kerala is given in Table 6.10.

Table - 6.10 District wise Forest cover in Kerala

(Area in sq.km)

Sl.		Coographia		Percen			
No	Name of District	Geographic area	Very Dense	Moderate Dense	Open forest	Total	t to GA
1	Thiruvananthapuram	2192	59	383	547	989	45.12
2	Kollam	2491	79	585	551	1215	48.78
3	Pathanamthitta	2642	168	1009	374	1551	58.71
4	Alappuzha	1414	0	4	17	21	1.49
5	Kottayam	2203	1	187	106	294	13.35
6	Idukki	5019	285	2212	1222	3719	74.10
7	Ernakulam	2407	1	233	235	469	19.48
8	Thrissur	3032	107	417	394	918	30.28
9	Palakkad	4480	150	730	695	1575	35.16
10	Malappuram	3550	69	496	647	1212	34.14
11	Kozhikode	2344	56	346	229	631	26.92
12	Wayanad	2131	13	1345	319	1677	78.70
13	Kannur	2966	36	424	293	753	25.39
14	Kasaragod	1992	0	265	306	571	28.66
	State	38863	1024	8636	5935	15595	40.13

Source: FSI, 2005

- 6.66 The estimated forest area (provisional) in Kerala is 11033.3875 sq.km. This includes 9078.1591 sq.km. of reserve forests, 116.6831 sq.kms. of proposed reserves and 1838.5453 sq.km. of vested forests. An area of 244.37 sq.km has been excluded from the total area which includes KDHP resumed area-97 sq.km, Chinnakkanal unreserve-47 sq.km, Pallivasal unreserve-79 sq.km, and revenue land-21.37 sq.km. Division wise details of forest area are given in appendix 6.5.
- In Kerala forests fall in two bio-geographic zones of Western Ghats and the West Coast, and are rich in bio-diversity and vital for environmental protection and considered to be a repository of rare and endangered flora and fauna. The forest area in Kerala (11033.39 sq.km.) is 28.40 per cent of the geographical area of the state which is higher than the national average of 19.5%.

Natural Forest

6.68 The spatial distribution of forests in the State is very uneven, with high forest concentration in the high land of the Western Ghats, supplemented by a few forest areas in the midlands. There are considerable variations in forest type, the predominant three broad types being tropical moist deciduous forests from the plains to 750 MSL, tropical wet evergreen forests in the mountain ranges of the Ghats, and tropical semi-evergreen forests between these two types. These three types together cover most of the natural forest area (79 per cent). The coverage of the plantation forestry is to the extent of 19.30 per cent of the total area. The forests in Kerala are better stocked than forests in most other parts of India. The types of forests in Kerala are given in Table -6.11

Table - 6.11 Types of Forests in Kerala

Sl. No.	Forest Type	Area (Sq.km.)	% of Total area
1	Tropical Wet Evergreen and semi evergreen Forests	3299	35.10
2	Tropical Moist Deciduous Forests	4100	43.62
3	Tropical Dry Deciduous Forests	100	1.06
4	Mountain Sub Tropical Temperate shoals	70	0.74
5	Plantation	1814	19.30
6	Grass land	17	0.18
	Total	9400	100

Source: Department of Forest

- 6.69 Kerala was first in the country to discontinue clear felling of natural forests in 1981 for raising plantations of economically important species. In 1986, selection felling for extraction of economically valuable timber in the natural forests was also discontinued. Towards the end of 1980s the State had evolved a strategy of managing its natural forests for maximum intangible ecological benefits and of managing its plantations for maximum productivity to meet the increasing demand for timber and firewood.
- 6.70 Forest plantation constitutes the major source of raw materials to the forest based industries. The total area covered by forest plantation of various species is about 1.81 lakh ha. Teak is the major species planted having 74183 ha (41 %) followed by eucalyptus 13566 ha (7.5 %). Of the total forest plantations, the area covered by hard wood spices is 77443 ha

- (42.8%), softwood species is 33164 ha (18.3%), bamboo and reeds is 6805 ha (3.8%), plantation crops is 1882 ha (1%) and mixed plantation is 61810 ha (34.1%). Species wise area under forest plantations are given in Appendix 6.5.
- 6.71 Major forest produce includes timber, reeds, bamboo and firewood. The quantity of timber produced in 2007-08 was 48628 cum (round log). The number of bamboos and reeds produced were 11.51 lakh and 143.52 lakh respectively. These are species which can be promoted under farm forestry with people's participation. The trend in production of forest produces from 1999-2000 onwards is shown in Appendix 6.7.
- 6.72 The forest policy of the state is guided by the 1988 National Forest Policy. In Kerala the strategies adopted for the development of forests envisages maintenance of environmental stability through preservation and reduction of degraded forests, conservation of bio-diversity, increasing productivity of forest, increasing substantially the forest cover through massive afforestation and developing participatory forest management. A comprehensive state forest policy to address the specific problems and issues related to the conservation of forests and biodiversity of the state as well as the livelihood needs of the forest development communities has been formulated during 2007. The Forest Management Policy of the state encompasses technology improvement, bio-diversity conservation and development of partnership with the forest dependent communities and fringe dwellers. Special thrust is also given for protecting species of plants and animals.

Participatory Forest Management (PFM)

- 6.73 Joint Forest Management (JFM) programme was pursued vigorously as the result of the National Forest Policy 1988, and the Joint Forest Management resolution in 1990 has now been adopted in all 28 states. Around 99868 JFM Committees have been formed and 214 lakh ha. forest area have been brought under JFM programme till 2006. About 138 lakh families are involved in JFM programme in various states all over the country. In Kerala 571 PFM Committees have been formed and 1.65 lakh ha. forest area has been brought under PFM. About 64000 families including 9823 SC's and 11279 ST's are involved in PFM programme in various forest divisions of Kerala. The execution, monitoring and evaluation of the micro plans are vested with the Vanasamrakshana samithies. So far 561 VSSs and 193 EDCs are formed during the last 5 year period.
- 6.74 Government of Kerala constituted the FDA's in each forest division in 2002-03, with a view to guiding the activities of the VSS. Towards the end of last decade, the State has adopted the strategy that livelihood improvement of the forest dependent communities including the tribal population provides best opportunity for ensuring biodiversity conservation. Grass root level institutions of people called Vana Samrakshana Samithies (VSS s) and Eco Development Committees (EDC s) have been constituted to take up the above task. 405 VSS s and 191 EDC s have established meaningful partnership with the Forest Department, Local Self Governments and Non-Governmental Organization throughout the state, working harmoniously towards the above stated goal.

National Afforestation Programme

6.75 NAP is a 100% Centrally Sponsored Scheme which started implementation in the State from 2002-03. The total outlay for National Afforestation Programme is Rs. 47.65 crores and later it was revised to Rs. 31.40 crore. The amount released to State was Rs. 31.29 crores and the expenditure reported as on March 2008 was Rs. 24.80 crore. The project is being implemented

through Forest Development Agencies (FDAs) at the apex level and Vana Samrakshana Samithies (VSSs)/Eco-development Committees (EDCs) at the grass-root level. 25 FDAs participated in the implementation of NAP during 2007-08.

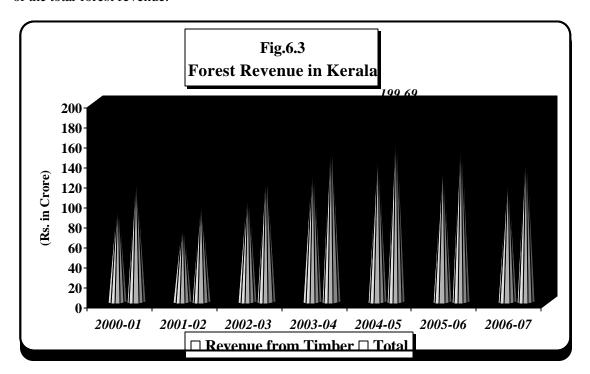
6.76 The financial assistance received from Government of India during the year 2007-08 was Rs.14.80 crores which accounted for 89% of the total receipts from Government of India during the preceding four year period from 2003-04 to 2006-07. The activities under the scheme include planting of different species. Bamboos and medicinal plants are thrust areas under the scheme. An extent of 6490.84 ha of forest land has been covered under the scheme during 2007-08 at a cost of Rs.9.17 crores. In addition to the planting components, a significant outlay (30%) is earmarked for Entry Point Activities (EPA) intended to benefit the forest dependent communities. The EPA include water supply schemes, construction of roads, culverts, sheds for anganvadies and of community halls, installing of energy saving devices like solar lamps, smokeless choolas and biogas. Providing revolving fund for self help groups is another important component of EPA. An amount of Rs.82.16 lakhs has been utilized for these activities and a total of 5,00,153 man days employment has been generated during the year.

Tribal Insurance

6.77 Tribal Insurance Scheme 'Hospitalization Benefits and Personal Accidents Benefits for the Scheduled Tribes & Scheduled Castes in the Forest Area' continued the year. All the tribal populations within the forest are covered under the scheme at a total premium of Rs.4.75 lakhs. 15 beneficiaries have received a total amount of Rs.6.47 lakhs during the year.

Forest Revenue

6.78 The Revenue from the forestry sector by way of sale of timber and other forest products comes to Rs. 154 crores in 2007-08. Major portion of the forest revenue is from timber (Fig. 6.3). During 2007-08, Rs. 123.43 crore was the revenue from timber, which account for 80.15 per cent of the total forest revenue.



Wild life and Biosphere Reserve

- 6.79 The protected area net work in the country constitutes 605 protected areas spread over most biomes, encompassing a wide array of habitats. These protected areas consists of 96 National Parks and 509 Wild life Sanctuaries. The total areas covered under the special protection is 15.7 million ha, which is about 4.78 per cent of the geographical area of the country covering about 20 per cent of the total forest. The National Parks and Sanctuaries of the country contribute significantly to the GDP of the country through various kinds of ecological services and benefits through the tourism sector. Of these, 28 have been declared tiger reserve, spread over 37,761 sq.km. in 17 states. These reserves constitute roughly 5.6 per cent of the recorded forest area and over one per cent of the country's geographical area. In all cases, PAs constitute whole or part of Tiger Reserves. The total tiger population recorded in 2001-02 census is 3642, but over half of these live outside tiger reserves. The tiger population in periyar triger reserve is estimated as 36 during 2001-02. The Periyar Wild life sanctuary was constituted in 1950 and was brought under project Tiger in 1978 as Periyar Tiger Reserve. The Periyar Tiger Reserve also falls in the Periyar Elephant Reserve. The types of forest include evergreen forests, grass land and moist deciduous forests. The total extend is 777 sq.km. consisting of core (350 sq.km), buffer (377 sq.km) and tourism (50 sq.km) zones. The animal found in the reserve are elephants, leopard, tiger, lion tailed macaque, Nilgiri marten etc. in addition to the 45 species of reptiles.
- 6.80 The Centre considered the Periyar Tiger Reserve in Kerala as the best managed tiger reserve in the country, with the forest dwellers on its fringes actively assisting the official machinery in the conservation efforts. The Union Ministry of Environment and Forests has agreed in principle to Kerala's proposal for declaring the Parambikkulam Wild Life Sanctuary as a tiger Reserve.
- 6.81 Government of Kerala declared the area around the Silent Valley National Park as a buffer zone during 2007. The buffer zone comprises an area of 148 sq,km. of forest land adjoining the park, providing protection to the regions of rich and varied plant and animal life. Also another148 sq.km reserve forest from Ranni Forest Division is added to Periyar Tiger Reserve as critical tiger habitat during 2007.
- The Western Ghats represent one of the world's 18 hot spots of biodiversity as per Norman Meyer's classification (now the number of hot spots is raised to 34). There are more than 4500 species of flowering plants found in Kerala. The records of KFRI indicates that there are 145 species of mammals of which 14 species are endemic to Western Ghats, 169 species of fresh water species, 93 species of amphibians of which 40 species are endemic and 486 species of birds of which 16 are endemic to Western Ghats, in addition to innumerable micro-flora and fauna.
- 6.83 From 1934 onwards, protected areas have been constituted in the biodiversity rich areas of forests in the State giving thrust on conservation of wild flora and fauna. The area covered by five National Parks, fifteen Wild life sanctuaries and one community reserve coming under the category of protected areas in Kerala works out to 2453.98 sq.kms. It is about 22.24 per cent of the total area under forest and 6.3 per cent of the total geographical area, which is higher than the national average of 5 per cent. Details are given in Appendix-6.8. A fowl sanctuary named choolannur pea fowl sanctuary was established in 2007. With the formation of sanctuaries, Government intended to ensure long term protection for the majestic vegetal sketch which contains many botanical rarities and novelties to science. Protected areas are managed now as showcases of bio diversity with predominance for large animals in habitat management,

participatory management based on the principles of eco-development has been initiated and this strategy has resulted in the co-operation of the neighborhood communities and forest dependent communities.

- 6.84 The major activities include protection of forests and wildlife, conservation of biodiversity, improvement of wildlife habitat conditions, developing facilities for ecotourism, ecodevelopment and conservation education. The India Eco-development Project implemented in Periyar Tiger Reserve has got wide recognition nationally. The project was successful in weaning out forest offenders and make them part of conservation efforts. Presently, the Forest Department is trying to emulate the Periyar model in the management of all the PAs of the State. In addition, schemes like Project Elephant, management of Biosphere Reserves, management of captive elephants etc. are also being implemented. With the participation of elephant owners, temple trusts, elephant welfare association etc., the Forest Veterinary Unit of the Department has successfully implanted microchips in 625 numbers of captive elephants with the objective of identification, control and monitoring the transport and exchange of ownership of captive elephants. The mandate of conserving biodiversity and ecosystems outside the forest area has been initiated by declaring Kadalundi estuary as a Community Reserve.
- 6.85 The cover of mangroves in Kerala is 8 sq.km of which 7 sq.km is in Kannur and one sq.km is in Ernakulam. Sasthamkotta and Ashtamudi are wetlands of national importance located in Kollam district with an area of 375 ha and 3200 ha respectively.
- 6.86 During 2007-08, an amount of Rs.1939 lakhs were earmarked under various schemes for protected areas management including bio diversity conservation and out of which Rs.1597.90 lakhs were utilised. It is estimated that out of the total expenditure, about 70 percent has been utilized for employment generation and as such it is estimated that 5,59,300 man days were generated during 2007-08.
- 6.87 Biosphere Reserves are terrestrial and coastal ecosystems which are internationally recognised within the framework of UNESCO's Man and Biosphere Programme. In the country, 13 Reserves have been set up and in 2001, UNESCO approved designating the Sunderban (West Bengal) and Gulf of Mannar Reserves. As a result three Biosphere Reserves from India are now included in the International Net Work, the third being Nilgiri (Kerala, Karnataka and Tamil Nadu) which was designated earlier. Kerala has two bio-sphere reserves namely Nilagiri Biosphere Reserve with an area of 1455 sq.kms constituted in 1986 and Agasthyamala biosphere reserve with an area of 1701 sq.kms constituted in 2002.

General Forestry

Natural Forests in Kerala are being managed mainly for sustaining the life support systems and biodiversity conservation. During 2007-08 also, no timber was extracted from the natural forests by way of clear felling or selection felling. Only timber from wind fallen trees was extracted wherever it is economically viable. The major activities taken up during 2007-08 were Survey of Forest Boundaries, Forest Protection and Regeneration of Denuded Forests. Boundary demarcation was also carried out by construction of cairns and kayyalas (dwarf walls) along the boundary of the forests. Degraded forest areas were rehabilitated by planting in gaps with the local species. Protection of the forests from fire was carried out mainly by undertaking fire lines and engaging fire protection watchers. The activities of boundary protection during 2007-08 include construction of 5367 cairns and maintenance of 521 cairns and construction of 37 km dwarf walls. Fire protection is another important activity and during the period 3417 km fire

lines were created. Under regeneration of denuded forests, the activities conducted are planting new areas (259 ha) and maintenance of plantation (9767 ha).

6.89 Efforts were made to adopt modern technologies including the use of improved seeds and modern nursery practices in raising the plantations during the year 2007-08. Plantations of Hardwood species of local origin, pulpwood species for supplying raw materials to industries, medicinal plants species and non-wood forest products species like canes and bamboos were raised during 2007-08. The existing plantations were managed by adopting intensive cultural operations. Under 'Hardwood' species 12 ha new areas was raised and 527 ha was maintained during the year 2007-08. Also under industrial plantation, 799ha. were newly planted and 1101 ha were maintained during 2007-08.

Outlay and Expenditure

The outlay and expenditure for various schemes implemented in the Forestry sector is shown in Table -6.12

Table 6.12 Outlay and Expenditure during 2006-07 and 2007-08

(Rs. Lakh)

	20	006-07	2007-08		
	Outlay	Expenditure	Outlay	Expenditure	
State Sector Schemes	4665.00	3989.26	4528.00	3619.59	
Central Sector Schemes	1950.00	964.76	1731.00	1348.46	
Total (Plan)	6615.00	4954.02	6259.00	4968.05	
Non-plan	15417.36	12824.40	14159.69	12317.08	

- 6.90 The state plan expenditure under forestry sector during 2007-08 is Rs.36.20 crores, which is 80 per cent of the original budgeted outlay. The shortfall in expenditure is due to low expenditure under RIDF project for which an amount of Rs.10 crores was budgeted and the expenditure reported was only Rs.0.99 crore. The state plan expenditure reported for various state plan schemes implemented during the period include forest protection with an expenditure of Rs. 9.26 crore, regeneration of denuded forest with Rs. 1.71 crores, strengthening bio-diversity conservation and management of protected area with Rs. 7.22 crores, strengthening of infrastructure facilities with Rs. 1.77 crores for roads and buildings, improving productivity of Plantation with 4.09 crores, extension forestry with Rs 1.96 crores and twelfth finance commission award with Rs 4.60 crores.
- 6.91 Under central sector scheme the expenditure reported was 78% of the budgeted outlay. This was due to low release of the central schemes viz. Nilgiri Biosphere, Project Elephant, Integrated Forest Protection Scheme and non materializing of the projects viz. Sanjeevinivanam, Greening India Programme and Coastal afforestation project.

Management of Non-Wood Forest Produce

6.92 The NWFP harvested in Kerala is dominated by reeds and bamboos, but the forests are also rich in canes as well as forest fruits, seeds, leaves, roots and other produce collected as medicinal plants mainly used for preparing ayurvedic medicine as well as for edibles, spices and fiber products. The quantities of bamboo and reed annually harvested are at a level of 40-50 thousand tonnes of bamboo and 80-100 thousand tonnes of reeds.

- 6.93 The NWFPs including medicinal plants is being given a major thrust because of their importance all around the world. The productivity and management of NWFPs are to be improved through sustainable and scientific management by adopting improved methods of harvesting, processing, value addition and marketing.
- 6.94 In addition to the protection and conservation measures taken by the department, these activities are to be strengthened by executing the same through actual consumer groups themselves. For this purpose Vana Samrakshana Samithies (VSS) were formed. The collection of NWFPs is entrusted with these user groups and they undertake collection.
- 6.95 Under the scheme Management of NWFP, new NWFP species were planted at an area of 135 ha. Also maintenance of NWFP plantations of different species was done at an area of 822 ha and nursery seedlings of different species were also produced and supplied.

Compensatory Afforestation Scheme

6.96 The Compensatory afforestation project was sanctioned at an estimated cost of Rs.113.00 crores to be implemented within a period of 10 years starting from 1993-94. The objective of the scheme is the afforestation of 57,180 ha. of degraded forest in lieu of 28588 ha. of forest land diverted for regularization of encroachments prior to 1.1.1977. The programme was a pre-condition laid by Government of India for issuing clearance for distribution of pattas to the encroachers on forest land prior to 1.1.1977. 57050 ha. of degraded areas were afforested upto 2006-2007 and an area of 130 ha were planted during 2007-08. For planting and maintenance an amount of Rs.860.75 lakhs were spent during 2007-2008.

Afforestation Outside Forest Area

6.97 The objective of the programme is to increase tree cover in non-forest areas to achieve the ideal target of 33.33% of forest cover. The following programmes were implemented during 2007-08.

(i) My Own Tree Programme (*Ente maram*)

6.98 Under this scheme one seedling each was planted by students from Standard V to Standard IX. It also aims at creation of awareness towards environment protection among younger generation. 24.35 lakh seedlings were planted under this scheme during 2007-08. An expenditure of Rs.127.32 lakhs was incurred for raising and distributing the seedlings to schools.

(ii) Shade on Wayside Project (Vazhiyora thanal)

6.99 The scheme is intended for raising avenue plantations for shade. This is a joint venture of Forest Department and trade union workers. About 92226 Nos. of seedling were planted along the sides of important roads, especially in urban areas during 2007-08. The expenditure incurred for this project during 2007-08 is Rs.11.83 lakhs.

(iii) Green Coastal Line Project (Harithatheeram)

6.100 The scheme aims at protection of coastal line from natural calamities like Tsunami, Sea erosion, Cyclone etc. by establishing bio-shield of sand binding trees and shrubs. This project is being implemented through Theera Samrakshana Vanavalkarana Samithies (TSVS). An extent of 105 ha of area in 106 costal wards covering all the 9 costal districts has been afforested through 105 TSVS during 2007-08 by incurring an amount of Rs.189 lakhs.

(iv) Our Tree Project (Nammude maram)

6.101 The scheme aims at planting of seedling in the compounds of education institutions and public compounds by student of Higher Secondary School and Colleges, during 2008-09. The Nursery works for raising seedlings required for this scheme commenced in 2007-08.

(v) Conservation & Management of Mangroves in Vembanadu and Kannur.

6.102 This Project aims at the conservation and protection of Mangrove Forests in Vembanad in Alappuzha District and in Kannur region. The expenditure incurred during 2007-08 for Vembanad is Rs.9.91 lakhs and for Kannur is Rs.6.93 lakhs.

Forest Management Information system

6.103 Computerisation programme of the Forest Department was started as one of the major initiatives of the World Bank Assisted Kerala Forestry Project (KFP), which was implemented during the period from 1998 to 2003 at a total project outlay of Rs.182.39 crores. Now the development and implementation of the Forest Management Information System (FMIS) including Geographic Information System (GIS) and other residual activities of the KFP are undertaken with the financial Kerala is the only State in India, which has been able to successfully assistance from the State. develop seventeen customized modules including GIS, designed for capturing all the major activities of the department. Computerisation has been done for the Offices down to Range level and networking of computers has been established down to Division Level Offices. The critical modules like accounts, sales, offence, court case and fire management could be successfully implemented. The department has also developed a Geographic Information System (GIS) first of its kind in a line department under the Government of Kerala. This unit has already developed spatial database of 12 Revenue Districts of Kerala having 23 layers. This comprises of spatial database of 21 Forest Divisions and all Wildlife Divisions. The spatial database so developed is made available to all offices up to division level using the customized GIS and Remote Sensing, a model-working Plan has also been prepared for Thiruvananthapuram Forest Division. Maps required by the users at various levels of the department are also being generated in the GIS unit and made available to them within a short span of time.

Kerala Forest Development Corporation

6.104 KFDC is a public sector undertaking with shares owned by Government of India and Government of Kerala. The jurisdiction of the corporation covers forest areas situated in 7 revenue districts and 10 territorial forest divisions. The total area of 10717 ha. (8006.86 ha of tree plantations and 2710.13ha. cash crops) is under 6 divisions and 23 sub units and tree crops like eucalyptus, acacia, teak, albizia, etc. and cash crops like cardamom, coffee, tea, pepper etc. are cultivated.

6.105 The activities undertaken during 2007-08 include raising of 194.11 ha. soft wood plantations and 160.78 ha teak plantations. KFDC entered into an agreement with M/s. Hindustan Newsprint Limited for the supply of pulpwood during 2007-08 and 17688 tonnes at 50% moisture content was removed up to March 2008. Eco-Tourism activities is being carried out at Gavi and Munnar Divisions and earned an income of Rs 63.11 lakh during 2007-08.

CHAPTER 7

ENERGY DEVELOPMENT

Indian Context

Energy is one of the major drivers of a growing economy like India. At the same time, its many facets- including implications of energy usages- present a complex collage. Thus, to establish an understanding of the sector, wide dissemination of appropriate knowledge and analysis about energy and energy applications becomes crucial. In India a lot of developmental activities are being carried out in the energy sector. The growth of the economy and its global competitiveness hinge on the availability of reliable and quality power at competitive rates. The demand of power in India is enormous and is growing steadily. Resources of power generation are unevenly dispersed across the country. This can be appropriately and optionally utilized to make available reliable supply of electricity to each and every household.

- 7.2 Electricity is considered as a key driver for targeted 8 to 10% economic growth in India. The State and Central Government Sectors account for 52.5% and 34.0% of the generation capacity respectively while the Private Sector accounts for about 13.5%. The bulk of the transmission and distribution functions are with State utilities. The availability of power has increased but demand has consistently outstripped supply and substantial energy and peak shortages of 7.1% & 11.2% prevail in India. Coupled with this is the urban-rural dichotomy in supply- as per census 2001, only about 56% of households have access to electricity with the rural access being 44% and urban access about 82% and Electrical Energy Consumption is estimated about 510899 million kwh in 2007-08.
- 7.3 As on December 31st 2008 position of All India Installed Capacity can be seen in the Table 7.1

Table 7.1
Total Installed Capacity

Sector	MW	(Percentage)
State Sector	76185.57	52.5
Central Sector	48970.99	34.0
Private Sector	22246.25	13.5
Total	147402.81	100.0

Source: Ministry of Power

7.4 Major chunk of the energy generation comes from thermal energy. It was estimated as 93392.64 M.W. It was followed by hydro 36647.76 MW, nuclear 4120 MW and 13242.41 MW of renewable sources. The percentage of increase installed capacity from 2007 to 2008 was only 6.6%. 2008-09 is a crisis year for the power sector in India and is marred by load shedding and power cuts in most states. Maharashtra, Rajasthan, Gujarat, Madhya Pradesh, Uttar Pradesh, Jammu and Kashmir, Haryana, Bihar, Punjab, Tamil Nadu and Karnataka have all been effected.

Power Sector in Kerala

7.5 Power Sector in Kerala plays a vital role in all developmental activities in Kerala. Obviously power crisis is the Prime Obstacle to start new initiatives in the industrial field. The need for power is increasing and the production of power should also increase

accordingly. Monsoon is essential to sustain the hydropower base in the state and the shortage in rainfall usually creates power crisis. Approximately there was a short fall of 30-40 percent rainfall. This resulted in power crisis. Kerala State Electricity Board (KSEB) has taken several initiatives to improve the physical and financial performances during the past several years, well in advance to the enactment of the Electricity Act. 2003. Kerala is one among the very few states in the country where there was no power cut during 2007-08. However, the National crisis in 2008-09 has affected Kerala also. Further poor monsoon has also aggravated the crisis in the state. KSEB has been responsible for the generation, transmission and supply of electricity in the Sate of Kerala, with particular emphasis to provide electricity at affordable cost to the rural population and for agricultural purposes. The Board has set up adequate generation capacity and transmission network and Kerala is one of the few states in the country having availability of power to meet the demand. The Board has been passing through a transitional phase of reforms in the electricity sector. The Electricity Act 2003 envisages separate organizations for Transmission and Distribution etc.

Generation

- 7.6 The history of Hydro Power development in Kerala begins with the commissioning of Pallivasal Hydro Electric Project in 1940. Next few decades reflected the progressive developments of various schemes. Sabarigiri in 1966 and Idukki in 1976 are milestones of Kerala State Electricity Board.
- 7.7 As per the seventeenth power survey, there is an additional generation requirement of about 1000 MW for the state during next five years. KSEB has set a target for providing affordable and reliable electricity to all households on demand by 2011. Water is the only commercially viable source for power generation within the State. To ensure reliability of supply as well as energy security, capacity addition in Kerala has to be given due importance. Meanwhile KSEB has proposed to add about 608 MW of new hydel capacity during eleventh plan period.

Capacity Addition

- 7.8 Power System in Kerala encompasses hydel, thermal and wind sources. Hydel energy is the most reliable and imperative source in Kerala .Of the total installed capacity, 2662.24 MW, the lion's share of 1888.60 MW of installed capacity comes from 24 hydel stations; 771.62 MW is contributed by the thermal energy including NTPC's at Kayamkulam which is Kerala's dedicated thermal station. Kanjikode wind farm, Palakkad has an installed capacity in 2.03 MW. Capacity addition during 2007-08 was only 0.188 percent to 2662.25 MW as on 31-3-2008 from 2657.25 MW on 31-3-2007.
- 7.9 Sabarigiri hydel projects increased its capacity by 5 MW from 320 MW during the period of 2006-07 to 325 MW in 2007-08. It can be seen in the Appendix. 7.3. Meanwhile Neriamangalam Extension Scheme & Two Units of Kuttiadi Tailrace Project were commissioned in 2008. Thereby 27.5 MW was added to the system with capacity to generate 68 MU.
- 7.10 As for contribution from renewable sources of energy is concerned, Wind Energy Projects at Agali (6 MW) and Ramakalmedu (10.5 MW) under Private Sector were also commissioned.
- 7.11 Table 7.2 reveals the detail of energy source and its installed capacity in Kerala as on 31-3-2008

Table 7.2 Energy Source in Kerala as on 31-3-2008

Sl. No.	Source of Energy	Installed Capacity (MW)
1	Hydel – KSEB	1855.60
2	Thermal: KSEB	234.60
3	Wind: KSEB	2.03
4	NTPC	359.58
5	Thermal :IPP	177.44
6	Hydel : Captive	33.00
	Total	2662.25

Source: KSEB

Hydel Generation

- 7.12 During the year 2007-08, Kerala received above average rainfall which resulted in good inflow into KSEB reservoirs. But due to the limitation in reservoir storage capacity, a major portion of the additional inflow received was wasted as spill water. Also, to reduce the spillage, all the hydel plants were put into operation during monsoon months to the extent possible and merit order scheduling was also employed.
- 7.13 During this period the peak demand reached 2745 MW and the morning demand was estimated as 2034 MW. The maximum daily consumption during the year was 47.60 MU and the maximum monthly consumption was 1336 MU. Even though 2007-08 was a bonus year in terms of water availability in 2008-09 inflows were substantially lower which has created a crisis.
- 7.14 Under the purview of KSEB, 20 hydel projects and one wind farm at Ramakkalmedu are in the pipeline. The details of the project can be seen in the Table 7.3.

Table 7. 3
Projects in the Pipeline

Sl. No.	Name of the Project	Installed capacity (MW)	Energy Potential (MU)
1	Pallivasal Eetention	60	153.90
2	Adyanpara	3.50	9.01
3	Athirappally	163.00	233.00
4	Sengulam Augmentation	-	85.00
5	Sengulam Tailrace	3.60	12.57
6	\chathankottunada 11	6.00	14.76
7	Poozhithode	4.80	10.97
8	Vilangad	7.50	22.63
9	Thottiar	40.00	99.00
10	Mangulam	40.00	82.00
11	Pasukkadavu	2.00	5.36
12	Maiyar tailrace	4.00	16.73
13	Perumthenaruvi	6.00	25.77
14	Chimony	2.50	6.03
15	Peechi	1.50	3.30
16	Barapole	21.00	51.00
17	Kakkadam poil-I	20.00	55.08
18	Kakkadampoil-II	5.00	15.21
19	Achankovi	30.00	75.81
20	Chinnar	24.00	78.00
21	Wind farm – Ramakkalmedu	5.00	15.00

Source; KSEB

Availability of Surplus Power during 2007-08

7.15 With the increased hydel generation on account of good monsoon received in 2007-08 and also on account of the better utilization of allocation from Central Generating Stations (CGS), KSEB had availability of some surplus energy during 2007-08. The estimated availability of Surplus Power in 2007-08 is as given in Table 7.4

Table 7.4 Details of Surplus Power

Sl. No.	Internal Generation	Million Units
I	Hydel Generation	8448.12
II	KSEB Thermal Generation	329.11
III	Wind	1.53
IV	Total Internal Generation	8778.76
	Less Auxiliary Consumption	48.82
V	Power Purchase from CGS	6999.66
VI	Power Purchase from IPPs	854.75
VII	Total Energy Availability	16584.35
VIII	Energy requirement	15630.45
IX	Surplus	953.90

Source: KSEB

7.16 Once again nature provided a bountiful monsoon which helped the KSEB to generate more hydel power and manage the power supply situation with higher quantum of cheaper hydro power. This also helped the Board to earn substantial revenue by utilizing the features of the Availability Based Tariff (ABT) by generating more power during day peak periods thereby availing higher tariff under unscheduled Interchange (UI) with strategic decision. The Board also could sell excess power to the traders in the Central Public Sector.

Power Consumption

7.17 The domestic category consumers showed a reasonable growth of 3.66 percentage to 7085652 in 2007-08 from 6834990 in 2006-07 and LT & HT Commercial category consumer registered a growth of 4.48 percentage over 2006-07. Growth of other railway traction, agricultural pumping, Licensees (Bulk supply) also increased substantially over the year. The sale of energy has increased corresponding to the increase of total consumers. During 2007-08, 12377.89 MU of energy was sold marking a marginal increase over the last year. The details of consumption and revenue collected during 2007-08 can be seen in the Appendix 7.6

Power Purchase Agreement (PPA)

7.18 KSEB has entered into PPA with various Central Generating Stations of NTPC, NLC, NPCIL etc. envisaged for Southern Region. In addition to this, power was purchased from Rajiv Gandhi combined cycle power plant of NTPC at Kayamkulam, BSES Kerala Power Ltd, Kochi and Kasaragode Power Corporation Ltd., Mylatti. Recenly, KSEB has also executed PPAs with Mega Power Projects such as Simhadri Stage II, NLC, Tutucorin-a joint venture project of NLC and TNEB, NLC Stage II expansion etc. As a measure to encourage non-conventional sources of energy, KSEB has executed 29 PPAs for purchase of power from wind energy projects and from two Small Hydro Projects. The capacity allocated from various stations for which the PPAs have been executed is given in the table 7.5.

Table 7.5
Power Purchase Agreement with Stations

Sl. No.	Name of the Station	MW
	Thermal Power Projects	
	NTPC Stations	
1	Ramagundam I to III	306
2	Talchar II	280
	NLC Stations	
3	NLC TPS II – Stage I	63
4	NLC TPS II – Stage II	90
5	NLC TPS II – Stage I Exp	58.80
	NPCIL Stations	
6	MAPS	18
7	Kaiga I to IV	73
	Mega Power Projects	
8	SIMHADRI STAGE II	140
9	NLC – Tutucorin	122
10	NLC TPS II – Stage II Exp	70
	IPPs	
11	RGCCP	359.58
12	BKPL	157
13	KPCL	20.44
	Non-Conventional Sources	
14	Wind Energy – 29 Nos for 32 WEGS	21.9
15	Meenvallom Small Hydro Projects	3
16	Iruttikkanam Small Hydro Projects	3

Sourcee: KSEB

7.19 Kerala is planning a capacity addition of 610.50 MW (1653.86 MU) through hydel and non-conventional sources during the eleventh plan. Allocation of 733 MW power from the projects viz. Koodamkulam Atomic Power Station (266 MW), Neyveli Lignite Corporation Expansion (70 MW), Simhadri Thermal Power Station (200 MW), Vallur (75 MW) and Tuticorin (122 MW) are expected. Moreover, share of power from NLC New and Kayamkulam Expansion is 500 MW. Meanwhile Kerala has also been allocated 300 MW from Tamil Nadu UMPP. To fulfill the demand in 12th plan period, KSEB has planned for 1000 MW coal based project. Allocation of coal (200.66) Million Metric tonnes) for generating 1000 MW for 25-30 years from Baitarni West Coal Block in Orissa has already been obtained from Ministry of Coal, Government of India.

Box. No. 1 Power Purchase Agreement With NLC

KSEB signed an agreement with Neyveli Lignite Corporation Ltd for the purchase of 14 percent of the energy generated at the NLC's 500MW new plant coming up at Neyveli in Tamil Nadu. Kerala's share from this Central Station is 14 percent of the generated power. The State will start receiving 70 MW from the new plant. The ongoing 500 MW expansion project will enhance Kerala's share to 335 MW. The power from Neyveli would cost the KSEB only around Rs.3 per unit.

Growth of Power System

7.20 Growth is necessary in every sector in the power system particularly, generation, and transmission. As on 30.09.2008, installed capacity has been hiked by 2703.75 MW as against the 2662.24 MW in the same period of previous year. Likewise per-capita consumption has also been increased by 485 KWh. The details of growth of power system in Kerala is seen in Table 7.6.

Table 7.6 Growth of Power System in Kerala

Particulars/Year	2006	2007	2008 (upto 30.09.08
Installed Capacity (MW)	2657.24	2662.24	2703.75
Annual Sales (MU)	12377.89	13396.61	7648.73
Per-capita Consumption (KWh)	465	477	485
EHT lines (circuit KM)	10477	10684	10768
Sub station (Nos)	272	290	296
H.T. lines (circuit KM)	37891	38227	39341
L.T lines (circuit K.m)	223370	234252	237686
Distribution Transforms (Nos)	39872	42401	43817
Revenue from sale of power	4286.13	4934.06	2364.14
(Rs.crores)			

Source: KSEB

Hydro - Thermal Energy

7.21 Taking into account the present hydro storage status in the reservoirs, expected, an inflow equivalent to the average of past 10 years during the remaining period of the current water year (2007-08), the present allocation from the CGS and CERC norms for target availability and auxiliary consumption, the average quantum of energy expected to KSEB from CGS is 18.48 MU per day. Expecting the nominal pattern of increase in peak demand during summer months, KSEB proposed to schedule about 40 MW from BDPP and 60 MW from KDPP during peak hours to meet the evening peak demand. Hydro-thermal mix in Kerala is shown in Table 7.7.

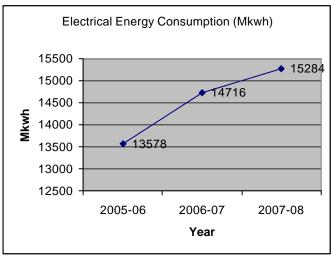
Table 7.7 Hydro-Thermal Mix in Kerala from 2003-04 to 2007-08

ilydio incimalivim in incima in om 2000 0100 2007 00						
Year	Hydel (MU)	Thermal (MU)	Total (MU)	Hydel	Thermal	
		+ Import (Mix)		(Percentage)	(Percentage)	
2003-04	3910	8545	12455	31	69	
2004-05	6134	6314	12448	49	51	
2005-06	7539	5866	13405	56	44	
2006-07	7497	7029	14526	52	48	
2007-08	8327	6884	15211	55	45	

Source : KSEB

- 7.22 The ratio of hydro-thermal mix indicates that during 2005-06 availability of hydel power has comparatively outnumbered the thermal power and subsequent years this phenomenon has also continued. It reveals that KSEB harnessed more hydel power than high cost thermal power. This resulted in the purchase of less thermal power.
- 7.23 Electrical Energy consumption in Kerala during 2005-06, 2006-7 and 2007-08 depicted in Fig 7.1.

Fig: 7.1 Electrical Energy Consumption



Transmission

7.24 Transmission is an important sector to evacuate the power in different parts of Kerala. A good transmission facility is necessary to effective distribution and to bring power from outside the state. Now there are two 400 KV substations. One at Madakkathala (Thrissur) and the other at Pallippuram (Trivandrum). Also another 400 KV substation at Arecode (Malappuram District) is being constructed by PGCIL. The site for the construction of this substation has been identified and taken over by PGCIL and the route Survey for the construction of Mysore Arecode line has also been completed. Thus, there will be one 400 KV substation in each region of Kerala, i.e North, Central and South.

7.25 As per the scheme approved by Southern Regional Electricity Board (SREB), 400 KV Multi – Circuit line is proposed from Thirunelveli – Edamon and 400 KV Double Circuit line from Edamon-Kochi (East) Madakkathara. One 400 KV sub station at Kochi (east) is also sanctioned as part of this evacuation scheme.

7.26 Kerala's Transmission system consisting of substations and its connected lines are given with Table 7.8 and 7.9

Table 7.8
Transmission Infrastructure

Sl. No	Item	Target	Unit	Achieve ment	Unit	Percentage of Achievement	
1	400 KV Substation	Nil	Nos	Nil	Nos		
2	220 KV Substation	3	Nos	1	Nos	33.33	
3	110 KV Substation	9	Nos	4	Nos	44.44	
4	66 KV Substation	1	Nos	1	Nos	100.00	
5	33 KV Substation	26	Nos	13	Nos	50	

Source:KSEB

7.27 It can be observed that, performance of the construction of substation with various capacities has not achieved the intended target. The table 7.8 reveals that only one 220 KV substation is completed against its target of 3 numbers. The construction of 110 KV and 33 KV sub station are still at a snail's pace: It will have an adverse impact on power evacuation facility.

Table – 7.9
Transmission facilities in Kerala (As on 30.9.2008)

Capacity	Substation (Nos)	Lines (Ckm)
400 KV	2	260
220 KV	15	2654
110 KV	114	3914
66 KV	87	2988
33 KV	78	952
Total	296	10768

Source: KSEB

Kayamkulam Expansion Scheme

7.28 The Kayamkulam expansion scheme (3 x 650 MW) is proposed to be completed by 2010 and under this scheme 400 KV lines are planned to be constructed between Thiruvananthapuram – Edamon and Madakkathara – Arecode. Hence, by 2010, a 400 KV power highway will be formed between Thiruvananthapuram and Arecode. With the commissioning of this Power Highway, the power situation in Kerala will improve considerably and Kerala will be able to draw our share from the existing as well as planned Central Generating Stations.

7.29 KSEB is paying the transmission charges to PGCIL for evacuating the allocated power from the central generating stations to KSEB bus based on the tariff order issued by CERC. The approximate wheeling charge for the energy evacuated from CGS is about 20 paise per unit. KSEB is also paying transmission charges for the two dedicated lines within the State i.e Kayamkulam – Pallom and Kayamkulam – Edamon constructed by PGCIL for evacuating power from the NTPC plant at Kayamkulam. The conversion to gas based generation at RGCCPP, Kayamkulam is still pending without appreciable progress of proposed LNG terminal at Kochi.

Voltage Improvement Works

7.30 KSEB is committed to provide 230 volts between phase and neutral at consumers premises in the L.T services and corresponding higher voltages in the case of higher voltage service within allowable limits of toleration. KSEB cannot always fulfill this commitment due to rapid load growth and corresponding changes in system parameters. When conditions of prevailing low voltage in any locality comes to the notice of KSEB, work to improve voltage is taken up as voltage improvement work. This is usually carried out at the expense of the Board. Converting existing single phase lines to 3 phase, strengthening distribution system by providing higher capacity conductors, providing additional transformers on the existing 11 KV line or by extending 11 KV line by providing adequate size of capacitors are the works usually carried out for providing higher voltage in distribution network.

Renovation, Modernisation and Uprating (RMU) of old Generating Stations

- 7.31 The normal life span of a hydro generating station is 30-40 years, depending on service conditions. Many of our existing generating stations are old and in service for 30 years and beyond. When the machines become old, their operational efficiency decreases. Major breakdowns occur and shutdowns of long duration will be necessary for maintenance work.
- 7.32 The renovation and modernization of Pallivasal, Panniar, Shengulam and Neriamangalam Projects have been completed. In the case of R&MU of Sabarigiri, unit 5 and 6 were put into service and due to explosion of unit 4 of Sabarigiri RMU works were temporarily stopped.

Transmission and Distribution Loss (T&D loss)

- 7.33 KSEB have to bear proportionate losses in PGCIL line through which allocation to KSEB from Ex bus of Central Generating Stations (CGS) is transmitted to KSEB Periphery and this loss component is treated as external losses to KSEB system. The energy loss in the KSEB System is accounted as internal loss.
- 7.34 During 2007-08 T&D loss has come down to 21.6 percent from 23.4 percent in 2006-07. KSEB made significant achievement in the field of reducing the T&D loss. During 2003-04 onwards T&D loss was considerably reduced by way of faulty meter replacement, intensification of theft detection, installation of new substations and lines, up gradation and modernization of sub transmission and distribution network through APDRP Scheme. This is in line with the efforts of reducing the loss by 2% every year. It can be seen in the fig: 7.2

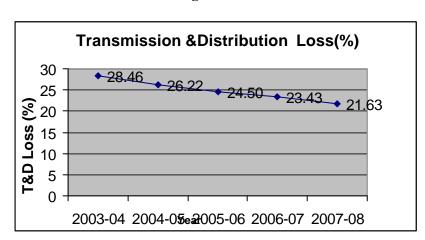


Fig:7.2

Distribution

7.35 Distribution Sector is a profound area which provides electricity to all consumers in Kerala. Kerala has achieved full electrification in all villages which is above average of national level KSEB has given great attention to strengthen the distribution backbone by new ventures of Accelerated Power Development and Reforms Programme (APDRP) and Rajeev Gandhi Grameen Vidhythi Karan Yojana (RGGVY). The power consumption comes to all time high. As on 31.3.2008 total number of consumers has increased to 9033756 nos against the 8713870 nos as on 31.3.2007. The details of pattern of power consumption and revenue collected are shown in the Appendix 7.6. The distribution infrastructure is essential part of electrifying to all domestic and non-domestic purpose. The target and achievement of the distribution infrastructure during 2007-08 is given in the Table – 7.10

 $Table-7.10 \\ Target\ and\ Achievement\ of\ distribution\ Infrastructure\ during\ 2007-08$

Sl. No.	Item	Target	Unit	Achievement	Unit	Percentage of Achievement
1	11 KV Lines	2000	Kms	1807	Kms	90.35
2	Distribution Transformer	2000	Nos	2553	Nos	127.65
3	L.T.Lines	6000	Kms	8128	Kms	135.47
4	Service Connection	5.00	Lakhs	4.83	lakhs	96.56

Source: KSEB

- 7.36 The above table reveals that laying of LT lines and 11 KV lines, effecting new service connection and distribution transformer are made comfortable achievement.
- 7.37 As part of providing electricity to households belonging to citizens below poverty line (BPL), 51929 connections were effected during the year. Service connections aggregating 482786 were effected during the year 2007-08. Pending service connection of 236939 at the beginning of 2006-07 was brought down to 129154 at the end of 2007-08. Anti Power Theft Squad (APTS) was active during the year with 18606 inspections throughout the state. An amount of Rs.10.49 crores was realised against an assessment of Rs.16.92 crores.
- 7.38 During the financial year 2008-09, 206463 service connections were given and pending service connections have been brought down from 129154 in March 2008 to 109410 up to 30.9.2008. The APTS wing conducted 8232 inspections till 30.9.2008 and out of the assessed amount of Rs.12.25 crores, Rs.6.24 crores was realised.

Tariff

- 7.39 The Kerala State Electricity Regulatory Commission (KSERC) has accorded sanction for restructuring power consumption of HT, EHT consumers and accordingly, KSEB issued orders that all HT and EHT consumers of KSE Board and other licensees should restrict their energy consumption of 75% of the base average consumption. Again based on Board's Petition KSERC accorded sanction to restrict the consumption of LT consumers and Board had implemented the same with effect from 15.10.2008. Average monthly quota for LT domestic consumers has been fixed as 200 units and for all other categories (except LTVID) 80% of average monthly consumption.
- 7.40 As per the orders of KSERC to impose thermal surcharge to all categories of consumers including licensees, KSEB had imposed thermal surcharge to all consumers with effect from 20.8.2008 as detailed in Table 7.11

Table 7.11 Thermal Surcharge

Category	Tariff Structure
All LT domestic consumers consuming 80	No Surcharge
units or less per month	
All LT domestic consumers consuming more	50 ps Per Unit for total consumption
then 80 units per month	
All other categories of consumers	50 ps Per Unit for total consumption

Source: KSEB

7.41 Meanwhile overall Average realisation rate from tariff has been raised to 351 paise Per Unit in 2007-08 as against the 324 Paise per Unit in 2006-07, the major contribution for raising realisation rate from tariff was sold to NVVN/PTC. During 2007-08 Board sold energy to NVVN/PTC @ 966 paise per unit. The details can be seen in the Appendix 7.4 and 7.5

Restructuring of KSEB

7.42 Government of India has approved the continuation of KSEB as a State Transmission Utility and Licensee only upto 24.9.2008. In exercise of powers conferred under Sub-sections (1), (2), (5),(6) and (7) of section 131 and section 133 of the Electricity Act 2003 (Central Act 36 of 2003) the Government of Kerala had issued notification for the purpose of vesting functions, properties, interest, rights obligations and liabilities of the KSEB in the State Government on such terms as agreed to by the KSEB and the State Government and

revesting there of by the State Government in a corporate entity and also for the transfer of personnel of the Board to the corporate entity and for determining the terms and conditions on which such transfers and vesting shall be made. Accordingly, with effect from 25.9.08, all the functions, properties and all interests, rights in properties, all rights and liabilities of the Board are vested in the State Government. All these functions and undertakings of the Board as vested in Government shall be re-vested in a company to be incorporated as a fully owned Government company under the Companies Act, 1956.

7.43 The draft Memorandum of Association (MOA) and Article of Association (AOA) of the proposed Government Company for the re-vesting of assets and liabilities of KSEB were placed before the Government for approval. The Government has informed that the name of the new company is finalised as 'KSEB Limited'. The Government has also appointed the existing members of the Board as first Directors of the proposed company. Application for registration of the company with the Registrar of companies is being processed and new company likely to start functioning in the year of 2009 itself.

Accelerated Power Development and Reforms Programme (APDRP)

7.44 APDRP is one of the lucrative schemes initiated by the Government of India to strengthern the transmission and distribution segment. KSEB has played a vital role to implement this scheme in Kerala since its inception.

7.45 A total outlay of Rs. 863.62 crores which includes circle scheme, town scheme and city scheme. The circle scheme already closed on 31.3.2006. The town schemes are expected to be closed this Financial Year itself. As far as 46 town schemes are concerned, Rs. 341.81 crores is sanctioned; so far works to the extent of Rs. 284.40 crores have been done.

City Scheme

7.46 The special scheme for the cites of Trivandrum, Kochi and Kozhikode with an outlay of Rs. 373.57 crores was sanctioned. The major works include construction of 11 KV lines (UG Cable), installation of distribution transformers, construction of substations, Distribution Automation, SCADA, TCMS, GIS mapping etc. The turnkey execution of the power part of Distribution Automation works in Trivandrum, Kochi, and Kozhikode have been awarded and their works are in progress. Details of scheme outlay and expenditure are shown in Table 7.12

Table 7.12
Financial Achievement under ADDRP Scheme as on 31.3.2008
(Rs.Crores)

Name of Scheme	Scheme Amount	Actual Expenditure	Remarks
Circle Scheme	148.24	143.11	Closed
(3 Circle)			
Town Scheme	160.72	139.06	
(7 Towns)			
New Town Scheme	123.91	104.92	
(26 Town)			
New Town Scheme	57.18	40.42	
(13 Towns)			
New city (3 city)	373.57	2.12	
Total	863.62	429.63	

Source:KSEB

Rajiv Gandhi Grameen Vidyuthikaran Yojana (RGGVY)

7.47 RGGVY is an imaginative scheme initiated by the Government of India for the attainment of the goal of the National Common Minimum Programme [NCMP] for providing access of electricity to all households within five years. Board has originally submitted proposal for an amount of Rs.438.36 crore for electrification of rural households in all the districts and construction of seven 66/11KV substations and eighteen 33/11KV substations under this scheme. Sanction has been obtained to implement the scheme in seven districts involving Rs.221.75 crores in the first package. For implementation of the scheme in Idukki district on turn key basis, contract agreement has been executed. A quadripartite agreement has been executed among Govt of Kerala, KSEB, REC and NESCL to entrust implementation of the scheme in the six northern districts of Kasaragode, Kannur, Kozhicode,, Wayanad, Malappuram and Palakkad. REC has released the first instalment of Rs.5.12 crore. Out of 61 Karas identified for electrification under the scheme, electrification works have been completed in 10 karas. Details of the progress of implementation as on 31-12-2008 is shown in the Table 7.13

Table 7.13

Details for progress of implementation of RGGVY

Sl No	Work Description	No of Karas
1	No of Karas electrified	14
2	No of Karas where 11 KV portion completed	10
3	No of karas where 11 KV portion partially	13
	completed	
4	No of Karas where 11 KV pole errection	9
5	Partially pole errection/work started	6
6	Work not started	9

Source: KSEB

Power Sector Reforms

7.48 Reforms in Kerala power sector and KSEB are mandated by Govt of Kerala Power Policy 1988. As a part of implementation of the reform process as envisaged in this policy and to take advantage of the benefits offered by the Govt of India, the Govt of Kerala signed a MoU with the Govt of India on 20-8-2001. Moreover KSEB has been implementing various reform process with the positive results of improving quality of energy service to customers and financial health of the Board. The major reform process being undertaken by the Board are as follows.

- ?? KSEB has targeted to reduce the loss by 2% every year. T&D loss brought down to 21.34 percent as on 31-3-2008
- ?? All villages have been electrified
- ?? Completed 100 percent metering of all distribution feeders
- ?? All consumers have metered
- ?? An amount of Rs. 1158.25 crores as dues outstanding payable to CPSU as on 30-9-2008 has been securitised.
- ?? New tariff order issued by KSERC.
- ?? Energy audit of 11 KV and above metering has been computerised
- ?? All 641 sections have been computerised in open source platform

Financial Performance of the Board

7.49 The prudent power management initiatives have resulted in a situation wherein the state was considerably reduced power cuts and load shedding. Voltage and frequency of the power system was well within the specified limits. The availability of HT and EHT feeders was about 98% all over the state. The results for 2007-08 indicates a continuing trend of

improvement in the financial and operating performance on account of strategic initiatives for improving the power management and overall productivity and efficiency coupled with cost reduction efforts. As a result, revenue deficit was reduced from Rs. 142.23 crores in 2006-07 to Rs. 91.29 crores in 2007-08. The total revenue during 2007-08 amounted to Rs. 5135.84 crores and the total expenditure was Rs. 5227.13 crores. Efficient financial management resulted in reducing the outstanding loan from Rs.2498.52 crores (as on 31-3-2007) to Rs. 1856.72 crores as on (31-3-2008)

7.50 The details of revenue earnings and revenue gap from 2005-06 to 2007-08 are shown in Tables 7.14 and 7.15

Table. 7.14 Revenue Earnings

(Rs. Crore)

Sl No	Particulars	2005-06	2006-07	2007-08
1	Energy sold (MU) (including sales outside state)	10905.7	12378	13397
2	Income (crores)			
	From Tariff	3367.3	4009.71	4696.95
	Non- Tariff	325.44	406.46	438.89
	Total	3692.74	4416.17	5135.84

Source: KSEB

Table 7.15 Revenue Gap

(Rs. Crore)

Years		Income	Total	Revenue	
	Tariff	Non-Tariff	Total	Expenditure	Gap
2005-06	3367.3	325.44	3692.74	3837.32	144.58
2006-07	4009.71	406.46	4416.17	4558.40	142.23
2007-08	4696.95	438.89	5135.84	5227.13	91.29

Source:KSEB

Category of Consumers and Realisation 2007-08

- 7.51 During 2007-08 realisation from tariff has gone up to Rs. 469695.48 lakhs from Rs. 400971 in 2006-07. Out of this, Rs. 125969.57 lakhs comes from the HT& Extra high voltage category of consumers and their energy consumption was registered at 3139.50 MU. Their tariff income was more than the other category of consumers.
- 7.52 The domestic category consumers are second largest group for paying tariff. Their contribution was Rs. 96292.02 lakhs and their energy consumption was 5602.85 MU. Details can be seen in the Table 7.16

Table 7.16 Consumers and Realisation 2007-08

Category of Consumers	Sales (MU)	Revenue (Rs.Lakhs)
Domestic		96292.02
Paying Group	5595.12]
Non Paying Group	7.73	
Commercial (LT&HT)	1378.33	92100.01
Industrial		
Low&Medium	984.18	40818.87
HT&Extra high Voltage	3139.50	125969.57
Public lighting	248.56	4726.37
Railway traction	109.26	3922.92
Agricultural Pumping	230.55	2431.15
Licensees (Bulk Supply	356.62	10222.51
Outside Supply	1346.76	93212.06
Total	13396.61	469695.48

Source: KSEB

Aggregate Revenue Requirement (ARR)

7.53 KSEB has submitted their ARR for 2008-09 to the KSERC. The actual net expenditure during 2007-08 was Rs.5009.68 crores and total income was Rs. 5135.84 crores. The revenue gap was Rs.91.26 crores by way of robust tariff collection, reducing administration and general expenses. On the other hand ARR for 2008-09, projection of tariff collection came to only Rs. 4451.13 crores and the net expenditure by Rs.5516.61 crores. Consequently revenue gap projected by KSEB was Rs. 754.69 crores. The summary of ARR is shown in the Table 7.17

Table 7.17 Summery of Aggregate Revenue Requirement (ARR) for the year 2008-09 (Rs. Crores)

						(110	Clures
Items		2006-07			2008-09		
Hems	ARR	KSERC	Actual	ARR	KSERC	Actual	ARR
Generation of power	43.09	43.09	111.83	54.96	143.30	195.97	207.03
Purchase of power	1646.02	1646.02	1629.30	2020.39	1734.65	2101.07	2674.65
Interest & Finance Charges	529.76	513.64	429.34	458.61	458.61	352.77	357.31
Depreciation	424.32	247.43	405.98	460.42	260.18	419.09	459.30
Employee Cost	882.20	823.45	898.09	965.00	1090.00	904.88	1136.86
Repair & Maintenance	96.50	90.00	110.99	101.47	101.47	116.26	131.05
Administration & General	108.85	105.00	135.10	125.63	54.47	125.35	140.06
Expenses							
Other Expenses	146.75	91.78	698.66	227.00	100.00	871.70	495.29
Gross Expenditure (A)	3877.49	3560.41	4419.29	4413.48	3942.68	5087.09	5601.55
Less: Expenses Capitalised	43.90	43.90	43.19	37.63	37.63	48.08	25.75
Less: Interest Capitalised	53.50	53.50	35.12	48.25	48.25	29.33	59.19
Net Expenditure (B)	3780.09	3463.01	4340.98	4327.60	3856.80	5009.68	5516.61
Return on Equity (RoE)	217.42	217.42	217.42	217.42	217.42	217.42	217.42
$\mathbf{ARR}\left(\mathbf{D}\right) = (\mathbf{B}) + (\mathbf{C})$	3997.51	3680.43	4558.40	4545.02	4074.22	5227.10	5734.03
Less Non-Tariff Income	301.31	290.51	406.46	361.84	361.84	438.89	528.21
Less: Revenue from Tariff							
(a) with in the State	3393.42	3574.55	4009.71	3753.07	4042.11	4696.95	4451.13
(b) Outside the State							
Total Income	3694.73	3865.06	4416.17	4114.91	4403.95	5135.84	4979.34
Revenue Gap	302.78	-184.63	142.23	430.11	-329.73	91.26	754.69

Source:KSEB

Non – Conventional Energy

- 7.54 The role of new and renewable energy has been assuming increasing significant in recent times with the growing concern for the country's energy security. Energy 'self-sufficiency' was identified as the major driver for new and renewable energy in the country.
- 7.55 The major non Conventional energy sources relevant to Kerala are solar energy, Bioenergy, Wind energy and Small Hydro Power and wave energy. The renewable source of energy such as biomass, and wood energy, geothermal energy, Wind energy, Tidal energy and Ocean energy are continuously and freely produced in nature and not exhaustible.
- 7.56 Agency for Non Conventional Energy and Rural Technology (ANERT) is the Nodal Agency of the Ministry of Non Conventional Energy Sources (MNES) Government of India for the State of Kerala. The activities of ANERT are being re-structured and integrated with the local government programmes through TESM.

Solar Photovoltaic Energy Sector

7.57 Solar Photovoltaic Energy Generation was proven to be the most convenient source of energy for the electrification of remote, isolated hamlets where the existing power grid can not be extended. A programme for remote village electrification is being implemented by ANERT jointly with District Panchayat through TESM. Solar electrification of remote houses in 72 backward class colonies spread in 6 districts of the State is being attempted viz Thiruvananthapuram, Kollam, Pathanamthitta, Idukki, Palakkad and Kasargod. The programme is expected to provide amenities of electricity to 6120 remote households spread into 6 districts of Kerala.

Solar Thermal Energy Sector

7.58 Solar Thermal Energy have an additional advantage of being economical compared to current fuel prices. Solar Water heaters for domestic and industrial purpose, solar crop dryers and solar cookers are devices propagated under this programme. Distribution of these devices has been integrated with LSG.

Wind Energy Sector

- 7.59 Wind Energy can be used for two major applications, firstly as Wind mills for pumping water for drinking as well as irrigation purposes and secondly as aero-generator for electricity generation for domestic and industrial purpose
- 7.60 ANERT was successful to take lead role in solving the policy limitations to bring in the private sector participation and technical and administrative clearances had accorded for establishing Wind farms for generating and supplying 28.8 MW power in Agali, Palakkad (16.8 MW) and Ramakkalmedu, Idukki (12 MW)] to the grid in coming years.

Bio Energy Sector

7.61 Major interventions in the Bio energy sector is envisage by ANERT jointly with District Panchayat through the Total Energy Security Mission. Community Biogas plants, Biogas plants in high water table areas and Biomass based energy generation programme using vide ranging types of inputs like coconut waste, oil palm bunches, fuel wood, hard wood power, refuse derived fuel etc.

Improved firewood Chulha Programme

7.62 The improved Chulha Programme is being revitalized jointly with local governments.

Micro Hydel Power Sector

7.63 The project taken up in 2006-07 for carrying out the pre-feasibility site investigation of the Micro Hydro Power potential of Kannur district is completed. The study covered about 80 sites spread along the western ghat ranges of the Kannur District.

Renewable Energy and Rural Technology Centre (RERTC), Palakkad

7.64 The transfer of land has been completed and the activities of the centre is being revamped.

Information, Education and Publicity Programmes

- 7.65 A Seminar on "Bio Energy Options" was conducted on the "Renewable Energy Day 2008", which was attended by representatives of industries, entrepreneurs in bio- energy sector, officials and engineers from energy related organizations.
- 7.66 Another important function carried out was the "National Demonstration Workshop on Improved Biomass Stoves" held on 5th September 2007 at ANERT Conference Hall, Thiruvananthapuram. Experts from North East Institute of Science & Technology Jorhat, Assam, Department of Bio Energy, Tamilnadu Agricultural University, QPRE Energy (India) Pvt Ltd, Bangalore, Ottotractions, Kerala etc participated and presented papers in the workshop.
- 7.67 An exhibition of various improved biomass stove models in use within Kerala and in other States was held from 5th to 8th of September 2007, which attracted the attention of public at large.
- 7.68 ANERT had taken up the centrally sponsored Rajiv Gandhi Akshay Urja Diwas (RGAUD 07) Publicity Campaign of the current year in a spectacular and informative manner in all the districts this year. Exhibitions, technical seminars, quiz and essay writing competitions for school students, rallies and public meetings etc, were held in various districts also as part of the RGAUD 07 Campaign. The campaign are sought to be integrated with TESM.

Total Energy Security Mission

- 7.69 The Total Energy Security Mission (TESM) is the flagship project in power sector launched by the Government of Kerala during the Eleventh Five Year plan. A Mission Group consisting of members of the State Planning Board, Principal Secretaries for Power, Local Self Government and Planning, Directors of Agency for Non-conventional Energy and Rural Technology (ANERT) and Energy Management Centre (EMC) has been formed for providing directions to the Mission activities. The Mission is championed by ANERT and EMC, two leading agencies working on energy in the state along with the Kerala State Electricity Board. ANERT is the nodal agency for the mission. The greatest strength of the Total Energy Security Mission is the grass root level linkages that the Mission has achieved by virtue of its partnership with the local governments in the state.
- 7.70 A comprehensive flagship project with clear deliverables and detailed action plan has been drawn out. The details of activities taken up under the flagship programme are clearly spelt out in the plan write up as indicated below:

- 7.71 The mission during 2007-08 has worked out projects jointly with local government which aims at preparing total energy plans for local level execution. The Mission support during 2008-09 is meant for providing knowledge support to the local government programmes. The provision shall be used for meeting expenses of IEC programmes, workshops, seminars, action research programmes capacity building programmes of functionaries of TESM at the State, district and local level. Support for project implementation in local governments and establishment expenses. Infrastructure support for the Mission including special tools, hardware and software etc shall be covered. Honorarium and other expenses of consultants and project staff shall be also met from the head. The programmes approved by the State Level Co-ordination Committee of TESM shall be taken up directly by Mission or outsourced to various agencies
- 7.72 In the Annual Plan 2008-09 the Mission shall intend to implement the following specific programmes.
 - ?? Preliminary reconnaissance study and preparation of database of potential small hydro sites with the participation of local governments.
 - ?? Knowledge Support to be obtained from premier national level research/consultancy groups for specific action research programmes, technology adaptation programme, capacity building of TESM functionaries and implementation support of various filed implementation activities.
 - ?? New action research problems identified through field studies in 2007-08 ANERT will be the nodal agency for Co-ordinating the implementation of the Scheme.
 - 7.73 An amout of Rs. 500.00 Lakhs is proposed for this scheme in the Annual Pla 2008-09.

Description of physical targets

- 1 Manpower with Key result Area and Key Process Area targets for integrated energy plan implementation in TESM local governments
- Base maps for ward road mapping and power line mapping in TESM local governments
- 3 GIS systems for power line mapping with potential for planning and reworking remote electrification and RGGYY.
- 4 Support systems for Chulha implementation, evaluation and monitoring through out the state
- 5 Knowledge support for implementation integrated energy plan implementation in TESM local government rural electrification plan for entire state and renewable energy programme implementation in the State.
- 6 Corporate systems for integration of state level programme with local governments.

Conservation of Energy

- 7.74 Energy Management Centre (EMC) is an autonomous agency devoted to the improvement of energy efficiency in the State, promotion of energy conservation and encouraging development of technology related to energy management and efficiency through research and training, demonstration programmes an awareness creation, Energy Management Centre is the State Designated Agency to enforce the provisions of the Energy Conservation Act 2001.
- 7.75 The following are major activities conducted by EMC during 2007-08

- 1. EMC has successfully developed an almanac fed electronically controlled switching device for switching on and switching off street lights. The switching device is capable of carrying 16 A current with setting arrangements. 5 systems are developed and are under testing at Kochi.
- 2. Organized two three days Energy Efficiency Capacity Building training programme for Engineers in Industries at Kottayam from 19.09.07 to 20.09.07 and at Palakkad from 21.09.07 to 22.09.07.

EMC conducted detailed Energy Audits conducted at

- 1. Kerala Hitech Industries Limited Ckackai, Trivandrum
- 2. Kinfra Export Promotion Industrial Park, Kakkanad, Kochi
- 3. Friends, Trivandrum
- 4. Steel & Industrial Forgings Limited, Thrissur.
- 3. In order to promote energy efficiency in Public Sector Industries, in association with Bureau of Public Enterprises, EMC organized 3 days training programme for the designated Energy Managers of various Public Sector undertakings:
- 7.76 Building sector consumes major portion of the energy in the State. EMC organized programmes to improve the energy efficiency in this sector.

4. Awareness Programmes

?? General Public

7.77 EMC has organized more than 21 large scale awareness programmes in different parts of the State.

?? House-wives (Energy Clinic)

7.78 Energy Clinic volunteers of EMC has conducted 1385 classes in various parts of the State and 42, 803 house wives attended the programme.

?? Energy Conservation Clubs

- 7.79 EMC has conducted various competitions to students to promote energy conservation activities, various competitions organized are high school project, high school quiz, and HSS essay writing, college paper presentation, ITI/ITC project.
- 7.80 EMC in association with different agencies organized exhibitions of energy efficient equipments and conservation.

?? Publication and Publicity on Energy Conservation

- 7.81 EMC has published posters and brochures to propagate and popularize the message of Energy Conservation among the general public. EMC supplied 2000 copies of posters and nearly 1 lakh brochures to KSEB for distribution.
- 7.82 EMC through the support of different Public Library has distributed brochure to general public to spread the message of Energy Conservation in their locality. Posters giving energy conservation messages are also exhibited in this library. 250 libraries are covered in the first phase. The second phase of 250 libraries are in the process. As a token of their support, EMC has provided a 18 CFL to these libraries.

5. Energy Conservation Awards

7.83 On National Energy Conservation Day, 14 December 2007. Participated organization for the award has saved 60 Million units equivalent to a project of 11 Mega Watt capacity, there by they saved nearly Rs.55 Crores.

Table.7.18
Summary Of Energy Savings Achieved By Industrial Units Participating In The Energy
Management Centre's Energy Conservation Award Schemes

	No. of	Sovings	Savings L		cal Energy avings	Furnace	Coal	
Year	Participating Industrial units	/Yr. Rs.Lakhs	Investment Rs. Lakhs	Million kwh/yr	Equivalent avoided Capacity (MW)	oil saving MT/yr	savings MT/Yr	
2007	21	1914.63	1097.95	59.735	11.34	1303.87		
2006	27	2343.1	4080.3	40.00	7.61	6665	2870	
2005	17	839.3	1654.5	23.52	4.48	850	0	
2004	12	873.8	1087.2	12.82	2.44	3170	5558	
2003	9	1745.9	7640.8	32.32	6.15	8169	6433	

Source: EMC

6. Small Hydel Power Projects (SHP)

7.84 EMC is providing consultancy to Kozhikode District Panchayath for the implementation of Arippara SHP.

7.85 During the current financial year the Engineers of EMC SHP division has been appointed as the Members of the Mission Secretariat to TESM. Various meeting, work shops and brainstorming sessions were conducted.

Development of Micro turbine System (R & D System)

7.86 EMC has designed and developed a pilot type of a 10 KW cross flow micro turbine with an electronic load controller. The proto type wad displayed during the UNIDO sponsored International seminar on Small Hydro power held at Trivandrum. The turbine generator system will be installed at a suitable side after extensive performance tests for plotting the hill diagram.

7. UNIDO Sponsored International Seminar on SHP

7.87 A three day International Seminar on Small Hydro Power organized by Energy Management Centre, United Nations Industrial Development Organisation (UNIDO), UNIDO Regional Centre for SHP functioning in EMC.

Enforcement of Standards & Statutes

7.88 The Electrical inspectorate is a department of the Government of Kerala. Safety inspections are carried out and sanction for energisation for all HT/EHT and other Medium Voltage installations in the state are issued by this department.

7.89 Enquiry of all Electrical accidents occurred in the state and forwarding the enquiry report to the government and take actions against responsible person/authority are also done by this department.

Activities and achievements for the year 2007-08

- 7.90 The office automation of Electrical Inspectorate department will be completed during this year.
- 7.91 Along with National safety week during the first week of May 2008 the department has also observed the safety week with various programmes in the state to make awareness to the public to reduce electrical accidents.
- 7.92 The Kerala State Electricity Licensing Board and Kerala State Cinema Operators Examination Board under this department had conducted examinations and issued permits and licenses.
- 7.93 The activities of State electrical accidents prevention committee which is formed for observing the electrical accidents and to suggest measures to prevent accidents has functioned most efficiently during this year.
- 7.94 Measures taken for completing the inspections of electrical installations and collection of inspection fees in time in the state has given good results. During this period the collection of revenue income has increased. Measures were taken for remitting the inspection fee through Janaseva Kendra (FRIENDS) under the control of Government of Kerala. This facility is implemented in district of Thiruvananthapuram, Kollam, Malappuram and Palakkad.
- 7.95 Steps were taken for giving information about Department to the public, especially to publish the exam results, through citizen call centers.

Kerala State Electricity Regulatory Commission

7.96 The KSERC established in the year 2002, entered in the 5th year of service. During this period, this statutory body has taken all efforts to set up a fair, transparent modern and objective electricity regulatory process in the State of Kerala.

Mission of the Commission

- (a) To promote competition, efficiency and economy in the activities of the Electricity Industry within the State of Kerala.
- (b) To regulate the power purchase and procurement process of the Distribution licensees for sale distribution and supply of electricity Within the State of Kerala.
- (c) To determine the tariff for generation transmission, Wheeling and supply of electricity, wholesale bulk or retail, as the case may be within the state of Kerala.

Functions of the Commission

- 7.97 The Commission is vested with the responsibility of discharging the following functions:
 - (a) Determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State;
 - (b) Regulate the electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating

- companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State:
- (c) Facilitate intra-State transmission and wheeling of electricity;
- (d) Issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- (e) Promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
- (f) Adjudicate upon the disputes between the licensees and generating companies and to refer any dispute for arbitration;
- (g) Levy fee for the purposes of the Electricity Act, 2003;
- (h) Specify State Grid Code;
- (i) Specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
- (j) Fix the trading margin in the intra-State trading of electricity, if considered, necessary;
- (k) Discharge such other functions as may be assigned to it under the Electricity Act, 2003;
- (I) Advise the State Government on all or any of the following matters, namely:-
- (i) Promotion of competition, efficiency and economy in the activities of the electricity industry;
- (ii) Promotion of investment in the electricity industry;
- (iii) Reorganization and restructuring of the electricity industry in the State;
- (iv) Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by the State Government.

7.98 Regulations issued by the Commission

- 1. Kerala State Electricity Supply Code (Second Amendment) Regulations, 2007
- 2. KSERC (Fees) Regulations, 2007
- 3. KSERC (Supply of Power from Captive Generating Plants to Distribution Licensees) Regulations, 2007
- 4. Kerala State Electricity Supply Code (Third Amendment) Regulations. 2007
- 5. KSERC (Licensees' Standards of Performance) Regulations, 2006 Postponement of enforcement in the case of KSEB

7.99 Orders Issued by the Commission

- 1. Order dated 20th July 2007 on the petition filed by M/s. Reliance Communications, Thiruvananthapuram.
- 2. Order dated 20th September 2007 on the petition filed by Kinfra Export Promotion Industrial Parks Ltd on the ARR & ERC for the FY 2007-08.
- 3. Order dated 3^d October 2007 on the petition filed by Rubber Parks India (P) Ltd on the ARR & ERC for the FY 2007-08 to 2009-10.
- 4. Order dated 3^d October 2007 on the petition filed by Cochin Special Economic Zone on the ARR & ERC for FY 2007-08
- 5. Order dated 25th October 2007 on the Petition filed by Thrissur Corporation on the ARR & ERC for the FY 2007-08 to 2009-10.
- 6. Order dated 24th November 2007 on the Petition filed by Kerala State Electricity Board on the Truing Up for the years 2003-04 to 2005-06.
- 7. Order dated 31st December 2007 on the Petition filed by Thrissur Corporation on Tariff for 2007-08.
- 8 Order dated 31st January 2008 on the Petition on Tariff for 2007-08 filed by Kanan Devan Hills Plantations Company Private Ltd.

CHAPTER 8

INDUSTRY AND MINING

Kerala, with all its limitation, is putting efforts for speedy Industrial Development in the State. Traditional industries are Handloom, Cashew, Coir and Handicrafts where the persons employed are from weaker sections of the Community. Other important industries are rubber, tea, ceramics, electric and electronic appliances, telephone cables, transformers, bricks and tiles, drugs and chemicals, general engineering, plywood splints and veneers, beedi and cigar, soaps & oils, fertilizers and khadi and village industry products. There are a number of manufacturing units for production of precision instruments, machine tools, petroleum products, paints, pulp paper, newsprint, glass and non –ferrous metals. Principal export products are cashew nut, tea, coffee, spices, lemon grass oil, seafood, rose wood and coir. The land of Kerala is endowed with a number of deposits of good quality china clay and beach sands containing a variety of valuable minerals. Heavy mineral sands and china clay contribute more than 90 percent of the total value of mineral production in the State. Kerala possesses one of the world – class deposits of mineral sands in the coastal tracts between Neendakara and Kayamkulam. Gold occurs in Kerala both as primary and placer deposits and the known occurrences are mainly in Wayanad and Nilambur regions.

- 8.2 In order to achieve high and sustainable economic growth through rapid industrialization and big leap in commercial activities, without affecting ecology and environment and to create large-scale employment opportunities for the people of Kerala and ensuring them fair wages and to convert Kerala into an investment friendly destination is the vision of the Industrial & Commercial Policy announced by the Government during 2007. The Industrial Policy, IT Policy, establishment of INKEL are all intended towards the enhancement of investment in the State especially in the industrial sector with the objective of creating more income and employment. The role of Government has been changed from a provider to that of a facilitator for industrial investment; which attracted private investors in the State.
- 8.3 In the case of PSUs Government is taking steps to restructure and revive the SLEPEs by a comprehensive inter-PSU tie up, capacity building and effective corporate governance.

Industrial Growth

8.4 Industrial growth recorded during 2000-01 to 2007-08 was positive except in 2001-02 which registered (-)4.44 percent and (-) 2.88 percent respectively at constant and current prices. The average growth rate for the period from 1999-2000 to 2007-08 was 4.9 percent and 8.5 percent at constant and current prices respectively. The contributions of manufacturing sector to GSDP at constant and current prices are 8.02 percent and 8.45 percent respectively during 2007-08. Growth of manufacturing sector (GSDP) of Kerala from 1999-2000 to 2007-08 both at constant and current prices are given in Table 8.1

Table 8.1
Growth of Manufacturing sector in Kerala (GSDP)

	Contributio	on to GSDP	Growth 1	Rate (%)
Year	(Rs. L	akhs)		
1 cai	At constant	At current	At constant	At current
	Prices	prices	prices	prices
1999-2000	666799	666799		
2000-01	680170	703404	2.01	5.50
2001-02	649950	683278	-4.44	-2.88
2002-03	680869	734199	4.76	7.45
2003.04	718735	818580	5.56	11.49
2004-05	753166	912523	4.79	11.48
2005-06	805882	1009504	7.00	1062
2006-07	914367	1197663	13.46	18.64
2007-08 (p)	1014424	1372495	10.94	14.60

Source: Dept. of Economics and Statistics P: Provisional Q: Quick Estimates

Index of Industrial production (IIP)

- 8.5 The Index of Industrial production measures the impact of development in the field of industrial sector over a period of time in the State in comparison with a selected previous year. It gives a comprehensive view of the industrial development of the State. So far the index used to cover only the production in the manufacturing and electricity generation and transmission sectors in the State. But now the mining and quarrying industry also falls within the purview of IIP. In order to ensure more accuracy and better reliability of the data, the base year has been shifted from 1980-81 to 1993-94.
- 8.6 The General Index for the year 2006-07 increased to 261.30 from 208.31 in 2005-06 showing an increase of 25 percent. Negative growth was recorded in products such as jute & other vegetable fibre textiles. All other itmes showed positive growth. The index of industrial production for the period 2004-05, 2005-06 and 2006-07 is given in Appendix 8.1.

Industrial Disputes

8.7 During 2007-08, 3482 industrial disputes were registered. At the end of the year, there was 6386 cases along with the pending disputes of previous years which is more than 4.26% of previous year. A total of 3567 disputes were settled during the year under review. Due to strike and lockout 7107 workers were affected which lead to lose of 1215214 man days. Details of industrial disputes for the period 2001-02 to 2007-08 are given in Appendix 8.5

Commodity Export

8.8 Among the five export commodities, spices recorded high growth (92%) in 2007-08 compared to 2006-07, However, that of Tea recorded a downward trend (19%). Positive growth projected in respect of cashew kernels and coir products compared to previous year. Details of major commodities exported from Kerala (through Cochin Port) for 2006-07 and 2007-08 are given in Table 8.2

Table 8.2 Export from Kerala (through commodities)

Sl.No	Commodity	2006-07		2007-	-08
		Quantity	Value	Quantity	Value
1	Tea	88610	540.67	71472	335.95
2	Cashew Kernals	68179	1504.94	77458	1480.70
3	Coir products	108051	12.36	124213	1308.13
4	Spices	36732	942.85	70521	1124.60
5	Coffee	92218	690.21	94384	1381.56

Source: Cochin Port Trust.

Working factories and Employment

- 8.9 The number of public working factories has been increased from 382 in 2006 to 390 in 2007 that of private working factories has increased from 18029 in 2006 to 18061 in 2007. However, no increase has been recorded in employment in public as well as private working factories. Growth of working factories and average daily employment in Kerala are given Appendix 8.2
- 8.10 During 2007, the number of working factories registered was 18659, which is more than 248 factories during the previous year. Ernakulam District registered the maximum number (2957) followed by Thrissur. A marginal increase is recorded only to Wayanad, Kozhikode and Kasaragod Districts. In the case of distribution of employment Kollam District stands first with 228282 followed by Ernakulam, Thissur, Thiruvananthapuram while it is least in Kasaragod. The District wise details of working factories and employment for the period from 2001 to 2007 are given in Appendix 8.3 and 8.4.

Joint Stock Companies.

8.11 The total number of Joint Stock Companies in Kerala as on March 2008 is 15967 in which 1635 are public limited and 14332 are private limited. This shows an increase of 418 companies. During 2007-08. 1586 companies were newly registered in the State of which 1537 were private limited and 49 were public limited, Only five private limited and one public limited Companies were transferred from other States and the same no. of companies were transferred to other States from Kerala. Details of Joint Stock Companies working in Kerala are given an Appendix 8.19.

Central Sector Investment

- 8.12 An amount of Rs. 19144 crores has between projected as the central sector investment in Kerala as on the end of March 2007, as against total central investment of Rs.782992 crores. This constitutes 2.44 percent. With this investment only less than 0.35 lakhs employment were created. While considering the All India investment, Maharastra stood first and Kerala ranked as 15. Details of Central Sector Investment in selected States are given in Appendix 8.7
- 8.13 During 2006-07, Government of India invested 73.76 percent of the funds in 10 Enterprises as detailed in Table 8.3.

Table 8.3
Details of Central Sectors Investment in Kerala

(Rs. in crore)

Sl.No	Name of Enterprise	Investment in terms of Gross Block	Share of Total Real Investment (%)
1	Oil & Natural Gas Corporation Ltd	129983.79	16.00
2	Bharat Sanchar Nigam Ltd	123850.65	15.82
3	NTPC Ltd	74405.68	9.50
4	Indian Oil Corporation Ltd	63625.56	8.13
5	Power Grid Corporation Of India Ltd	47895.41	6.12
6	Steel Authority Of India Ltd	32384.79	4.14
7	Nuclear Power Corporation of India Ltd	32611.29	3.51
8	National Hydroelectric Power Corporation Ltd	27456.34	3.51
9	Bharat Petroleum Corporation Ltd	21162.25	2.70
10	Hindustan Petroleum Corporation Ltd	24125.6	3.08
	Total	577501.36	73.76
	Total Gross Block	782991.68	100.00

State Level Public Sector Enterprises

- 8.14 Public Sector Enterprises in Kerala are among the largest employment providers in the organised sector
- 8.15 In connection with the revival of PSUs under the Industries Department, Government is taking steps to restructure and revive the SLPEs by a comprehensive policy initiative through upgradation of technology, performance contract agreement, inter PSUs tie ups, capacity building and effective corporate governance.
 - ?? The Government has also observed that many State Level Public Enterprises (SLPEs) had availed term loans as well as working capital loans from banks and had failed to service the same promptly. This has resulted in classification of these accounts by banks as NPAs and bank operations have been stalled in certain cases. Due to the above, there is dearth of capital support from the FIs/Banks. In this context, Government has constituted a Core Committee for PSU restructuring with representatives of banks and Government officials as members. One Time Settlements of liabilities with Bank / Fls have been included in the following PSU's during 2006-07 and 2007-08 with budgetary assistance from Government.

&Kerala State Electronics Development Corporation Ltd

∠∠Autokast Ltd

Steel Compelx Ltd

ZPrenationalisation dues of Kerala State Textiles Corporation Ltd

ZIFCI dues of Kerala State Detergents & Chemicals Ltd

?? To improve the professional management in PSUs Government had constituted a committee for selection of Chief Executives on the basis of merit. Based on this, advertisement was released for selection of CEOs for PSUs in Chemical, Electrical, Textiles, Engineering and Electronics sectors. The selection process was carried out through a transparent procedure and appointed professionals as Chief Executive Officers in SLPEs

- ?? As part of the steps being initiated by the Industries Department for inter PSU tie-ups on marketing of products among themselves and strategic tie ups with State/ Central PSUs or agencies good progress have been achieved. For example, KSEB has established synergy with companies like KEL, SILK, Traco Cable Company, United Electrical Industries Ltd and Transformers & Electricals Kerala Ltd to meet its captive demands.
- ?? Other major initiatives
 - Government has approved a project for manufacturing Soap Noodles in the first phase by the KSIE at an estimated cost of Rs. 70.95 lakhs in the premises of KSO, the company will be named as Kerala Soaps Ltd
 - ©Government is exploring the possibility of utilizing the facilities of Kerala State Detergents & Chemicals Ltd (KSDC) through KINFRA for the industrial development of the State
 - Kerala State Industrial Enterprises Ltd was entrusted to set up a Hyper Super Market cum Office Complex at the premise of Metropolitan Engineering Company Ltd
 - Kerala SIDCO was entrusted to set up a Telecom city in the premises of Kerala State Salicylates & Chemicals Ltd.
 - KSFDC was entrusted to take over the assets of KPDL and Keltron Rectifiers Ltd for industrial use
 - Mailtiated implementation of comprehensive Capacity Building programmes in PSUs
 - A quarterly publication named "RESURGENCE" has been launched by RIAB to disseminate the developmental activities in State Public Sector
- ?? Industries Department has taken initiatives for utilizing unutilized land in PSUs for industrial development in the State. For this purpose, assets and facilities in Kerala Soaps & Oils Ltd., Kerala State Detergents & Chemicals Ltd, Travancore Plywood Industries Ltd., Chalakudy Refrectories Ltd. Astral Watches Ltd and Kerala Construction Components Ltd are being examined by the Government for industrial use. Kerala State Industrial Enterprises Ltd was entrusted to set up a Hyper Super Market cum Office Complex at the premises of Metropolitan Engineering Company Ltd. Kerala SIDCO was entrusted to set up a Telecom city in the premises of Kerala State Salicylates & Chemicals Ltd. KSEDC was entrusted to take over the assets of KPDL and Keltron Rectifiers Ltd for Industrial use.
- ?? Government is also exploring the possibility of merging PSUs having the same lines of business. Details of progress achieved are given below

Kerala State Industrial Products Trading Corporation Ltd with Travancore Titanium Products Ltd

Sitaram Textiles Ltd and Trivandrum Spinning Mills Ltd with Kerala State Textile Corporation Ltd.

?? RIAB has conducted a Training Need Assessment programme in August 2007 as part of the Capacity Building Programme in PSUs. Corporate Governance Training Programmes are being planned for strengthening the Board of Directors of the PSUs. Steps are also being initiated to appoint Functional Directors as part of the strengthening corporate governance in PSUs. The following training programmes were conducted recently for the CEOs/Senior level officers in PSUs and Officers from Industries, Finance and Planning Departments in Government Secretariat.

8.16 The performance of PSUs under Industries Department for 2006-07 and 2007-08 are given in Table 8.4.

Table 8.4
Turnover and Profit /Loss of PSUs under the Ministry of Industries – 2007-08
(Rs. in lakh)

	(Rs. in lakh)				
Sl.	Company		over	Profit / L	
No	Company	2006-07	2007-08	2006-07	2007-08
1	Malabar Cements Ltd	21,296.34	21,296,34	2,704.83	3,604.67
2	Kerala State Industrial Development Corporation Ltd	4,792.70	2,832.00	3,671.00	2,307.00
3.	Transformers and Electricals Kerala Ltd	16,888.25	20,547.99	380.00	915.01
4	The Kerala Minerals and Metals Ltd	32,854.54	34,101.00	2,243.24	900.07
5	Kerala State Electronics Development Corp	12,228.05	14,634.51	1,699.27	842.12
6	Steel and Industrial forgings	4,765.00	5,818.78	358.00	800.00
7	Travancore – Cochin Chemicals Ltd	14,247.37	10,858.00	54.00	705.07
8	Kerala State Industrial Enterprises Ltd	1,218.89	1,349.65	501.36	655.55
9	Kerala Electrical & Allied Engineering Company Ltd	8,552.38	10,096.72	122.36	450.04
10	The Kerala Ceramics Ltd	970.43	1,069.03	108.48	180.50
11	Kerala Small Industries Development Corporation Ltd	5,549.11	5,179.76	78.52	179.51
12	United Electrical Industries Ltd	3,579.74	3,965.00	237.00	130.00
13	Kerala Clays & Ceramic Products Ltd	476.88	529.52	94.70	119.94
14	Travancore Sugars & Chemicals Ltd	717.51	963.77	70.71	88.50
15	Steel Complex Ltd	835.05	3,039.38	-133.27	65.04
16	Handicrafts Dev. Corp. (Kerala) Ltd	408.80	1,112.40	28.48	50.72
17	Keltron Crystals Ltd	61.87	92.60	-61.31	47.43
18	Keltron Magnetics Ltd	460.82	595.31	47.67	37.90
19	The Travancore Cements Ltd	2752.00	3,111.36	-84.00	35.00
20	Forest Industries (Travancore) Ltd	734.00	625.85	48.00	35.00
21	Traco Cable Company Ltd	5984.70	4,725.79	14.95	24.83
22	Kerala State Bamboo Corporation Ltd	912.59	1,423.24	-196.81	21.38
23	The Metal Industries Ltd	188.75	225.30	-6.43	10.05
24	Steel Industries Kerala Ltd	1,012.64	1,894.45	-272.51	9.87
25	Keltron Component Complex Ltd	2,382.50	2,540.60	-249.59	4.00
26	KELPALM	7.79	9.11	2.48	3.66
27	Keltron Resistor's Ltd	182.53	185.43	-16.60	1.38
28	Kerala Artisans Development Corporation Ltd	25.76	408.00	-15.93	-3.00
29	Travancore Titanium Products Ltd	11,668.12	10,590.69	-150.00	-52.72
30	Keltron Electro Ceramics Ltd	505.98	353.88	17.49	- 73.960
31	Sitaram Textiles Ltd	672.53	796.71	-93.07	-117.10
32	Alleppey Co-operative Spinning Mills	362.93	329.38	-105.57	168.65
33	Autokast Ltd	1,276.94	1,437.26	19.84	-195.57`
34	Kerala State Drugs & Pharmaceuticals Ltd	340.68	890.37	596.99	-218.95
35	The Malappuram Co-operative Spinning Mills	2,257.87	1,955.40	-11.48	-230.68
36	The Trichur Co-operative Spinning Mills Ltd	1,232.00	1,003.40	-26.73	-293.23
37	Kerala State Textile Corporation Ltd	3,694.92	3,723.04	83.04	-346.35
38	The Quilon Co-operative Spinning Mills Ltd	557.65	531.15	-310.59	-348.78
39	The Cannannore Co-operative Spinning Mills Ltd	1,117.55	945.72	-313.80	-369.85
40	Kerala Automobiles Ltd	3,972.02	2,215.76	22.52	-397.51
41	Kerala State Handloom Dev. Cop Ltd	1,501.45	1,013.36	-379.07	-443.80
42	HANTEX	1,327.00	1,590.00	-440.93	-993.00
	Total	174,574.63	181,150.40	9,143.26	8,031.15

8.17 Details of Financial Assistance sanctioned to PSUs during 2007-08 are given in Table 8.5

Table 8.5
Details of Financial assistance sanctioned to PSUs during 2007-08

Sl.	Company	Amount released by Government
No		(as on 31.3.2008
Α	For OTS	
1	Kerala State Electronics Development Corporation Ltd	1250.00
2	Steel Complex Ltd	587.00
3	Autokast Ltd	400.00
4	Sitaram Textiles Ltd	135.47
	Sub Total (A)	2372.47
В	For revival and rejuventation	
1	Kerala State Textile Corporation Ltd	300.00
2	Kerala State Salicylates & Chemicals Ltd	1.63
3	Metropolitan Engg. Company Ltd	1.63
4	Trivandrum Spinning Mills Ltd	0.25
5	Sitaram Textiles Ltd (with SBI)	50.00
6	Autokast Ltd	23.75
7	Sitaram Textiles Ltd	75.00
8	Travancore Cements Ltd	100.00
9	Autokast Ltd	100.00
10	Kerala Electrical & Allied Engg. Co. Ltd	100.00
11	United Electrical Industries Ltd	60.00
12	Kerala State Textile Corporation Ltd	300.00
13	Trivandrum Spinning Mills Ltd	283.00
14	Steel Industries Kerala Ltd	117.00
	Sub Total (B)	1522.26
	For VRS dues	
	Kerala State Industrial Dev. Corporation Ltd.	1.80
	CHICOPS	235.34
	Travancore Plywood Industries Ltd	199.76
	Kerala Garments	39.36
	Kerala State Drugs & Pharmaceuticals Ltd	81.88
	Steel Industrials Kerala Ltd	21.67
	Kerala State Salicylates & Chemicals Ltd	114.96
	Travancore Cements Ltd	176.00
	Kerala State Detergent s & Chemicals Ltd	88.00
	Sub Total ©	958.81
	Grand Total (A + B+C)	4853.54

Source: RIAB

Micro Small and Medium Enterprise – (MSME) (Small Scale Industry (SSI))

8.18 MSME Sector contributes a lot towards the needs of domestic and export market of our State. Government of India has initiated new policy measures to increase the domestic growth, export marketing, technology up gradation, training etc by simplifying the MSME Act. Necessary directions were also issued to Financial Institutions. Credit Guarantee limit is

increased to Rs. 50 lakh by increasing the corpus fund for Credit Guarantee Fund Trust for Small Scale Industries (CGFTSI).

- 8.19 The 4th All India Census of MSME is launched during the year 2008 with reference year 2006-07, covering all the registered enterprises as on 31-03-2007. Units registered with Khadi and Village Industries Board/Khadi and Village Industries Commission and Coir Board are also included in the survey. The total number of registered enterprises to be conducted in accordance with the guidelines of Government of India will be covered. The entire expenditure of the census is to be met by Government of India. The SSI system of registration was in existence only up to 02-10-2006 and a new system of filing memorandum under MSME Act came into practice with effect from that date.
- 8.20 The total number of working SSI units registered in Kerala as on 31st March 2008 is 195960. Out of the total number of units, 6834 are promoted by SCs, 1414 by STs, 41305 by women and 146407 by others. Further the total investment is Rs. 600255 lakh and the number of employment generated is 722860 and value of goods and services purchased during the period is Rs 125799 lakh. Details of the District wise position of the same is given in Appendix 8.21.
- 8.21 From the Appendix, it is clear that Ernakulam district stood at the highest position in terms of number of units, employment provided, investment and value of production and Wayanad district at the lowest position.
- 8.22 Ernakulam is the most potential district for small-scale units by producing goods worth more than three times the investment. Alapuzha, Thiruvananthapuram, and Kannur are in the succeeding position. In Wayanad, Idukki and Palakkad the SSI units are not found much profitable.
- 8.23 The working status of SSI units in Kerala is given in Appendix 8.22. Out of the total 195960 units registered so far in the State, the number of units identified as sick as on March 2008 is only 7737. Among the sick units, 2399 units are registered for revival and 1287 units are revived. The District Industries Centres revived six sick units at Kollam, and one unit in Kozhikode during 2007-08.
- 8.24 The total number of mini Industrial Estates under DIC as on 31.3.2008 is 87 and the total number of SSI units established in these estates is 799. The total number of employees under these units is 2865. Out of the total number of 925 sheds in these estates, the number of sheds allotted to working SSI units is 745. The details of District wise SSI units, number of employees etc are given in Appendix 8.49.
- 8.25 Small Industries Development Corporation(SIDCO) was established in the state for strengthening the SSI sector in the State. SIDCO is essential for a healthy SSI sector, consultancy services, import and export services, technology up gradation, training programme and business information. The total number of Mini Industrial Estates under SIDCO as on 31st March 2008 is 314. Out of this, 63 are closed and the remaining 251 are working. The total number of sheds under these estates is 421. A total of 712 employees are working in 252 Mini Industrial Estates. District wise details of these estates are given in Appendix 8.51
- 8.26 The total area acquired for major Industrial Estates by SIDCO as on 31st March 2008 is 241.45 acres and total number of units is 780. Out of this, 80 units are closed. The total number of sheds under these units is 540 and the number of sheds allotted to working units is 531. District

wise details of the major Industrial Estates under SIDCO as on 31st March 2008 is given in Appendix 8.50.

8.27 The total number of Enterprises filed Memorandum under MSMED Part II during 2007-08 is 11186. The total number of employment generated, value of goods produced and investment made through these units during the period are 116189, Rs 588100.13 lakh and Rs 189760.31 lakh respectively Details of Enterprises that filed Memorandum under the Act are given in Table 8.6.

Table 8.6
Details of Enterprises Filed Memorandum under MSMED Act Part II – 2007-08

Sl. No.	District	No. of Enterprises	Investment (Rs. Lakh)	Value of Goods Produced	Employment Provided
1	Thiruvananthapuram	781	4817.86	12328.65	5354
2	Kollam	811	11210.53	37229.73	34703
3	Pathanamthitta	296	2581.82	24097.45	2258
4	Alapuzha	581	3358.12	8212.85	1659
5	Kottayam	1292	33041.26	80612.25	12568
6	Idukki	234	2709.40	12873.81	1686
7	Ernakulam	2953	77987.68	268676.79	25582
8	Thrissur	1338	15566.12	52567.44	12485
9	Palakkad	448	10114.38	28016.78	4571
10	Malappuram	487	16663.29	18057.07	3892
11	Kozhikode	788	2863.36	18805.50	3594
12	Wayanad	190	648.62	276.27	1058
13	Kannur	819	10296.97	21863.65	5477
14	Kasaragod	168	1901.40	4481.89	1272
	Total	11186	189760.31	588100.13	116189

Source: Directorate of Industries & Commerce

8.28 While analyzing the Enterprises filed Memorandum under MSME, it reveals that Ernakulam occupies highest position in terms of value of goods produced, investment made and number of units and Wayanad has the lowest position in all of the above items. The achievement of MSME Development Institute, Thrissur during 2007-08 in terms of training programmes, Campaigns, Courses undertaken, Workshops, etc are given in Appendix -8.46.

Prime Minister's Rozgar Yojana (PMRY)

- 8.29 For the period 2007-08 the target under the scheme was 33700 and the performance in the State is very good. 32403 cases were sanctioned during 2007-08 year i.e., 96.15% achievement against the target. An amount of Rs. 13257.25 lakh was also disbursed to 23900 beneficiaries. District wise details of targets and achievements of PMRY are given in Table 8.7.
- 8.30 The State has achieved only 96.15 percent of the target under sanction of loans under PMRY Scheme during 2007-08 against the target of 33700 cases. Kasaragod, Malappuram, Kozhikode, Kottayam, Idukki, Alappuzha, Palakkad, Trissur and Kollam could not achieve 100% sanction to the target. District wise details of achievements of Self Employment Programme under PMRY are given in Appendix-8.23.

Table 8.7 Pmry 2007-08 district wise position

SL. No.	Dist.	Target	No. of Loan sanctioned	% sanction against Target	Amount of loan sanctioned Rs. in lakh	No. of cases disbursed	Amount of loan disbursed Rs. in lakh
1	2	3	4	5	6	7	8
1	TVM	3100	3266	105.35	1770.7	2427	1273.06
2	KLM	3100	2661	85.84	1581.17	2068	934.76
3	PTA	1400	1434	102.43	893.79	1006	617.28
4	ALP	2450	2354	96.08	1249.05	1814	947.29
5	KTM	3050	2792	91.54	1627.58	1840	966.41
6	IDK	1300	1187	91.31	720.03	984	593.31
7	EKM	3600	3668	101.83	2511.71	2413	1701.19
8	TSR	3300	3231	97.91	1381.67	2389	1105.89
9	PKD	3450	3358	97.33	1660.51	2808	1339.77
10	MPM	2450	2101	85.76	1623.68	1547	1199.88
11	KKD	2900	2824	97.38	1651.04	1991	1130.97
12	WYD	850	884	104.00	399.65	703	256.05
13	KNR	1900	1919	101.00	1109.89	1321	768.63
14	KSD	850	724	85.18	547.16	589	422.76
TOTAL		33703	32407	96.15	18733.63	23907	13265.25

PMRY Scheme stopped with effect from 31.03.2008. Source: Directorate of Industries & Commerce

8.31 The PMRY programme achieved good performance during the Year 2007-08. 32403 cases were sanctioned during the year under review against the target of 33700 number of applications. An amount of Rs.13257.25 lakhs was also disbursed to 23900 applicants. Details of achievements under Self Employment Programme . PMRY during the last six years are given in table 8.8

Table 8.8 Performance under PMRY in Kerala

		San	ction	Disbur	Disbursement		Percentage of			
Program me Year	Targe t (No)	Numb er	Amou nt (Rs. Lakh)	Numb er	Amou nt (Rs. Lakh)	(3) to (2)	(5) to (2)	(5) to (3)	(6) to (4)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
2002-03	19250	16297	8982	12589	6781	84.66	65.40	77.25	75.50	
2003-04	20350	20377	10900	16945	8376	100.13	83.27	83.16	76.84	
2004-05	25500	25813	12708	20599	9788	101.23	80.78	79.80	77.02	
2005-06	28000	29461	14573	23623	11229	105.22	84.37	80.18	77.05	
2006-07	28000	29088	14220	23248	11261	103.89	83.03	79.92	79.19	
2007-08	33700	32403	18727.	23900	13257.	96.15	71	73.8	71	
			63		25					

Source Directorate of Industries & Commerce

8.32 The State has disbursed 71 percent of the sanctioned amount toward 73.8 percent of applications sanctioned so far to achieve 71 percent of the target during the programme year 2007-08.

Prime Ministers Employment Generation Programme (PMEGP)

- 8.33 Government of India have introduced a new Credit linked Subsidy Programme called Prime Ministers Employment Generation Programme (PMEGP) by merging the two schemes PMRY and REGP which were in operation till 31.03.2008, from 2008-09 onwards. KVIC was approved as the nodal agency for the implementation of the scheme at National Level and KVIC Directorate, KVIB, DICs and Banks in the State Level. A target of 708 number of units were allocated to District Industries Centres for 2008-2009. The loans will be released through Banks and are permitted to charge normal rate of interest.
- 8.34 The maximum cost of the project/unit admissible under manufacturing sector is Rs.25 lakh and in business/service sector is Rs.10 lakh.
- 8.35 The selected beneficiaries will have to undergo two weeks mandatory training before the disbursement of the loan. Beneficiaries who have attended similar types of training earlier are exempted from the training.
- 8.36 Steps being taken to implement the scheme in the State and necessary directions were given to the General Managers to initiate action on PMEGP.

Industrial Co-operatives

8.37 Out of the total number of 1816 Industrial Co-operative Societies, 17 were registered during 2007-08 and up to 30-6-2008. Of the total number of registered societies, 317 are SCs, 81 are STs, 593 are women and 825 societies are general category. The details of working industrial co-operatives in Kerala as on 30-6-2008 is given in Appendix 8.24.

Bank Credit to SSI Sector

8.38 The outstanding bank credit to various sectors at the end of March 2008 was Rs.75304 crore as against Rs. 64273 crore in the previous year. The flow of credit to SSI sector showed a considerable increase in absolute terms from Rs. 4391 crore in 2007 to Rs.6674 crore in 2008. The status of flow of credit to various sectors is given in Appendix 8.25.

KINFRA Food Parks

8.39 Government has given special thrust to the promotion of food processing industry due to the enormous potential of the sector for development. With the objective of boosting industrial growth, KINFRA has been promoting the concept of Theme Parks, which have been set up for the exclusive growth and development of specified industrial sectors. Food Processing Parks, Apparel Park, Film and Video Park, Herbal and Ayurveda Parks are some of the examples of the theme parks already implemented by KINFRA. Two Food Processing Parks had already been set up by KINFRA, one at Kakkancherry near Kozhikode and the other at Mazhuvannur near Ernakulam. A third Food Park at Adoor is under implementation at present. 85 acres of land has been acquired for developing the specific infrastructure for the same. MOFPI, Government of India proposes to set up 10 mega food parks in the country. Under the scheme, KINFRA proposes to develop a Mega Food Park in Wayanad district. Further, KINFRA has a plan to develop a Spices Park at Idukki for the processing of spices. Details of Food Processing Units in KINFRA Parks during 2007-08 are given in Table 8.9. The details since inception upto March 2008 are given in Table 8.10

Table 8.9
Details of Food Processing Units in KINFRA Parks during 2007-08

Sl. No.	Name of Park	Total area acquired (acres)	No. of units	Area allotted (acres)	Invest ment (Rs. Lakh)	Employm ent (Nos)
1	Kinfra Small Industries Park, Mazhuvannur, EKM.	65	4	1.80	708.40	110
2	Food Processing Park, Kakkanchery, Malappuram.	60	2	1.92	45.90	15
3	Small Industries park, Thumba	40	0	0.00	0.00	0
4	Small Industries Park, Sithamgoly	60	4	5.15	418.46	93
5	Small Industries Park, Wayanad	50	2	0.92	115.00	40
6	Small Industries Park, Koratty	20	1	1.00	85.09	40

Source: KINFRA, Tvpm

Table 8.10
Details of Food Processing Units in KINFRA Parks as on March 2008

Sl. No.	Name of Park	Total area acquired (acres)	Area allotted (acres)	No. of units	Investment (Rs. Lakh)	Employment (No)
1	Kinfra Small Industries Park, Mazhuvannur	65	26.07	24	3642.82	711
2	Food Processing Park, Kakkancherry, Malappuram	60	49.23	17	3562.60	376
3	Small Industries Park, Thumba	40	3.41	9	493.62	131
4	Small Industries Park, Sithamgoly	60	9.35	9	946.81	340
5	Small Industries Park, Wayanad	50	2.38	8	373.91	106
6	Small Industries Park, Koratty	20	9.20	5	994.39	204

Source: KINFRA, Tvpm

8.40 Kinfra Small Industries Park, Mazhuvannur is the largest park in the Food Processing sector in the State, occupies 65 acres of land with a total investment of Rs 3642.82 lakh and providing employment to the tune of 711 persons. Small Industries Park, Koratty is the smallest park under Kinfra, occupying only 20 acres of land with 5 units providing employment to 204 persons.

8.41 ADFIK is also handling the operation and maintenance of common facility centers in KINFRA parks such as Quality Control Laboratories, Incubation Center and Cold Storages. For the Q.C Labs at KINFRA Parks at Mazhuvanoor and Kakkancherry the procurement of equipments have been completed and selection of operating agency is about to be completed. In the case of Incubation Center at KINFRA Park in Kakkancherry, most of the equipments have been delivered; operating agency has been selected, with only the installation of utility lines is pending. For the Cold Storages at KINFRA Parks at Mazhuvanoor and Kakkancherry the equipments have been installed whereas the selection of Operating Agency is under progress.

Handloom Industry

8.42 Among the Traditional Industries of Kerala, Handloom sector stands second to the coir industry in providing employment to the tune of 1.75 lakh persons. The Industry in the State is highly concentrated in Thiruvananthapuram and Kannur districts. Palakkad, Kozhikode, Thrissur, Ernakulam, Kollam and Kasaragod districts also have some concentration of the Industry. Out of the total number of looms, the co-operative sector occupies 94 per cent and the rest by industrial entrepreneurs. The sector consists of factory type and cottage type societies. By the end of March 2008, there were 758 PHWCS consisting of 155 factory type societies and 603 cottage type societies The district wise details of handloom societies in the state are given in Appendices 8.26 & 8.27

- 8.43 Kannur district has 11050 looms with 73 registered weavers' co operative societies and 79 private handloom units. Lungi, grey sari, furnishing material and dhothies are the major handloom items produced in the state and which accounts 67 per cent of the total production in the Industry.
- 8.44 The Southern region in the state produces 54 per cent of the major handloom items followed by the North (32 per cent) and Central region (14 per cent). The overall production of cloth in Cooperative sector of Kerala shows an additional increase of 8.21 million metres ie. from 60.05 million metres in 2006-07 to 68.26 million metres in 2007-08. Out of the total handloom production in the state, 96.11 per cent is from the co-operative sector and the rest (3.89 per cent) is by the units in the entrepreneurial sector. The total value of production from Cooperative sector is Rs. 307.17 crore, Rs. 11.79 crores from other sectors during 2007-08. Total number of employment generated during the period in cooperative sector is 539.1 lakh man days and in the other sector is 58.94 lakh man days. The details of production, productivity etc. of Handloom sector are given in Appendix 8.27.
- 8.45 Under School Uniform Project, State government has launched a new scheme "Uniform made of Handloom Cloths to School Children". According to the scheme, school children should wear handloom clothes for atleast one working day in a week. The objective of the scheme is to provide employment for atleast 20000 weavers and to some extend to keep preserve the traditional heritage of the state of Kerala. Implementation of the project has been initiated by Textile Project Development Centre.
- 8.46 Under the scheme, "Development of Clusters" Government of India has sanctioned 19 projects worth Rs 11.30 crore, submitted by Kerala for Cluster Development Programme of the scheme and released the first installment of Rs 4.29 crore. Of the 20 handloom clusters identified through out the country for development under the IHCD scheme, one is from Kerala ie. Thiruvananthapuram cluster. Hanveev is identified as the implementing agency. The details of assistance available under Integrated Handloom Cluster Development Scheme are given in Box No 8.1

Box No 8.1 Components eligible for assistance under Integrated Handloom Cluster Development Scheme

- 1. Setting up of Common Facility Centre and Showroom
- 2. Up gradation and purchase of accessories and appliances
- 3. Organizing/participation in exhibitions/fairs
- 4. Organizing / participation in buyer seller meets including inviting retailers
- 5. For developing publicity materials
- 6. For declaring the Cluster as legal entity, its capacity building, brand building etc..
- 7. For seminars and workshops.
- 8. For Market Research and Technical consultancy
- 9. Cost of engaging designer as per the project price.
- 8.47 The Government had entrusted the Department of Economics and Statistics to conduct a detailed survey on Handloom Sector in Kerala. Following are the objectives of the Survey.

- ?? To understand the Financial and Social Development achieved by weavers.
- ?? To determine the actual number of weavers, looms, type of loom, ownership of loom, production, Rebate sales, non-rebate sales etc.
- ?? Financial aids by Co-operative Societies.
- ?? To understand reason for out-migrating from weaving and the possibility of brining unemployed youth to Handloom Sector.

8.48 Hantex and Hanveev are the two State level agencies dealing with the procurement and marketing of handloom fabrics. Hantex is an apex body of handloom co-operatives established for the supply of raw materials for the primary weaver's societies and for the marketing of their products. There are 152 sales depots, two weaving factories, two garment units and one cloth processing unit and four regional offices working under this apex organization. The value of yarn purchased is Rs.4.50 crore and value of cloth produced is Rs.8.34 crore during 2007-08 as against Rs.5.37 crore and Rs.6.39 crore respectively during the previous year. The accumulated loss of Hantex during 2007-08 is Rs 102.19 crore. Out of the total produce of the societies, 80 per cent is marketed through Hantex and the rest is through own retail shops. The details of the working results of Hantex are given in Appendix 8.28.

8.49 Handloom Industry is also assisted by an another agency called the Kerala State Handloom Development Corporation (Hanveev) which is outside the purview of the co-operative fold. The Hanveev is acting as a link between the weavers and consumers so as to eliminate the middlemen. The Corporation supplies raw materials to the weavers at a reasonable price and helps to market their products also. There are 33 production centres/ clusters and three regional offices (Thiruvananthapuram, Ernakulam and Kannur) presently working under the Corporation. The company has a strength of 6500 registered weavers. The sales turnover of the Corporation has decreased from Rs.1501.45 lakh in 2006-07 to Rs.1290.32 lakh in 2007-08. The accumulated loss of the Corporation has increased from Rs.3132.49 lakh in 2006-07 to Rs.3576.29 lakh in 2007-08. The Company's volume of production and its value has increased from 10.10 lakh metres and Rs 491 lakh in 2006-07 to 13.07 lakh metres and Rs 607 lakh during 2007-08. The working results of Hanveev are given in Appendix.8.29 and the details of production, accumulated loss etc. of Hanveev from 2000-01 to 2007-08 are given in Table 8.11.

Table 8.11
Performance of Hanveev from 2000-01 to 2007-08

	Produ	action	Sales	Accumulated Loss (Rs. Lakh)
Year	Quantity (lakh meters)	Value (Rs. Lakh)	Turnover (Rs. Lakh)	
2000-01	19.11	797.00	2032.22	785.48
2001-02	8.48	354.00	1688.00	992.65
2002-03	8.20	335.00	990.00	1441.29
2003-04	12.30	515.74	1640.85	2085.64
2004-05	15.93	772.51	1603.84	2753.42
2005-06	16.88	686.56	1486.65	3008.44
2006-07	10.10	491	1501.45	3132.49
2007-08	13.07	607	1290.32	3576.29

Source: Hanveev

8.50 Hanveev has undertaken two projects (sponsored by Government of India), namely, Thanima and Krithika which covers 9000 handloom weavers in the State. The assistance given under these programmes include assistance for loom modification, skill upgradation training, common infrastructure facilities etc. Under integrated cluster development programme one project at Trivandrum is under implementation which covers 5000 handloom weavers. This programme is aimed at organizing production and marketing of products through cluster approach, providing common infrastructure and training to weave diversified products

Handicrafts

- 8.51 Handicrafts Industry is a major area for employment generation in Kerala by upholding our tradition and culture. Coconut shell carving, straw picture making, cane work, bamboo and reed weaving, ivory carving, bell metal casting, screw-pine and mat weaving are the major handicraft items in our state. Kerala State Handicrafts Apex Co-operative Society (SURABHI), Handicrafts Development Corporation and Artisans Development Corporation are the major promotional agencies of the Industry.
- 8.52 Kerala State Handicrafts Apex Co-operative Society (SURABHI), established in 1964, is an organization sponsored by Government of Kerala and Government of India for the development of handicrafts industry in the State. SURABHI has 103 primary co-operative societies to market their products through a network of 16 sales showrooms across the country. The society gives financial support to the primary societies and also implements various promotional and welfare schemes, namely, Training, Design development workshops, skill up gradation programme, craft development, craft marketing, house cum work sheds for artisans, cluster development etc.. with the assistance of State/Central governments.
- 8.53 During 2007-08, the Society procured goods worth of Rs 267.00 lakh and the total sales achieved for this period was Rs 380.60 lakh. The Society conducted 10 exhibitions in different centers and 200 artisans have participated in these events. The total sales through its various exhibitions come to Rs 140.30 lakh. The society also conducted one training and four design development programmes for its primary societies and artisans which aimed at providing training to semi-skilled artisans to up grade their skills using improved tools and equipment; give new design inputs and techniques.
- 8.54 The Handicrafts Development Corporation is a Government of Kerala undertaking established in 1968 with the objective of developing handicrafts sector in Kerala. The Corporation is procuring and marketing handicraft products by giving fair returns to the artisans through its 18 Kairali emporia, spread all over India. The sales turnover of the Corporation increased to Rs.1112.40 lakh in 2007-08 from Rs.1076.55 lakh in 2006-07. The Corporation could improve its profit from Rs. 28.22 lakh in 2006-07 to 38.92 lakh in 2007-08. The total sales of the Corporation as on 31.8.2008 is Rs. 432.40 and the net profit is Rs. 8.96 lakh
- 8.55 The artisans in the trades of pottery, copper, bronze, gold smithy, carpentry etc. are assisted by the Kerala Artisans Development Corporation (KADCO). Assistance is given to them for establishing production units, promoting marketing of products and providing employment opportunities directly and indirectly through schemes of trade fairs and marketing centres. The loss of the Corporation during 2007-08 was Rs.7.57 lakh as against Rs.15.93 lakh in 2006-07 and the accumulated loss at the end of March 2008 was Rs.242.284 lakh. KADCO is approved as one of the state agencies for the implementation of schemes financed by the National Backward Classes Finance and Development Corporation (NBCFDC). For the direct sale of the artisans' products to the public, the Corporation is conducting exhibitions through out the state.

Bamboo Industry

- 8.56 Kerala is one of the major bio diversity centres for bamboo species. The State accounts for about 19 per cent of the total bamboo distributed in India. In Kerala, bamboo is used as a raw material in pulp and paper, bamboo ply and traditional industries. The pulp and paper and bamboo ply industry belongs to organized sector, while the traditional industry falls in the unorganized sector. The Bamboo industry in Kerala provides livelihood to about three lakh workers mostly belonging to the tribes and other weaker sections of the society, majority of which are women.
- 8.57 The Kerala State Bamboo Corporation was set up in 1971 by Government to ensure a steady supply of raw material to the artisans and reeds to cooperative societies and traditional users. At present, the major activities of the Corporation are conversion of reeds collected from forest into bamboo mat by traditional bamboo workers, manufacture and sale of bamboo ply, and sale of bamboo mats. About 21 Procurement Depots with its sub centres, nine Reeds Collection centres, 13 Reed Distribution Centres and one manufacturing unit for the production of Bamboo Ply are working under the Corporation. The total turnover of the Corporation during 2007-08 is Rs 1375 lakh, and the Corporation could achieve a profit of Rs 21.38 lakh during the period as against a loss of Rs 196.1 lakh in the previous year. The Corporation introduced the use of "Thick Core Mat" in the place of core mats now using in the production of bamboo ply and started the production of Flattened Bamboo Board with financial assistance from National Mission of Bamboo Applications (NMBA). The other major achievements of the Bamboo Corporation during the period under review are:
 - a. Started Five weaving Centers and generated employment opportunities to 257 Women workers.
 - b. Established Bamboo Flooring Tiles Factory at Kozhikode for Flooring Tiles. (Green Field High Tech Bamboo Products)
 - c. Strengthening of Mechanized Floor Mat Weaving Centres
- 8.58 The Kerala State Bamboo Mission was constituted in 2003 with the aim of marshalling the scattered resources of the State and adopting a focused approach to revitalise the sector. The State Bamboo Mission under K-Bip is designated as the Bamboo Development Agency (BDA) of the State for the implementation of the National Bamboo Mission Programmes. The major activities undertaken by the State Bamboo Mission during 2007-08 are:
 - ?? Kerala Bamboo Fest 2008 at Kochi
 - ?? Development of Bamboo Nurseries
 - ?? Participation in International Conference on Bamboo at New Delhi
 - ?? Participation in Aahar 2008, New Delhi

Coir Industry

8.59 Coir Industry is a traditional, labour intensive, export oriented and agro-based cottage industry. Coir fibre is extracted from the outer cover of the coconut - coconut husk. Indonesia, Philippines, India and Sri Lanka are the major coconut producing countries in the World. Eventhough India has only the third place in coconut production, she has the first place in coir

- production. A significant share of world coir production is from India (50.48%) and Sri Lanka (37.88%)
- 8.60 Coir Industry in India is an agro-based traditional rural industry, providing employment to 6.57 lakh people and largely confined to coconut producing States like Kerala, Tamil Nadu, Karnataka and Andra Pradesh. Two kinds of coconut fibres are produced in India, ie, White Fibre and Brown Fibre. The fibre extracted from green coconut husks by the process of retting is known as 'white fibre' and the fibre extracted from the dry husks/green husks by mechanical means is known as 'brown fibre'. Kerala is the largest producer of white fibre and other States like Tamil Nadu, Karnataka and Andra Pradesh are producing brown fibre.
- 8.61 Coir Industry is one of the major traditional Industries in Kerala, giving employment to 3.83 lakh workers and 76% of them are women. Coconut is a major cash crop in Kerala and it has a great influence on the economy. 30% of land is under coconut cultivation. The coconut husk is highly available in Malappuram district and low in Kottayam district. The availability of husk is in plenty in all districts in relation to its demand, except in Alappuzha and Kottayam. But all these husks are not properly collected for fibre extraction leading to shortage of fibre in Kerala.

The Coir Industry in Kerala is comprised of following 5 sectors:

- 1. Household Sector 2. Co-operative Sector, 3. Private Sector, 4. Export Sector and 5. Public Sector.
- 8.62 Household sector having the major share of the Coir Industry in Kerala, is engaged in spinning and weaving activities and fibre extraction. Low capital, traditional methods of production, exploitation by middlemen etc are the major features of this sector.
- 8.63 The Co-operative sector plays an important role in the Coir Industry of Kerala. The Coir Co-operatives are mainly of four forms, viz., Primary Coir Cooperative Societies, Coir Mats and Matting Cooperative Societies, Defibering Mill Societies and Small Scale Producers Co-operative Societies. A good number of Primary Cooperative Societies are not functioning effectively. Out of 826 registered Coir Co-operative Societies, only 434 are working, 170 Societies are dormant societies, 163 Societies are under liquidation and 59 Societies are new Societies which have not started functioning. Details of various types of Cooperative Societies, their activities during 2007-08 and the district wise details of Coir Cooperatives are given in Appendices 8.31, 8.32 and 8.33
- 8.64 There are so many large and small coir units which are neither household units nor under Co-operatives, but engaged in the production of different kinds of coir products. Such units include the manufacturer exporters, other manufactures in the public and small scale private sector. The exporters of Coir products can be categorized into two viz, manufacturer exporters and merchant exporters. The merchant exporters are exporting coir products sourced from other units.
- 8.65 The Coir Industry depends heavily on the export market. USA is the biggest importer of Coir Products from India, followed by UK, Germany, Netherlands, Spain, Italy, Canada, France, Australia and Belgium. The export market of Coir and Coir Products from India during 2007-08 was 187566.74 tonnes valued at Rs. 59288.08 lakh as against 168754.75 tonnes valued at Rs. 60516. 59 lakh in 2006-07. During the period under review, there was a decrease in the export earnings by Rs1228.51 lakhs. Among the items of export, Coir fibre, Coir pith, Coir rope, Coir Geotextiles, tufted mat, powerloom matting and rubberized coir achieved an increase in the

export earnings and curled coir, coir rugs, coir yarn, handloom mat, powerloom mat and handloom matting recorded a decrease. Item wise export of Coir and Coir products from India during 2006-07 and 2007-08 are shown in the Appendix 8.34.

8.66 Even though intensive steps were taken to revive the sector, it still remains as a sick traditional industry due to the competition from the products of other natural as well as synthetic fibers, both in domestic and international markets. Problems like non-professional management system in the co-operative sector, reluctance to adopt mechanization, shortage of husk due to the attack of mandari, unhygienic surroundings and conditions in the work area of traditional retting and beating operations have resulted in the reduction of fiber production and an unprecedented increase in the price of fiber in the State, and huge quantity of fiber have to be purchased from Tamilnadu. Unsatisfactory working of most of the defibering mills under Co-operative sector and absence of a mechanism for coconut husk collection also worsened the situation. Out of 72 defibering mill societies, 23 are not working 43 are dormant and only six are working. The stoppage of Minimum Export Price (MEP) and Rebate schemes by the Government of India has also contributed considerably to the present crises of the Industry, especially in the co-operative sector. Market Development Assistance (MDA), which was introduced in lieu of rebate system, was not much helpful either to Apex society (COIRFED) or to the Primary Co-operative Societies, because of the impracticable conditions stipulated for the utilization of MDA. As part of Government's effort to revive the existing defibering units in the co-operative sector and opening new units in the private sector, Coir Department is offering 50 percent subsidy on their capital investment limiting to Rs.10.00 lakh per unit.

8.67 The Kerala State Coir Co-operative Marketing Federation (COIRFED) is the apex organization in the Coir Cooperative Sector consisting of 585 member Societies producing Yarn, Mats and Mattings and operating defibering units. Coirfed has 108 showrooms all over the country, of which 51 are its own and the rest are run by the agencies behalf of Coirfed. During 2007-08, the sales turn over of the Coirfed was Rs.1214.44 lakh as against Rs. 1071.44 lakh in 2006-07. The major portion of coir yarn produced by the Primary Coir Co-operatives is marketed by the Coirfed. The coir products produced by Coir Mats & Mattings Co-operative Societies (CMMCS), Small Scale Coir Manufacturers Primary Co-operative Society (SSCMPCS) etc. are chiefly marketed by themselves and the Coirfed and KSCC also come for their marketing needs occasionally. During 2007-08 the annual turn over of the Foam Matting (India) Ltd (FOMIL) was Rs. 683.16 lakh as against Rs. 480.49 lakh during 2006-07. The annual turnover of the Kerala State Coir Corporation Ltd. (KSCC) was Rs. 1349.34 lakh during 2007-08 as against Rs. 293.52 lakh during 2006-07.

8.68 A comprehensive Geo-textile Programme has been launched for popularizing the concept and application of coir Geo-textiles. The coir Geo-textiles has been identified as a major coir product, with huge market potential in the multidisciplinary Geo-textile engineering applications. Coirfed, Kerala State Coir Corporation (KSCC) and Foam Mattings (India) Limited have been implementing many pilot projects and demonstration schemes for the popularization of coir Geo-textiles. The KSCC has implemented a number of projects in association with other research institutions for the development and promotion of coir Geo-textiles applications for varied purpose like erosion control, soil conservation, road construction etc. An amount of Rs.25.00 lakh was expended to implement the Geo-textiles Development Programme during 2007-08.

8.69 National Coir Research and Management Institute (NCRMI) has been conducting studies for the development of new coir technologies in collaboration with similar research organizations across the country like CIRCOT, NIRJAFT, RRL and NIT. NCRMI has created a brand image

for the coir products of the State viz. "Kerala Coir – Golden Yarn of God's Own Country" for improving market in international and domestic markets.

8.70 The State Government has been implementing various schemes for rejuvenating the coir industry. It includes, Regulated Mechanization of Coir Industry, Price Stabilization Scheme, Fund for Revitalization of Co-operatives, Rebate for exporters, Infrastructure Development, Common Facility Service Centre, Market Development Assistance etc. "The Coir Commission" constituted by the Government of Kerala recommended various measures to rejuvenate coir sector. It includes, Introduction of Husk Procurement Scheme, Modernization of the Sector, Encouraging both Private and Co-operative Sector, Strengthening of Coir PSUs / Coirfed, System to Ensure Adequate Modern Machinery for the sector and its maintenance, Strengthening of R & D System Formation of an Apex Body for Coir, and Kerala Coir Marketing Corproration and also Debt Relief to Coir Workers.

Khadi and Village Industries

- 8.71 The Khadi and Village Industries Board (KVIB) carried out its activities through cooperatives societies, registered institutions and departmental units by availing financial assistance from State Government, Khadi Commission and Nationalised Banks.
- 8.72 During 2007-08, under Rural Employment Generation Programme (REGP) of Government of India, Khadi Board has disbursed an amount of Rs.1288.79 lakh to 782 units as margin money grant by providing employment to 26781 persons. State level exhibition at Ernakulam, seven district level exhibitions and three awareness camps were organized by the Board during 2007-08.
- 8.73 Products worth Rs.127.13 crore were produced through the aided units of the Khadi and Village Industries Board and products worth Rs.144.64 crore were sold and employment provided to 105562 persons. Details of production, sales, employment and wages paid are given in Appendix 8.37.
- 8.74 The Board took a remarkable achievement in the weaving sector by replacing 200 numbers of old seven spindle charkas by new eight spindle charkas in the departmental production centres of Thiruvananthapuram, Kollam, Pathanamthitta, Kottayam and Ernakulam. The Board also extended production incentive to Khadi artisans in the State @ 20 paise per hank to spinners and @ 55 paise per hank used for weaving to the weavers.During 2007-08, Rs.83.92 lakh was disbursed to 9048 Khadi workers as production incentives.
- 8.75 During the period under review, 40 Grama Soubhagyas were computerized and 6 Khadi Soubhagyas of Khadi Board were renovated under Flagship scheme. The Board has 218 sales outlets for the products of Khadi and Village Industries and sold goods worth of Rs.1357.47 lakh during 2007-08. District wise details are given in Appendix 8.38.

Sericulture

- 8.76 Sericulture is an agro-based industry promoted as a subsidiary occupation in Kerala. State Sericulture Co-operative Federation (SERIFED) is the nodal agency for promoting sericulture activities. It is an apex body of Sericulture Co-operative Societies formed with the objective of developing sericulture and silk industry in the State through the member co-operative societies.
- 8.77 During the period under review the cocoon production was 79892.69 Kgs as against 101294 Kgs in 2006-07. There was a decrease in the production of cocoon by 21401.31 Kgs. The year-

wise performance in terms of mulberry plantation, disease free laying supply (DFLs), cocoon production and raw silk production is given in the Table 8.12. The district-wise details of physical achievements during 2006-07 and 2007-08 are given in Appendix 8.39.

Table 8.12 Status of Sericulture

Year	Mulberry Plantation in Acre (cum)	No. of Farmers (cum)	DFLs Distributed (Nos)	Cocoon Production (Kg)	Raw Silk Productio n (Kg)
1	2	3	4	5	6
2002-03	1414	2366	98369	33229	2602
2003-04	1981	3216	154125	59113	4041
2004-05	2435	3975	185025	77620	4112
2005-06	2800	4521	210055	92084	3761
2006-07	3383	5187	240462	101294	2770
2007-08	3626	5503	177275	79892	2690

Source: Serifed

8.78 During 2007-08, new mulberry plantation was done by 316 farmers covering 243.80 acres of land. A system of direct procurement of cocoon in the District Offices and its further sale was introduced by the Serifed . One new Open Cocoon Market was also started at Nilambur, in Malappuram district with an objective of easy marketing of cocoon for the districts of Malappuram, Kozhikode, Wayanad, Kannur and Kasaragod. An amount of Rs. 42.10 lakh was earned through the sale of cocoon at the open cocoon market Palakkad and Rs.16.61lakh through the open market Nilambur. During the period under review, 2.69 MTs of raw silk was produced by the Serifed .

Cashew Industry

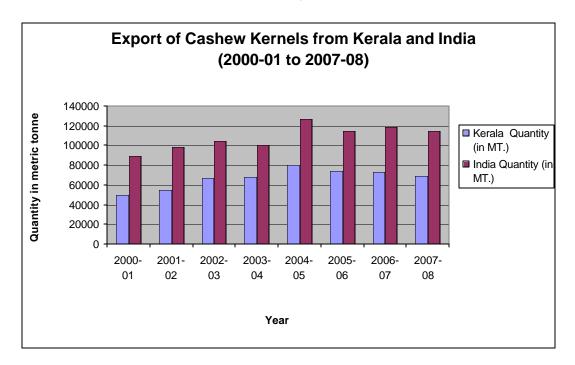
8.79 The total export of cashew kernels from India during 2007-08 was 114340 MT, valued at Rs.2289 crore in comparison with the export of 118540 MT cashew kernels valued at Rs.2455 crore during 2006-07. Details of export of cashew kernels from Kerala and India from 2000-01 to 2007-08 are given in Table 8.13. and Fig. 1

Table 8.13
Export of Cashew Kernels from Kerala and India from 2000-01 to 2007-08
(Quantity: MT, Value: Rs. Crore)

Year	Kerala India		Share of (per	Kerala cent)		
	Quantity	Value	Quantity	Value	Quantity	Value
2000-01	49874	1152	89155	2050	56	56
2001-02	54717	971	98203	1789	56	54
2002-03	66859	1217	104137	1933	64	63
2003-04	68119	1205	100828	1804	68	67
2004-05	79950	1716	126667	2709	63	63
2005-06	74376	1623	114143	2515	65	65
2006-07	72861	1505	118540	2455	61	61
2007-08	69298	1395	114340	2289	61	61

Source: Cashew Export Promotion Council, Kochi.

Fig. 1



8.80 The Kerala State Cashew Development Corporation (KSCDC) and Cashew Workers Apex Cooperative Society (CAPEX) are the two State agencies engaged in the cashew processing sector in Kerala. KSCDC owns 30 cashew factories spread out in the District of Thiruvananthapuram, Kollam, Alappuzha, Thrissur and Kannur. In KSCDC there are about 15000 workers and majority of them are women. KSCDC exports cashew kernels and cashew shell liquid. Raw nuts are mainly imported to supplement the local availability. During 2007-08 the Corporation provided employment for 165 days as against 195 days in 2006-07.

8.81 The sales turnover, working days in factories and loss of the corporation during the last seven years is given in Table 8.14.

Table 8.14
Performance of Cashew Development Corporation

Period	working days	Turnover	Loss
1 criou	in factories	(Rs. lakh)	(Rs. lakh)
2001-02	23	5083.69	2995.24
2002-03	nil	164.61	3033.54
2003-04	17	1222.31	1782.30
2004-05	67	3587.13	297.16
2005-06	230	9100.89	3968.17
2006-07	195	6381.84	1205.83
2007-08	165	6117.55	909.67

Source: KSCDC

8.82 CAPEX is the apex society of cashew workers primary societies with headquarters at Kollam. The Society owns 10 factories. There are about 4000 workers and 225 staff under this

apex society. CAPEX incurred a loss of Rs.417.78 lakh in 2007-08 while it was Rs.615.56 lakh in 2006-07.

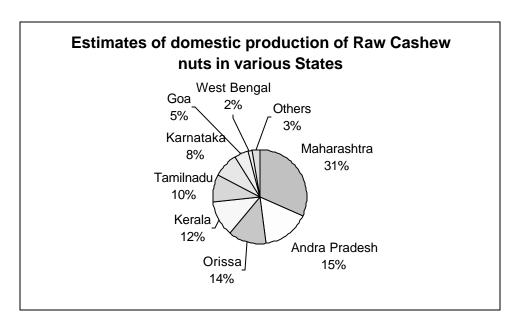
8.83 An estimate of domestic production of raw cashew nuts in various states during 2007-08 is given in Table 8.15 and Figure 1

Table 8.15
Estimates of Domestic Production of Raw Cashewnuts in various States

	2007-08					
States	Area (area hectares)	Production (MT)	Share of Production			
			(%)			
Maharashtra	167000	210000`	31.58			
Andra Pradesh	171000	107000	16.09			
Orissa	131000	90000	13.50			
Kerala	84000	78000	11.73			
Tamilnadu	123000	65000	9.77			
Karnataka	103000	56000	8.42			
Goa	55000	31000	4.66			
West Bengal	10000	10000	1.50			
Others	24000	18000	2.71			
Total	868000	665000	100.00			

Source: Directorate of Cashewnut & Cocoa, Cochin

Fig. 2



8.84 From the above table and figure it is clear that Maharashtra State occupies the top most position in the share of production followed by AndraPradesh, Orissa and Kerala. West Bengal has the least share of Cashew Production.

Beedi Industry

8.85 Beedi Industry in Kerala is concentrated on Kozhikkode, Kannur and Kasaragode. The Kerala Dinesh Beedi Workers Central Co-operative Society is the only agency in the State to promote beedi industry in the organized sector. During 2007-08, raw materials worth Rs.9.00 crore were procured and 151.00 crores(Numbers) of beedi were produced through the Society. The society provided employment to 11000 workers and the sales turnover during the year 2007-08 was Rs.40.00 crore while the net profit of the society was Rs.4.82 lakh. Further an amount of Rs.19.00 crore was paid as wages. The society has embarked upon product diversification programme and Dinesh Foods and Dinesh Umbrella are now in the market of Kerala. A Dinesh Garment Unit was started during 2006-07 and training was given to 350 persons.

Industrial Promotion

8.86 Promotional institutions and public sector manufacturing units are given prime focus under the programmes of medium and large industries. Government of Kerala assists the industrial units by providing financial assistance, infrastructure and training / consultancy services. Government encourages all sorts of investments on mutually beneficial terms which will positively contribute for the growth of the economy, employment generation and increase in tax revenue. Important agencies / departments engaged in industrial promotion in the State are the following: (1) Kerala Financial Corporation (KFC) (2) Kerala State Industrial Development Corporation (KSIDC) (3) Small Industries Development Bank of India (SIDBI) (4) Kerala Industrial Infrastructure Development Corporation (KINFRA) (5) Infrastructure Kerala Ltd (INKEL) (6) Directorate of Industries and Commerce (DIC) (7) Kerala Small Industries Development Corporation (SIDCO) (8) MSME Development Institute (formerly SISI) (9) Kerala Industrial and Technical Consultancy Organisation (KITCO) (10) Kerala Bureau of Industrial Promotion (K-bip) and (11) Centre for Management Development (CMD)

Industrial Financing

8.87 Kerala Financial Corporation (KFC) is one of the oldest industrial Financing Agency in the State and it has been providing finance to a large number of projects and enterprises. It has sanctioned 523 projects at a total cost of Rs. 24531 lakhs. Out of this Rs.18643 lakhs has been disbursed for 444 projects. This includes 175 SSI units for Rs. 4316 lakhs.

8.88 During the financial year the total recovery was Rs. 22168 lakhs. The operating profit of the Corporation is Rs. 2183 lakhs which is 92% more that of previous year.

Kerala State Industrial Development Corporation (KSIDC)

8.89 KSIDC is the premier industrial and investment promotion agency of the State Government. Established in 1961, KSIDC constitutes a group of professionals from various fields including engineering, management, finance and law who breathe life into business concepts and help investors through planning and implementation. KSIDC's strategic alliances with leading management consultants, ventures fund managers as well as financial institutions and its commitment to value added assistance make it a single point contact for all investors. KSIDC, the nodal agency for foreign and domestic investments, provides comprehensive support for investors with an ideal road map. From identifying viable projects, providing financial assistance and helping through the entire project till implementation and running of the industry, KSIDC caters cutting – edge assistance for all industrial requirements

- 8.90 KSIDC Consulting Services (KCS) leverages its deep understanding of business processes in Project Development, Management and Fund Management to help clients to identify opportunities for new business and growth. The KCS offers services in a variety of consulting areas such as Project identification, Project Report, Market Survey, Technology tie ups and Turn key Project Management Services etc.
- 8.91 During the year 2007-08, KSIDC had assisted 12 projects with a total investment of Rs. 35 crores, and direct employment potential for 941 persons. Since its inception in 1961, the corporation has assisted 659 projects with an outlay of Rs. 5059 crores.
- 8.92 During the reference year, KSIDC sanctioned financial assistance to 23 projects with an estimated investment of Rs. 339 crores. When completed, these projects can provide direct employment to 2548 persons.
- 8.93 29 projects with an aggregate cost of Rs. 636 crores were under implementation as on 31st March 2008. On completion, these projects will provide employment to 3188 persons.
- 8.94 The total financial sanctions (comprising share capital and loans) for various industries during the reference year amounted to Rs. 98.12 crores
- 8.95 Total disbursement during the year was Rs. 62 crores including share and loan. Since 1961, the corporation has disbursed a total of Rs. 928 crores by way of equity, loan etc.
- 8.96 The Corporation's total recovery of principal and interest on loans from assisted units amounted to Rs. 97 crores
- 8.97 The operating profit of the corporation for 2007-08 was Rs. 22 crores as against Rs. 42 crores last year.
- 8.98 The KSIDC is implementing Major development project at Nadapuram, Kodungalloor, Kuzhalmandam, Vadakkekara and Kutiyadi. Apart from this KSIDC is also implementing a Mega Power Project at Kasargod, Industrial growth centres, IDB-Medical/Industrial Township at Kozhikode, Education complex at Malappuram and Apparel part at Kannur.

INDUSTRIAL INFRASTRUCTURE

Kerala Industrial Infrastructure Development Corporation (KINFRA)

- 8.99 KINFRA, the premier Industrial Infrastructure development agency of the State has been following a conscious effort towards developing industrial infrastructure in the State, specifically aimed at economic development by setting up industrial parks/Townships/Zones etc which provide all facilities required for entrepreneur for starting industries in the thrust sectors identified in the Industrial Policy.
- 8.100 Following were the major activities of KINFRA during the year 2007-08.
 - ?? Expansion of KINFRA International Apparel Park, under APES scheme has been completed.

- ?? Augmentation of utilities like power and water supply by KINFRA Export Promotion Industrial Park, Kochi to Info Park and Smart City projects under ASIDE scheme are in progress.
- ?? Development of an Integrated Infrastructure Development Centre & Food Processing Park in 85 acres of land at Enadimangalam village of Adoor Taluk, with financial assistance of Government of India, is nearing completion and allotment procedures are expected to commence in December 2008.
- ?? Setting up of a Textile Centre in 126 acres of land at Taliparamba in Kannur District with financial assistance under Textile Centre Infrastructure Development (TCID) Scheme of Ministry of Textiles, Govt. of India, has been completed. The allotment of land would start from January 2009.
- ?? Work is in progress for the establishment of an Integrated Textile Park in 350 acres of land at Palakkad under SITP Scheme of Ministry of Textiles, Government of India, to provide the textile industry with world class infrastructure facilities for setting up textile units.
- ?? The development of a Small Industries Park in Kunnamthanam, Pathanamthitta, is nearly complete and allotment procedure is expected to commence from December 2008.
- ?? The construction of the Biotechnology Incubation Centre in the Biotechnology Park, Kochi, has been completed and procurement and equipments/instruments/apparatus for the facility has commenced.

Public private partnership initiatives

- 8.101 M/s Manipal Universal Learning's, Bangalore, has been selected as the private partner for the International Animation School in KINFRA Film and Video Park, Trivandrum,
- 8.102 M/s TCG Urban Infrastructure Holdings(P) Ltd., Mumbai the private sector participant for the development of the Biotechnology Park in 50 acres of land at Kalamassery has submitted their Master Plan to the Ministry of Environment & Forests for obtaining environment clearance for the project.
- 8.103 M/s Zoom Developers the private sector participant setting up the International Exhibition and Trade Centre in 40 acres of land at Kalamassery, has submitted the detailed drawings for the construction of the first phase of the Trade Centre and work at site has commenced.
- 8.104 M/s SFO Technologies, the co-developer setting up the SEZ for Electronics at Hi-Tech Park, Kalamassery, has signed an agreement with EPV Solar Inc., USA for the project and the Master Plan for this is now under preparation.

New Projects of KINFRA

Electronics Park in 450 acres of land in Mangaswaram, Kasargode district

ZeIndustrial Park in 100 acres of land in Ottappalam, Palakkad District

Expansion of Textile Centre at Nadukani, Kannur,

See Food Processing Park in 50 acres of land at Konni in Pathanamthitta District

ZEFootwear Industrial Park in 50 acres of land at Kozhikode.

8.105 Kinfra has Industrial Park in various parts of Kerala with 313 operating units and an investment of Rs.668 crores and provided employment to 19304 persons during the period under review.

8.106 Details of allotment, investment and employment in Kinfra Industrial parks is given in Table 8.16

Table 8.16
Allotments in KINFRA Industrial Park as on 31.03.2008

Sl.No	Sl.No Name of the Park		Area Al	lotted	Investment	Employment
		units	Land	Built-up Space	(Rs. lakh)	(Nos)
1	KINFRA Small Industries Park, Trivandrum	59	32.76		6111.78	1940
2	KINFRA International Apparel Park Trivandrum	15	17.17	291856	9329.60	5043
3	KINFRA Film and Video park, Trivandrum	14	24.75		8629.11	3661
4	KINFRA Export Promotion Industrial Park, Cochin	15	61.57		15552.85	2983
5	KINFRA Small Industries Park, Mazhuvannur, Ernakulam	55	39.45		5866.37	1746
6	KINFRA Small Industries Park, Koratty	23	14.81		2040.08	488
7	KINFRA Food Processing Park, Kakkancherry	23	19.19		4645.20	580
8	KINFRA Small Industries Park, Thalassery	25	33.45		4569.00	967
9	KINFRA Small Industries Park, Seethangoli	41	34.93		4101.78	778
10	KINFRA Small Industries Park, Kalpetta	15	6.72		2402.91	321
11	KINFRA Neo Space, Malappuram	22		35,448	766.26	497
12	KINFRA Park, Palakkad	6	307.71		2785.00	300
	Total	313	592.51	327304	66799.94	19304

Centre for Management Development (CMD)

8.107 Centre for Management Development (CMD) taken up variety of studies/research activities during 2007-08 for Government of India, Government of Kerala and other agencies. It

continue to provide professional support to RIAB. The major activities undertaken by CMD during 2007-08 are given in Box No. 8.2

Box No. 8.2 Major activities of CMD

- ?? Monitoring of Rashtriya Sam Vikas Yojana
- ?? Study on financial inclusion. Indebtedness of farmers and N on farmers causes of farmers suicides sponsored by SLBC.
- ?? Studies for BPE
- ?? Review of Public Enterprises in Kerala 2006-07
- ?? Studies for Coir Board, Ministry of Micro small and medium enterprises, Government of India.
- ?? Assessment of pre-project information of Intensive Dairy Development Programme for Malabar Regional Co-operative Milk producers Union Ltd.,
- ?? District perspective plan for Kasargode District
- ?? Management Development Programmes and Micro Enterprises Development
- ?? Vocational Training Programmes for the beneficiaries of SGSY.
- ?? Capacity Building Programmes for State Horticulture Nurseries.,

Special Economic Zone

8.108 Special Economic Zone provides high quality and world class infrastructure designed to render cost of products, delivery, logistics and transactions competitive on global basis. The special policy disseminated by the Central Government provides for setting up of SEZs in the public, private, joint sector or by State Governments. The units operating in Special Economics Zones are excluded from the sectoral restrictions prevalent in the conventional manufacturing sector. Apart from this, these units also enjoy other benefits like single-window clearance,100 percent excemption of income tax for the first five years, self certificate of activities exempted from routine customs check etc.,

Cochin Special Economic Zone(CSEZ)

- 8.109 The Cochin Special Economic Zone(CSEZ) is one of the seven Special Economic Zones of Central Government. It was set up as a Multi-Product Export Processing Zone in 1984 to boost exports from the State. The Cochin Export Processing Zone was converted into a special Economic Zone in November 2000. Spread over an area of 103 acres in the newly emerging Kakkanad, mere five kilometres away from the city center, on the Cochin Seaport Airport Highway, it is well connected to the National Highway network.
- 8.110 CSEZ is a multi product zone with 81 working units and four under implementation units in sectors as varied as software, hardware, engineering, readymade garments, food processing, rubber products gem & jewellery,manufacturing and with more than 7800 employees making it the single employment destination in the State. Both Multi National Corporations and domestic corporate have set up their units in this Zone. Export during 2007-08 was of Rs.4651.40 crore during 2006-07 thereby registering a growth of 348 percent. The quantum jump in export performance was due to few units of gem and jewellery coming into operation in full swing.
- 8.111 CSEZ stands out amongst the SEZ in India as having the world class infrastructure for attracting investors globally. Besides operating the Central Government owned CSEZ, the jurisdiction of the Development Commissioner extends to new SEZs being set up in Kerala &

Karnataka and also the 100% export oriented Units(EOUs) in Kerala, Karnataka, Lakshadweep and Mahe.

- 8.112 During 2007-08 74 units have been in operation and 14 are under implementation in Kerala. One unit operates in Lakshadweep. Exports from Export Oriented units of Kerala was of Rs.1149.37 crore during 2007-08 has against Rs.1073.688 crores in 2006-07.
- 8.113 CSEZ being the only multi sector SEZ in the state and the land area stands fully utilized. In order to meet the growing demand for SEZ space from manufacturers, a proposal for expansion of the zone by notifying another 125 acres of land in Cherthala in the hands of KSIDC has been mooted.
- 8.114 Three Special Economic Zones viz., Kinfra films and Video Park and Kinfra Food processing zone and Kinfra Electronics Sez have been notified in Kerala during 2007-08 in addition to the five SEZ notified during the previous year. The industry wise export performance of units in CSEZ 2003-04 to 2007-08 in shown in Table 8.17

Table 8.17
Industry – wise export performance of units in cses 2003-04 to 2007-08

Sector	No. of Exporting Units as on 31.10.2008	Export Performance (Rs. Lakhs)				
		2003-04	2004-05	2005-06	2009-07	2007-08
Electronic Hardware	8	17938	29771	32794	33000	26480
Electronic Software	22	1067	1083	1388	4903	12087
Garments	5	1777	2287	5536	9267	11965
Gem & Jewellery	8	1849	2641	2587	21894	382447
Plastic & Rubber	8	3566	2817	2665	4340	2792
Engineering	11	2620	3707	5752	6078	5647
Food & Agro Products	9	6680	5491	6562	13088	12904
Others	28	4922	15919	12116	11182	10818
Total	99	40419	63716	69600	103752	465140

Mining

- 8.115 Kerala is rich in deposits such as heavy mineral sand, china clay, iron ore graphite, bauxite, silica sand lignite lime shell etc., But mining activities are large scale based on mainly to four minerals, such as heavy mineral sand china clay silica sand limestone and graphite. About 90 percent of the total value of mineral products in the state is lying covered by heavy mineral sand and china clay. Department of Mining and Geology has undertaken exploratory drilling for china clay in the following areas.
 - ?? Kanjiramcode area, Kollam districts
 - ?? Kommungal padvau in Kasaragod
 - ?? Moonnu road Malapacheri in Kasarkode district
- 8.116 The department has taken up a programme for mineral root mapping in all districts of Kerala to prepare a minor mineral database. The work was undertaken as per the

recommendation of the public accounts committee(PAC) of Kerala Legislature. Survey of minor mineral quarries in Thiruvananthapuram district was completed and data on 870 minor quarries collected over an area of about 2192 sq.ft. in four taluks. The work in Kottayam district has been commenced and 461 mineral quarries have been inspected and data collected over an area of 211 sq. km. covering four Taluks. As part of the investigation and proven iron ore deposits in Kozhikode and Malappuram districts, a survey was carried out in different areas covering 97 sq.km. A study was also carried out in poomala dam in Trissur district relating to desilting and utilization of silt as an alternative raw material for tile industries. The Department has undertaken work of demarcating the areas suitable for Tile/Bricks clay mining in Kozhikode, Trissur and Malappuram in association with Revenue and Agriculture departments.

8.117 During 2007-08 the Department has collected a revenue of Rs.31.08 crores which constitute 17% increase against 2006-07 revenue collections. For the year 2008-09 the department could collect Rs.13.27 crores upto .August 2008. The revenue collection for the last 5 years is given in Table 8.18.

Table 8.18

Details of Revenue collection for the period from 2004-05 to 2008-09

(Rs. Crore)

Year	Major Minerals	Minor Minerals	Total
2004-05	6.57	13.77	20.34
2005-06	7.33	16.27	23.60
2006-07	6.54	19.93	26.47
2007-08	7.05	24.03	31.08
2008-09 *	3.06	10.21	13.27

Source: Mining & Geology Department. * Upto August 08

8.118 During 2007-08 the Gem testing laboratory had tested 1542 gem stones by collecting Rs.4.49 lakhs which is lower than that of 2006-07. But during 2008-09 upto September 2008 1584 gem stones were tested by collecting Rs.4.67 lakh.

CHAPTER 9

TOURISM

- 9.1 Kerala, promoted as "God's Own Country" is blessed by nature with varied geographical features like beaches, hill stations, backwaters, national parks & wild life sanctuaries. Befittingly, Kerala was adjudged as one of the "Ten Paradises of the world" by the National Geographic Traveler. Its unique culture and traditions, coupled with its varied demography has made Kerala one of the most popular tourist destinations in the world.
- 9.2 Popular attractions in the state include the beaches such as Kovalam, Varkala, Marari, Bekal and Kannur. Kerala's most popular backwater destinations are Kumarakom, Alappuzha, Kollam, Kochi and Kozhikode, and its best known hill stations are Ponmudi, Munnar, Wayanad and Wagamon. Kerala has a number of well-known wildlife reserves, including the Periyar Wildlife Sanctuary, Eravikulam National Park, Thattekkad Bird Sanctuary and Parambikulam Wildlife Sanctuary.
- 9.3 Health / wellness tourism has been one of the strongest growth sectors over the past few years for Kerala, which has attracted attention as the home of Ayurvedic medicine an ancient Indian science of natural medicinal herbs used for curative and relaxation purposes. Kerala is extremely rich in terms of culture and heritage- the traditional classical and folk arts in the state dates back over a thousand years.

Kerala's model for success

- ?? Strong Brand positioning
- ?? Thinking out side of the Box
- ?? Product Differentiation
- ?? Model public/private partnership
- ?? Tremendous political support
- ?? Public Acceptance

Performance of Kerala Tourism

9.4 Kerala is today the most acclaimed tourist destination in India with its Super brand 'God's Own Country' and is continuing as one of the prime tourist destinations of South Asia. Tourism industry in Kerala not only facilitates infrastructure development but also help in balanced and sustainable regional growth by generating income and creating employment opportunities. Global economic slowdown is expected to impact the tourism sector globally and regionally. The challenge of Kerala's tourist sector is to see how Kerala tourism could cope up with the crisis and how to structure its activities to a competitive advantage.

Tourist Statistics

Foreign Tourist Arrivals

9.5 Kerala achieves highest growth rate in tourist arrivals. The number of foreign tourist arrived in Kerala in the year 2007 is 515,808 against 4,28,534 in 2006. It shows an increase of 20.37 per cent over the previous year. The average annual growth rate of foreign tourist arrival since 1991 is 25 per cent. During the last year Kerala has contributed 10.36% of the total foreign tourist arrivals to India. Appendix 9.1 gives the details of foreign tourist arrivals in Kerala and in India

from 2003 to 2007. Fig 9.1 gives a comparison of growth of foreign tourist arrivals in Kerala and India.

5081504 6000000 4429915 3915324 5000000 4000000 3000000 ■ India (Nos.) 2000000 ■ Kerala (Nos.) 428534 1000000 2003 2004 2005 2006 2007 Year **Foreign Tourist Arrivals**

Fig.9.1

Domestic Tourist Arrivals

9.6 The number of domestic tourists to Kerala in the year 2007 is 66, 42,941 against 62,71,724 in 2006. It shows an increase of 5.92 per cent over the previous year. Appendix 9.2 gives the domestic tourist arrivals to Kerala from 2003 to 2007. The growth in foreign and domestic tourist arrivals to Kerala from 2003 to 2007 is given in fig 9.2.

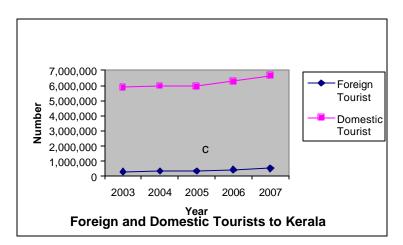


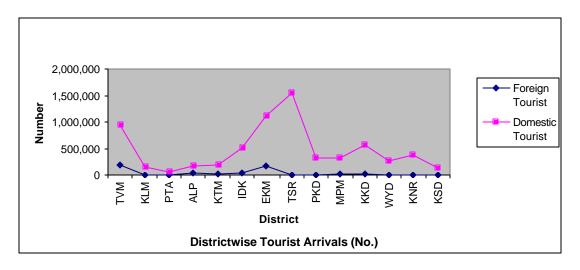
Fig 9.2

District wise arrival of foreign and domestic tourists in Kerala.

9.7 It is observed that Thiruvananthapuram and Ernakulam are continuing as the leading districts for the last few years on the basis of foreign tourist's arrivals to Kerala. Thrissur and Ernakulam are the leading districts on the basis of the domestic tourist's arrival to Kerala. The leading district for foreign tourist's arrival to Kerala is Thiruvananthapuram and that for domestic tourist's arrival is Thrissur. The district wise arrival of foreign and domestic tourists for the last

two years is given in Appendix 9.3. Figure 9.3 gives the comparison of District wise arrival of foreign and domestic tourists in Kerala.

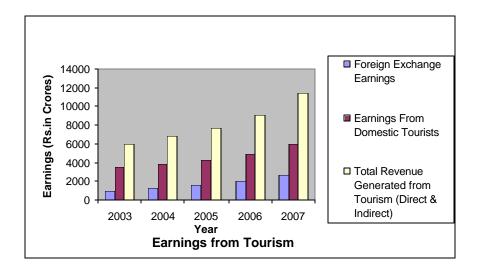
Fig 9.3



Indicators on Economic Impact of Tourism

- 9.8 The tourism sector happens to be one of the largest earners of foreign exchange in the World, and has acquired tremendous significance in recent years. The sector is growing at a fast pace, especially in the developing countries. The tourism industry is a major contributor to the State's economy.
- 9.9 Appendix 9.4 gives earnings from foreign tourists from 2003 to 2007. It is found that the foreign exchange earning during the year 2007 is Rs.2640.94 crore which recorded a growth of 32.82 per cent over the previous year. The total revenue generated from tourism comes to Rs. 11433 crore, showing an increase of 25.28 per cent over the last year and the tourism contribution to state's GDP is 7.70 per cent. The total employment generated from tourism is around 10 lakhs including skilled, semiskilled and unskilled employment. The tourism investment per year in the state is approximately Rs. 1000 crore. From the graph shown below, it is clear that earnings from Tourism show an increasing trend over the years.

Fig. 9.4



State Financial Assistance

9.10 The State plan allocation for tourism for the years 2004-05 to 2008-09 are given in Appendix 9.5. The Department of Tourism has spent cent per cent of its plan allocation during the last year.

Central Financial Assistance

- 9.11 The Ministry of Tourism, Covernment of India assists State Government in executing the following schemes.
 - ?? Assistance for development of Dams at Neyyar, Peechi, Vazhani and Malankara
 - ?? Assistance for development of craft village at Iringal, Kumarakom and Vagamon

The Central Plan Allocation for Tourism for the years 2004-05 to 2008-09 is given in Appendix 9.6

Marketing Initiatives

- 9.12 Kerala Tourism is noted for its innovative and market focused campaigns.
 - ?? New initiative for the promotion of Monsoon Tourism
 - ?? New initiative for promoting Kerala as one of the best health tourism destinations in the World

Cultural Initiatives

- 9.13 The following are the Cultural Initiatives
 - ?? Onam week celebrations with great people participation
 - ?? Joint Initiative with Cultural Department to promote traditional arts and festivals
 - ?? State wide programmes for the promotion of local cultural programmes

New Policy Initiatives

- 9.14 The new initiatives of Kerala Tourism during 2007-08 are as follows
 - ?? New policy initiative on Responsible Tourism
 - ?? Destination Management Committees to be formulated in every tourist destinations
 - ?? Initiated action for starting Tourist Information Offices at West Bengal and Mysore
 - ?? Initiated schemes for promoting souvenir industry
 - ?? District Tourism Promotion Council's reconstituted
 - ?? Initiative for identifying lesser known and unseen places for developing into tourist centers with necessary infrastructure
 - ?? Initiative to develop more dormitory accommodations at major tourist centers

Top Performance

- 9.15 Department of Tourism has initiated various projects for the development of basic infrastructure at tourist destinations, improvement of tourism attractions at the destinations. The following are the important initiatives that perform the best:-
 - ?? **Responsible Tourism** Responsible Tourism is adopted as the cornerstone for the tourism development in Kerala

Implementation of first Phase of Responsible Tourism at Kovalam, Kumarakam, Thekkadi and Wayanad.

Host of International Responsible Tourism Conference during March 2008 in Kerala.

- ?? **Synergy Quest:-** Synergy Quest is one kind of tourism research project launched by Kerala tourism to assess the impact of marketing initiatives of Kerala Tourism
- ?? My Village, Tourism Friendly Village:- Scheme launched to identify and develop unknown rural tourist destinations with participation of local bodies
- ?? Wake up to Malabar:- It is a comprehensive plan to promote North Kerala
- ?? **Kerala Souvenirs:-** A unique project launched for the design and development of capacity building
- ?? Let's Learn:- This unique human resource initiative is launched for skills development in the tourism and hospitality sector
- ?? **Grand Kerala Shopping Festival:-** In this bold initiatives, effects are underway to make Kerala the shopping hub in the country
- ?? **Utsavam:-** It is a year long festival of traditional arts spread throughout the State.
- ?? **Dream Season:-** Dream Season campaign launched to tackle seasonality
- ?? Monsoon Tourism
- ?? International Convention Centre at Thiruvananthapuram is opened
- ?? **Home Stay:-** Promotion and classification of home stay opportunities throughout Kerala
- ?? **Vazhiyoram:-** Vazhiyoram is a unique scheme for development of way side facilities through private participation
- ?? Tourism Conservation & Preservation Act Enacted to regulate tourism development

Supporting Agencies/Organisations

Kerala Tourism Development Corporation (KTDC)

- 9.16 KTDC is a commercial agency, which is actively participating in building up basic infrastructure needed for the development of tourism in the State. They operate star hotels, budget hotels, motel Araams and way side facilities, Yatri Nivases, restaurants and beer parlours, central reservation systems and conducted tours.
- 9.17 The number of bed available for the year 2007-08 is around 411700. Of this domestic tourists occupied 106123 and foreign tourists 19532 beds. The details of income and operational expenditure for the year 2007-08 is given in Appendix 9.8
- 9.18 The hotel sector forms one of the most important parts of tourism industry. Kerala has to its credit a total of 7654 rooms in classified hotels, the maximum number of rooms being in 3-Star categories. The details of availability of accommodation facility in classified hotels in 2006 and 2007 are given in Appendix 9.7.

District Tourism Promotion Councils (DTPC's)

9.19 The District Tourism Promotion Councils have undertaken the responsibility of creating and marketing local tourism products and opportunities. They are constantly improving the quality standards of these tourism products and services through surveys and other data collection means. The DTPCs also monitor and supervise the levels of sanitation in tourist areas. Other related activities of the DTPCs are the creation of awareness of the facilities and services in their

specific area as well as the development of tourism clubs and the dissemination of tourism specific information.

Tourist Resort (Kerala) Ltd (TRKL)

- 9.20 Tourist Resort (Kerala) Ltd is the agency meant for joint venture projects and they already started joint venture companies with TAJ and OBROY Hotel groups. It also overseas the Land Bank Scheme. The major achievements of TR(K)L during the year are:
 - ?? The first phase of Sarovaram Project at Kozhikode is being completed.
 - ?? The whole work of the heritage circuit development of Thalasery and Surroundings are in progress.

Bekal Resort Development Corporation (BRDC)

- 9.21 Bekal Resorts Development Corporation Ltd. is a company formed by the Government of Kerala for developing beach destination at Bekal. The aim of BRDC is to develop the infrastructure needed for tourism development centered at Bekal beach. The following are important achievements of BRDC during the period.
 - ?? Sites were undertaken and developed
 - ?? Infrastructure facilities like Water supply, Road networks, Solid waste management, Bekal fort rest house renovation, parking area near bekal kotta are developed.

Kerala Institute of Tourism and Travel Studies (KITTS) and Food and Craft Institures (FCIs)

9.22 These institutes are actively involved in the recruitment, training, and placing of quality staff in the tourism site throughout Kerala. All aspects of Human Resources Development for the tourism and hospitality sectors are impacted by KITTS and FCIs by establishing and monitoring the quality regulations of the Tourism and Travel Training Institutes.

Eco - Tourism

- 9.23 Kerala is famous especially for its ecotourism initiatives. Tourism is an environmental development industry .The following are the objectives of Eco-tourism.
 - ?? To convert entire tourism industry in Kerala into Eco-friendly mode
 - ?? To strengthen Eco-tourism development initiatives in the State.
 - ?? To ensure local community involvement in tourism initiatives leading to employment and income generation.
 - ?? To create public awareness and involment in responsible tourism development.

The nmala Ecotourism Project

9.24 The first phase of the Thenmala Ecotourism project was inaugurated during 1999 with the commencement of boating in the Shenduruney Wildlife Sanctuary Reservoir and the Deer Rehabilitation Center. The second phase of the Thenmala Ecotourism project was inaugurated during 2001 with the commencement of eco-friendly general tourism activities like Leisure Zone with Sculpture Garden, Board Walk, etc., Adventure Zone with Elevated Walkway, Mountain Biking, Rock Climbing, River Crossing and Culture Zone with the facilitation center, Musical Dancing Fountain, Amphitheatre, Restaurant etc.

9.25 The details of the revenue generated and the number of tourists visited from 2000 to 2008 are as detailed below

Table 9.1
No. of Tourists visited & Revenue Generated from
Thenmala Ecotourism Project

Financial Year	Number of tourist visited	Revenue generated
		(in rupees)
2000-2001	26148	445437
2001-02	41161	1138839
2002-03	65075	2147985
2003-04	118404	4044571
2004-05	104622	3563820
2005-06	114443	3926430
2006-07	120178	4954459
2007-08	104758	4602536
April 2008 to	4278 (Aprox)	2218998
September 2008		

Source: Directorate of Ecotourism

9.26 During this year new adventure activities like flying Fox, Valley Crissing, Burma Bridge, Commando Net, Snorkeling, Goan banana, Trampoline, Trust fall, Short range, Archery etc. were introduced in the adventure zone making Thenmala a destination providing adventure activities all round the year. The Government had accorded sanction for the purchase of two higher capacity boats in order to enhance the boating experience for visitors at Thenmala.

Ecotourism initiatives Implemented Through Forest Department

- 9.27 The Forest Department is evolving modalities for developing community based ecotourism products to the already identified potential ecotourism spots through the institution of Vana Samrakshana Samithy (VSS) / Eco Development Committees (EDC) ie., the committee of the local dependent communities. Certain successful models of these efforts are programmes at Athirappally, Vazhachal and Thekkady. Community led ecotourism activities are already in place at Palaruvi, Kallar, Chinnar, Aralam, Thommankoothu etc.
- 9.28 During the year Government of Kerala had accorded sanction for implementing the centrally sponsored scheme named southern ecotourism circuit aimed at a series of ecotourism developments so as to form a circuit. The areas in the circuit include.
 - ?? Neyyar Wildlife Sanctuary (Thiruvanathapuram District)
 - ?? Thenmala (Kollam District)
 - ?? Konni Ecotorism (Pathanamthitta District)
 - ?? Gavi (Pathanamthitta District)
 - ?? Periyar Wildlife Sanctuary (Idukki District)
 - ?? Munnar (Idukki District)
 - ?? Chinnar Wildlife Sanctuary (Idukki District)
 - ?? Chulannur (Palakkad District)
 - ?? Kambamala (Palakkad District)

Jadayupara Tourism Project

- 9.29 Jadayupara is a huge bear rock with small rock boulder in the Kottarakkara taluk of Kollam district. From the name itself it is understood that this is connected to the legendary bird Jadayu in the epic Ramayana. The proposed project is to be developed in the 63 acres provided to Department of Tourism. It is proposed to develop the road and its surrounding as an ecofriendly tourism spot targeting tourists with pilgrim interest, nature speciality interest, picnic interest and ethnic interest.
- 9.30 The park shall be divided into three zones the introductory zone, the assembly zone and the rock top. The works pertaining to the first phase of the introductory zone is completed which includes approach road, car parking, reception center with information counter, restaurant and walkway leading to the top of the rock and further ascending down. These facilities could be opened to tourists soon.
- 9.31 The major attraction of the place will be the sculpture of Jadayu on the top of the rock. The sculpture is progressing well in the direction of the creation of the sculpture. The sculpture is expected to be completed by 2010.

Promotion and Publicity

- 9.32 The Department of Tourism has taken up various innovate initiatives in the areas of promotion and publicity. The result is evident from the very high growth rate of tourist arrivals in Kerala. The major initiatives in these promotions include conducting fairs and festivals, participation in major tourism marts, advertising in print and electronic media etc. The following are some International and National festivals and fairs participated by Kerala Tourism.
 - ?? Arabian Travel Mart at Dubai 22 International Leisure Travel Mart at France ?? World Travel Mart at London ?? FTTUR – 07 at Spain ?? International Travel Borse at Berlin ?? Travel and Tourism Fair, Bangalore, Chennai and Kolkatta ?? India International Travel Mart, Mumbai ?? India International Trade Fair. New Delhi ?? South Asia Travel and Tourism Exchange, New Delhi
- 9.33 In short, the Tourism Industry in Kerala witnessed a remarkable growth in this year in the field of number of foreign and domestic tourists arrival, earnings from tourism, investment in tourism and total employment generation.

Awards & Recognitions

- 9.34 Kerala Tourism continued to win world wide awards and recognitions and few of them are listed
 - ?? Best Tourism State Award from Government of India in 2006-07. This was followed by two related awards best tourism village **Aranmula** and best tourism website-**W.W. Kerala tourism.org.**
 - ?? Smart Travel-Asia selected Kerala as its 3rd best tourism destination

- ?? Kerala is one of the three top finalists in WTTC's "Tourism for tomorrow" international destinations competition.
- ?? Berlin Golden City Gate Award (ITB Berlin) for the "Best Tourism Film".
- ?? PATA Grand award for "Zero Waste" in the Environment category and two Gold awards for "Kumbalangi Tourism Village and Ayurveda Mantra of Nirmaya.
- ?? UNESCO awarded Asia Pacific Heritage Awards for Heritage Conservation, 2006

Threats to the Tourism Industry

9.35 The major threats to the Tourism industry are Global Warming and changing weather patterns, Differing monsoon pattern and Global recession

CHAPTER 10

INFRASTRUCTURE

Kerala had over the years developed a good infrastructure. Now the main challenge is its upkeep and upgradation. The infrastructure sector requires a lot of coordination among various agencies in the field. Central agencies like Railways, National Highways, National Waterways, Ports, Post and Telegraphs/ Telecommunications and Civil Aviation Authorities play a significant role in providing infrastructure facilities.

- 10.2 Kerala is a leading state in terms of infrastructure penetration and a very popular tourist destination. Kerala is among the well performing states in India and holds and important position on the industrial front. The State holds significant industrial potential owing to good infrastructure facilities like power, transport system, air ports, ports and availability of rare minerals.
- Transport Infrastructure is the backbone of a nations economy and has become one of the most critical elements of economic liberalization strategies of countries throughout the world. Transportation in India is a critical infrastructure for economic growth. The major development indicators of Transport and Communication sector in the state since 2000 are given in Appendix. 10.1

Road Transport

10.4 Of the various modes of transport, Road Transport is vital to economic development, trade and social upgradation. India has a large network of roads aggregating 3.34 million Kms, comprising National Highways, State Highways, Major District Roads, Rural Roads and Urban Roads making it one of the largest road networks in the world.

Road Network in Kerala

10.5 Kerala has a total road length of 173592 km during 2007-08 where as the total road length during 2006-07 is 162149 km showing an increase of 7.06 %. Road density in the state during 2007-08 is 446 km/100sq.km and is much more than the road density over the previous year (417km/100sq.km) Agencies maintaining roads in the State include PWD(R&B), Panchayats, Municipalities , Corporations, Forests, Irrigation, PWD (NH), Railways and KSEB. Agency wise distribution of State Roads is given in the Table 10.1

Table 10.1 Agency wise Distribution of State Roads

Sl. No.	Name of Agency	Length (Km)	Percentage
1	2	3	4
1	Panchayat	122232	70.42
2	PWD (R&B)	28203	16.25
3	Corporation	4580	2.64
4	Municipality	8477	4.88
5	Forests	4734	2.73
6	Irrigation	3478	2.00
7	PWD (NH)	1524	0.88
8	KSEB	267	0.15
9	Railways	97	0.05
	Total	173592	100.00

Source: Various agencies

National Highways

10.6 The National Highway wing was formed on 16th December 1970 as a part of the State PWD and is functioning as an independent unit for the construction and maintenance of the National Highways in the State, The State government is the executing agency for the National Highways pertaining to the State. It shall be the responsibility of the Central Government to develop and maintain the National Highways. The National Highway wing in the state is also executing the road development works with the financing from 'Central Road Fund' and implementation of certain Annual plan schemes of the State Plan and Central Plan. There are eight National Highways in the State of road length 1524 km.

State Highways and Major District Roads

10.7 All major arterial roads which provide mobility are with the PWD (R&B) consisting 4137 km State Highways and 24066 km Major District Roads. The district wise details are given in Appendix 10.2. As part of decentralization of powers to Local Self Governments, the maintenance of village roads are vested with the concerned local governments. Roads maintained by PWD (R&B) and PWD (NH) are Shown in Fig 10.1

National
Highway
5%
State
Highway
14%
Major
District
Roads
81%

Fig 10.1

10.8 Of the 14 districts in the state, Kottayam district has the major share of PWD Roads with a length of 2830 km and Wayanad district has the lowest share with 970 km. The district wise, surface wise and category wise length of road maintained by PWD (R&B) as on 31-3-2008 is given in Appendixes 10.3. The length of roads maintained by PWD remain stagnant without any increase or decrease during 2007-08. The details are given, in Appendix.10.4. Analysing the PWD roads it reveals that only 6.655km is cement concrete, 27135 km is black topped, 447.238 km water bound macadam. The district wise details are given in Appendix.10.5.

10.9 Similarly the number of bridges and culverts and number of unsafe bridges and culverts also remained stagnant. There are 2179 bridges (627 on SH and 1552 on MDR) and 51422 culverts 11512 on SH and 39910 on MDR) in PWD. Of them 148 bridges and 1519 culverts are unsafe and need reconstruction/renovation as shown in Appendix.10.6.

Roads maintained by panchavats and other agencies

10.10 In Kerala major portion of the road (122232 km) are maintained by panchayats . Analyzing the surface wise details maintained by the departments other than PWD about 48081 km roads

are having black topped surface ,20366 km metalled surface, 6915 km cement concrete and about 16647 km road is non motorable. Surface wise details of roads maintained by the various agencies are given in Table 10.2

Table 10.2
Surface wise Distribution of Roads maintained by the various agencies
(Length of Road in Km.)

Agency	Cement	Black	Metalled	Earthern	Others/	Total
	Concrete	Topped		Road	Non	
					Motorable	
Panchayat	5080.27	38407.81	17726.30	45771.63	15246.36	122232.37
Corporation	1114.97	2608.62	216.53	104.09	535.44	4579.65
Municipality	675.00	5087.66	938.87	1497.44	278.34	8477.31
Forest	27.93	246.37	755.55	3117.45	587.27	4734.57
Irrigation	12.95	1446.32	672.35	1346.15		3477.77
KSEB	1.82	213.62	46.17	5.10		266.71
Railway	2.55	70.76	10.71	13.15		97.17
Total	6915.49	48081.16	20366.48	51855.01	16647.41	143865.55

Source: Various agencies

Road Network Quality

10.11 PWD roads constitute about 16% of the total road network in the state but carries nearly 80 percent of the road traffic within the state with road traffic growing at around 10 percent every year. Even though Kerala has succeeded in providing adequate length of roads, the overall quality of PWD roads is much below the prescribed standard set forth by the Indian Road Congress (IRC).

- 10.12 Apart from the infrastructure deficiencies, PWD has the following issues to content with.
 - **??** Inadequate funds availability
 - **??** Outdated standards and specifications
 - **??** Unscientific method of planning, development and prioritizing maintenance works.
 - **??** Inadequacies in project preparatory process
 - **??** Outmoded project implementation procedures
 - **??** Inadequate quality assurance capabilities
 - **??** Lengthy land acquisition procedures
 - **??** Inadequate contractor capabilities
 - **??** Huge backlog of roads due for maintenance
 - **??** Mediocre technology in construction methods
 - ?? Problems of co-ordination with other departments such as KSEB, KWA, TELECOM
 - **??** Inadequate capabilities for monitoring and controlling assets.
 - **??** Inadequate institutional and human resource.
- 10.13 Kerala State PWD has initiated a number of steps to attract private investment in the sector and to instill confidence in investors. The following proactive steps are taken by the Kerala PWD.

- **??** Established a State-level Empowered Committee, headed by Principal Secretary-PWD, to oversee implementation of projects.
- ?? A multi-disciplinary project management team has also been constituted within the PWD
- ?? Completed a Comprehensive Institutional Development Study and prepared an Institutional Strengthening Action Plann (ISAP). The ISAP recommendation are being implemented in a time-bound manner.
- **??** Constituted four dedicated working groups and a committee of Chief Engineers, from within the organization, to fine-tune and expedite the ISAP implementation.
- ?? A draft road Development Policy for Kerala has been formulated and deliberations are on to finalize the policy.
- ?? The Kerala Tolls Act (1983) was studied with a view to facilitating greater private sector participation in the road sector.
- ?? The Kerala Road Fund Act was enacted in November 2001, establishing the Kerala Road Fund administered by a Road Board.
- ?? The Government of Kerala drafted a Medium-Term Fiscal Plan (MTFP) for fund requirements and financing sources of road sector projects.
- ?? The Roads and Bridges Development Corporation of Kerala (RBDCK) was created to promote private investment in the road sector and improve road infrastructure efficiency by corporatising some traditional PWD functions.
- **??** Enacted the Kerala Highway Protection Act (1999) in order to protect highway corridors from encroachments, regulate ribbon developments and prevent undesirable land use practices:
- **??** Government of Kerala recently completed one major bridge project on a BOT basis. Other BOT schemes to build NH bypasses will begin soon.
- ?? Several key road sector studies, such as, Core Road Network Study to identify road and bridge projects amenable for private financing, a study on road maintenance planning, and several road safety studies, have been completed.
- ?? The Resettlement and Rehabilitation (R&R) Policy Framework has been approved and ratified. Besides this the Sectoral Environmental Assessment (SEA), Environmental Impact Assessment (EIA), Environmental Management Plans (EMP) and Resettlement Action Plan (RAP) have been completed and made available to the World Bank's Public Information Center and in project districts for public review and comments.
- **??** An international road safety specialist was appointed to train PWD staff to analyze accident sites, assist them in improving black spots, and help the PWD to develop a road safety strategic action plan. A Road Safety Action Plan has been drawn up.
- **??** Computerization of PWD is being done in a phased manner/Project Financial Management System (PFMS) has been developed in the project office and adapting this facility into PWD offices has commenced.

Kerala State Transport Project (KSTP)

10.14 Kerala State Transport Project (KSTP), an initiative of Public Works Department of Government of Kerala, was officially launched in June 2002 to improve 1600 km of State Road network and 77 km of Inland Water Canals. The total cost of the project is US\$ 336 million

- (appx. Rs.1612.85 Crores). Out of this, World Bank assistance is US\$ 255 million(appx R.1224.25 crores) and the share of Government of Kerala share is US\$ 80.96 million (appx. 388.6 crores).
- 10.15 Upgradation of 600 km of State Highways and Major District Roads are taken up under Phase-I and Phase-II. The Phase-I upgradation work consisting of 127 km (Thalikkode-Kazhakuttam, Thaikkode-Kottarakkara, Kottarakkara-Chengannur, Alappuzha Changanassery) was awarded to Pati-Bel. After completing 55% of the work, they terminated the work and after negotiations the work was again entrusted to them and the work is now in progress. The KSTP-III (Thodupuzha Muvattupuzha and Muvattupuzha-Angamali -49 km) was awarded to M/s.Oriental Structural Engineers and they have completed their work in January 2007.
- 10.16 KSTP-IV is Thrissur-Kuttippuram and Shornur-Palakkad having a road length of 75 km was awarded to M/s. Road Builder. After completing about 65% of the work they have terminated the contract in 12/2006. Later KSTP.IV contract was split into 2 smaller contracts, work tendered and were awarded to M/s. Roman Tarmat and these road works are in progress.
- 10.17 Improvement of 77 km of Feeder canals namely, Alappuzha-Kottayam, Alappuzha-changananssery and Kottayam-Vaikkom was awarded to contractor M/s. Bhageeratha Engineering on 8/2003 but the work was terminated on 8/2005 due to their poor performance. Balance works of urgent nature were awarded to another contractor. M/s. Pile Tech company and the work is in progress.
- 10.18 1000 km of heavy maintenance are arranged in 43 RMC works under I, II and III year maintenance programme. Out of 43 RMC works totaling length of 1000kms, 930 km has been completed in 41 contracts and 2 RMC works of 70 km road length is in progress.
- 10.19 The Phase-II upgradation work could not be taken up due to delay in land acquisition and time and cost over run. A proposal has been submitted to Government for availing another loan for implementation of Phase-II works. With the balance unutilized amount available in the project, 7 RMC works has been taken up and works will be in execution shortly. The expenditure during 2007-08 is Rs. 83.86crore. Total expenditure upto 30/09/2008 is Rs. 1014 crore.

Research and Development in Road Sector

10.20 Research and Development activities play a crucial role in meeting the challenges of modernizing the road system/technology upgradation and finding cost effective solutions to infrastructure problems in general. Design, Research, Investigation and Quality Control Board (DRIQ Board), Kerala Highway Research Institute (KHRI) and National Transportation Planning and Research Centre (NATPAC) are engaged in research and development activities of the road sector.

Design, Research, Investigation and Quality Control Board (DRIQ Board)

10.21 The DRIQ Board consists of three divisions viz .Design wing ,Research and Project Preparation Unit and Quality Control and Computer cell. During 2007-08, DR IQ Board completed 19 construction work and 4 projects works. Computer cell of the DRIQ Board have maintained all hardwares and softwares under the control of DRIQ Board, upgraded two old Pentium to latest model, purchased necessary equipments, conducted training programmes and effected pending payments of previous financial years.

Kerala Highway Research Institute (K.H.R.I)

- 10.22 The main objective of KHRI is to cater to the needs of all the wings of PWD in carrying out laboratory tests and field tests of samples of flexible pavements, building materials, concrete, soil, bricks, tiles, steel etc. and also to conduct traffic studies.
- 10.23 The other objectives include establishment of facility on quality control and testing for private and government sectors such as proper documented internal procedures, accreditation and act as monitoring and certifying body for all standards for PWD through out Kerala. The Institute has extended its activities to the filed of detailed survey works using modern computerized equipments like Total Station and Auto level. Engineering college students and polytechnic students from inside and outside Kerala do project work in this institute. Central Public Works Department (CPWD), Airport Authority of India (AAI), ISRO, Techno Park, BHEL, Power grid Corporation, BSNL etc use the facilities of KHRI for testing and studies. KHRI provides the only technical reference library for PWD.
- 10.24 KHRI conducted training programmes for technical and non-technical staff of PWD under the State Training Policy of IMG with the support of regional centers at Ernakulam, Kozhikode, Kannur, Trichur and Kottayam.
- 10.25 The tests conducted and revenue collected by various divisions of KHRI are given in Table 10.3

Table 10.3
Test conducted and Revenue collected by KHRI

Test conducted and Revenue concerca by initial					
Name of Division	No. of Tests	Revenue collected (Rs.lakh)			
1, Soil Mechanics and foundation	391	1.240			
Division					
2. Concrete and Structures Lab	1625	8.75			
3. Flexible Pavement Lab	184	2.12			
4. Traffic Engineering Lab	3 topographical survey				
	1 total Sanitation Survey				
	1 Junction Study				

Sorce :KHRI

- 10.26 Following are the investigations and activities conducted by KHRI during 2007-08.
 - **??** Subsoil Investigation for the construction of an Annexure Building for DME at Medical College by Soil Mechanics &Foundation Division.
 - **??** Subsoil Investigation for the construction of Ladies Hostel Building at Medical College by Soil Mechanics &Foundation Division.
 - **??** Technical Investigation on the irregularities in the construction of Sahakarana Bhavan at Puthiyara, Kozhikkode by Concrete & Structures Division.
 - ?? Utilization of Waste Plastic in Road Construction-Pilot Study Project on the Road "Chavadimukku-Pullanivila Narikkal Road. Road Construction Completed on February, 2006 and Visual observation going on.
 - ?? Behaviour of Subgrade of roads of Wayanad Division Report submitted.
 - **??** Prepared and submitted Scenario Appraisal Report Thiruvananthapuram, Kottayam & Kozhikode.

National Transportation Planning And Research Centre (NATPAC)

10.27 The broad area of activities of NATPAC include: Rural and Regional Transportation, Transportation Planning and Road Safety, Highway Engineering, Traffic Engineering and Management, Inland Water Transport, Project Planning, Training and Extension Programmes. As many as 15- plan programmes and 7-Sponsored projects have been completed during the year 2007-08.

10.28 NATPAC initiates research for finding alternative materials for road pavement by using waste plastics to suit their properties for Kerala conditions as new pavement material. The highway Engineering lab of NATPAC has carried out four planned projects and three consultancy projects.

- **??** Pavement Maintenance Management system for Selected roads in Kerala Phase-IV.
- ?? Use of waste plastics for road construction in Kerala and demonstration project.
- **??** Study on overloading of trucks and its effects on pavement deterioration
- ?? Resource mapping of road construction materials in Kerala A case study of Kollam District.
- **??** Performance Evaluation of roads laid with plastic waste in Madurai region
- **??** Demarcation of influence area of tourist centers in Kerala
- ?? Preparation of master plan for tourist destinations in Kerala.

Road Safety

10.29 Government of Kerala has initiated various programmes to address the alarming issue of increasing road accidents by coordinating all stakeholders of Road safety viz. Engineering , Education and Enforcement agencies.

10.30 Public Works Department is primarily responsible for Engineering aspects, and a safety engineering component has been introduced as a part of world bank aided, Kerala State Transport Project. Constitution of Road Safety Unit and Road Safety Engineering Tool kit are the initiatives in PWD for road safety. The following activities are also undertaken by PWD.

1. Blackspot improvement programme

Completed Schemes	Work in progress	Under Tendering
1. Kallampally	1. Thonnackal	1. Kanamala
2. Pongumoodu	2. Sreekaryam	2. Vattapara
3. Kochullor	3. Kumarichantha	
4. Enchackal	4. Varkala Maidanam	
	5. Varkala court junction	
	6. Marakkada junction	

2. Road Safety Audit- Model Road

The road safety cell undertook a safety Audit for the road and bids are now under tendering stage. The salient features are

- ?? Complete Signs and Markings to demonstrate and enforce under Road Safety Action Plan.
- **??** No overtaking centerline based on visibility check
- **??** Roundabouts, junction with Traffic signal and priority junction for demonstration
- **??** School Zone treatment
- **??** Pedestrian crossing treatment
- **??** Highly visible studs and markings
- **??** Crash barrier for deep drops
- **??** Delineators to guide drivers at night
- **??** Curve treatment with Chevrons

3. Demonstration signs and markings

Two demonstration schemes are implemented on NH 47 with a view to achieve consistency and uniformity.

- ?? Signs and Markings at Kazhakuttam junction at the take off point of Trivandrum bypass on NH 47
- **??** Signings at Ambalapuzha Haripad section of NH-47.

4. Junction Improvement Schemes

- **??** Design completed for 8 junctions in Pathanamthitta ring road
- **??** Survey and design is progressing for 10 junctions in Tiruvalla town.

5. Mass Action Schemes

The median end of various reach of NH-47 are being hit by vehicles especially during night. In order to counteract such accident, similar treatment by way of diagonal markings reinforced with Rumble strip and studs and signs have been installed for all median ends between Trivandrum and Cherthala on NH-47.

6. Safety Improvement of Hazardous locations of NH

As considerable number of accidents are occurring on National Highway, at the request of State level monitoring committee, Road safety cell carried out site visit and proposed countermeasures to 74 hazardous locations on NH -47 and 42 hazardous location on NH- 17. The work has been awarded.

7. Safety Assessment of RMC roads

The road safety cell carried out safety assessment of KSTP's maintenance roads and implemented required safety engineering measures in order to counteract the accident due to better riding quality. Measures have been implemented for 6000 km road through out the state and balance for 350 km is underway.

8. Road Accident Database.

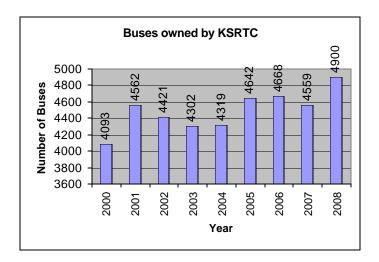
The PWD in association with Police Department has developed GIS – enabled accident database called Geo KHMS having the following features.

- **??** Automatic generation of collision diagram with vehicular movements
- **??** Advanced querying and reporting
- **??** Many new advanced features like, High accident location identification, Scenario Analysis, Spot/Intersection Analysis, Cluster Analysts, Strip/Corridor Analysis, Ability to add Accident photograph or location photograph along with the accident data.
- 10.31 NATPAC has undertaken the following programmes to reduce the accidents and its severity.
 - **??** Safe Road to School AProactive Programme for School Children:
 - **??** Safe Community Programme for selected Panchayaths in Kerala
 - **??** Strategies for Safe Transportation of Dangerous Goods A Status report
 - **??** Publication of Road Safety Education Training material.
- 10.32 Transport Infrastructure planning affects the safety of the whole system of a city. NATPAC has carried out four plan projects and four consultancy projects at various parts of Kerala. They are
 - ?? Road Development Programme for Hilly regions of Kerala a case study of Wayanadu District
 - **??** Accident Abatement measures for urban areas in Kerala case study of Alsappuzha District.
 - **??** Road Safety Auditing and related Community Road Safety Programme inn Northern Kerala
 - ?? Traffic Engineering and Management Study for selected towns in Kerala State.
 - **??** Preparation of Inventory of roads for a region
 - **??** Traffic and Transportation study for Badagara Town.
 - ?? Preparation of Project Report for Infrastructure Development in Transport sector for Neyyattinkera Municiplaity under Centrally funded "Urban Infrastructure Development Schemes for Small and Medium Towns.

Kerala State Road Transport Corporation (KSRTC)

10.33 KSRTC is the second largest public sector undertaking in the state. KSRTC has been established in year 1965. It is functioning as a public utility service. Besides it is also incurring expenditure on providing concessional travel facilities to handicapped , deaf and dumb persons, students and to a lot of other category. The number of buses owned by KSRTC as on 31-8-2008 is increased to 4900 from 3974 in 31-8-2008. The age wise details of vehicles owned by KSRTC as on 31-3-2007 is given in Appendix 10.15. The number of buses owned by KSRTC from 2000 onwards is given in fig 10.2

Fig 10.2



- 10.34 The number of schedules operated as as on 31st March 2008 is 3758. About 12069 lakh passengers traveled in KSRTC buses during 2007-08. The major indicators showing operational efficiency of KSRTC are given in Appendix 10.16. The unit wise details of operational statistics are given in Appendix.10.17.
- 10.35 The fares charged by KSRTC ranged from 55 ps per km in city and ordinary buses to 90 ps in High Tech /Ac/Air Buses. The fare structure of KSRTC is given in Appendix 10.18. The major performance indicators of KSRTC such as average kms run per day, earnings etc are given in Appendix 10.19. Category wise staff position of KSRTC is given in Appendix 10.20.
- 10.36 Following are the achievements made by KSRTC during 2007-08.
 - ?? 603 buses were newly built and put on to road (164 Malabar/Venad services, 20 A/C Air Buses,135 Super Fast, 210 Fast Passenger, 42 Ananthapuri Fast, 30 Ordinary buses and 2 Super Express.
 - ?? KSRTC could build 115 buses in 3/2008 from their Workshops.
 - ?? An Inter-State Agreement with Tamilnadu was signed and more services are being operate. So also, an inter- state agreement with Karnataka was also signed after the close of financial year 2007-08.
 - ?? In Thiruvananthapuram City, parallel services were controlled and more services had been introduced.
 - ?? Training were given to 6108 employees from all categories. Special training was given to more than 5421 drivers including newly recruited drivers for safe and fuel efficient driving habit. Training to 1,393 newly recruited drivers is also going on.
 - ?? Tyre life has increased by using good quality retread materials. On account of this, tyre consumption is reduced and an amount of Rs.11.26 crores is saved.
 - ?? An Accident Information & Control System has been introduced and there is positive results.
 - ?? To avoid ticket less travel, directions were issued to impose fine of Rs.500/- to ticket less travelers by Inspectors of KSRTC and higher Officers.
 - ?? Piravom operating Centre was newly opened.
 - ?? Introduced ETM in more depots as part of taking steps for total computerization,
 - ?? Six Oil Tankers were newly introduced.

10.37 NATPAC conducted study of KSRTC moffusil bus service for passenger load and load characteristics during peak and non-peak periods in Kollam District. Measures are suggested to improve the operational efficiency of KSRTC services

Kerala Transport Development Finance Corporation

10.38 Kerala Transport Development Finance Corporation registered under the Companies Act on 27.2.1991, started commercial business on1992. The corporation was formed with the objective of providing loans to Kerala State Road Transport Corporation and the company has expanded its business by granting loans to other Government/Quasi Government Organisations, individuals for purchase of new vehicles. The Corporation has launched its website during 1999. The complete office system is connected through Local Area Network (LAN).

10.39 The Corporation has diversified its business by engaging in operation of BOT projects at selected KSRTC Bus Stations and land owned by Government Departments. Corporation has successfully completed one such project 'Trans Towers' at Vazhuthacaud in the land owned by Motor Vehicle Department. This Tower, which is an office-cum-shopping Complex, is first of such high-rise building in the State Government sector

10.40 During the financial year the corporation has granted loan amounting to Rs. 13.67 crores to public and other institutions and an amount of Rs. 145 crores released to KSRTC.

10.41 Construction of shopping complex at the premise of Ankamali Bus Station was started as a pilot project. Government have also accorded sanction to KTDFC for constructing Bus Terminal Complex and Thampanoor Bus Terminal Project on BOT basis.

Motor Vehicles Population

10.42 The Motor Vehicle registration in the State is showing a steady increase in the past few years. The number of motor vehicles having valid registration as on 31-3-2008 is 4442387 as against 4025350 in the previous year showing a growth of 10.36 percent. The district wise details are given in Appendix 10.7. The newly registered vehicles come to 417038 (9.40%). The details are given in Appendix 10.8. The category wise motor vehicles having valid registration as on 31-3-2008 is given in fig.10.3.

Number of Motor Vehicles Having Valid Registratiom as on 31.3.2008 goods tractors,trail vehicles buses ors etc. 7% 3% 1% cars 15% four two wheelers wheelers three 5% 60% wheelers 9%

Fig.10.3.

10.43 In Kerala, Wayanad has the lowest number of vehicles followed by Idukki. The highest vehicle population was recorded in Ernakulam district followed by Thiruvananthapuram district. District wise growth of motor vehicle in Kerala and the Index (Base 1990-91=100) is given in Appendix 10.9 and category wise growth of motor vehicles in Kerala from 2000-01 is given in Appendix 10.10.

Trend of Road Accident in Kerala

10.44 The tremendous increase in the volume of road traffic in recent years has caused increase of road accidents. Government of Kerala has initiated various programmes to address the alarming issues of increasing road accidents by coordinating all stakeholder of Road safety viz Engineering Education and Enforcement. Also several initiatives are taken by the police to enforce road discipline and rules by the Motor Vehicles Department.

10.45 In Kerala almost 60 percent of the vehicles are two wheelers, which accounts to nearly 42% of the road accidents reported in the State. Details of Motor Vehicles involved in road accidents in Kerala during 2008 is given in Appendix 10.13. Also 98.49 percent of the accidents are due to the fault of driver of motor vehicles. The district wise category wise details are given in Appendix 10.12. As vehicle population increases road accidents also increases. Highest accident was recorded in Ernakulam city followed by Thiruvananthapuram and lowest in Wayanad followed by Kasaragod and Idukki. District wise road accidents in Kerala is given in Appendix 10.11

10.46 The total number of road accidents in Kerala during 2008 in 27972 as against 29316 in 2007 showing a decrease of 4.58 percent. Though it is not satisfactory, the trend is positive. Among the27972 motor vehicle accidents ,20223 accidents occur in day light. The details are given in Appendix 10.14. The trend of Motor Vehicle accidents in Kerala from 2000 onwards is shown in fig 10.4

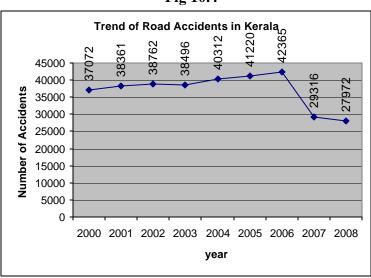


Fig 10.4

Water Transport

Port Sector

National Scenario

- 10.47 India has 12 major ports and 187 non major ports along its 7517Km long Indian coastline.
- 10.48 At the time of independence India had only five major ports. After independence development of ports was taken up in a planned manner. Mechanization and modernization of cargo handling facilities at ports have been a thrust area in recent years, with the emphasis on development of infrastructure. Deepening of ports to receive larger vessels is the main priority area.
- 10.49 Traditionally, most ports in the world are owned by the Public Sector. But privatization of port facilities and services has now gathered momentum and India is also following the global standard. To meet this requirement an enabling policy frame work has already been put in place by the Government of India.
- 10.50 The experience of operating berths through PPPs at some of the major ports in India has been quite successful. It has, therefore, been decided to expand the programme and allocate new berths to be constructed through PPPs. Government has also decided to empower and enable the 12 major ports to attain world class standards. To this end, each port is preparing a Master Plan for 20 years and an Action Plan for seven years. Recognizing that the shipping industry is moving towards large vessels, a plan for capital dredging of channels in major ports has also been formulated.
- Major ports in India handle nearly 75% of the total cargo traffic. 70% of the traffic at major ports by volume is dry and liquid bulk, remaining 30% is general cargo including containers.
- 10.52 Container traffic at Indian Ports is growing rapidly and has increased by 102% in the last five years to 5.4 million TEU in 2006-07. It is expected that the growth rate will continue to be dramatic and that by 2016-17, the country will handle 15.64 million TEU.
- 10.53 The booming Indian manufacturing and exports, requires huge investment in the port infrastructure. Government has fixed a target of US \$ 150 billion for exports by the year 2008-09 to double India's share in world exports from nearly 0.80% to 1.50%. About 95% by volume and 70% by value of the country's international trade relies upon maritime transport. The total volume of traffic handled by all Indian ports during 2005-06 was 573 million tonnes and the projected traffic for 2011-12 is 1009 million tonnes.
- 10.54 The National Maritime Development Programme estimates total investment requirement of about Rs. 600 billion in Central Government Ports by 2013-14, of which Rs.115 billion through budgetary support, Rs.51 billion through ports own internal resources and Rs. 392 billion from private sector.

Kerala Port Sector

10.55 Along its coastline of 585 Kms Kerala has one major port at Cochin and 17 non major ports. The non major ports are under the administration of Government of Kerala. Government of Kerala intends to provide a boost to coastal shipping with the development of ports, which will ease the burden on the heavily congested highways in the State apart from savings in transportation cost. Government, besides acting as a catalyst for establishment of ship repair and ship building industries, would also encourage other port based industries contributing to the development of ports.

Private Sector Participation

10.56 Recognizing the need to develop the ports in a time bound manner, but not having adequate resources for the same, Government of Kerala decided to encourage private sector participation. Government is committed to seek private sector investments into the port sector and therefore to create a framework for such participation, the Kerala Port Policy was announced in the year 2004.

Cochin Port

- 10.57 Cochin Port is the only major port in Kerala. It spreads over 827 hectares. It has a water frontage of 7.5 Km. The port has connectivity to hinterland through NH 47, NH 17 and NH 49. Rail links to the Konkan and Southern Railway also give key rail access to its hinterland. An inland waterway connecting Kollam and Kottappuram on either side is being developed by the Inland Waterways Authority of India.
- 10.58 Cochin Port handled traffic of 157.57 lakh tonnes during 2007-08 against 152.57 lakh tonnes in the previous year, recording an increase of 3.26%. The container traffic throughput for the year was 253715 TEUs.
- 10.59 During the year 2007-08, 1121 ships called at the port as against 1173 ships in the preceding year registering a decrease of 4.43% in shipping activity. The total Net Registered Tonnage (NRT) of ships called at the Port showed an increase of 15.02% during the year over the preceding year.
- 10.60 43 Cruise vessels visited the Cochin Port during 2007-08. As regards the productivity parameters the port recorded an average pre-berthing detention time of 14.40 hours, average turnround time of 2.54 days and average output per berth day to the tune of 10881 meteric tonnes as against the previous figures of 13.97 hours, 2.7 days and 8282 metric tonnes respectively.
- 10.61 On the financial performance front, the operating income was 220.09 crores and operating surplus was 38.88 crores as against 212.07 crores and 64.51 crores respectively during the year before. During 2007-08, the operating ratio was to the tune of 82.33% as compared to 69.59% during the previous year.
- 10.62 The number of container vessels called at the port decreased from 382 in 2006-07 to 350 in 2007-08. At the same time the number of passenger vessels increased from 38 in the year 2006-07 to 43 during 2007-08 representing an increase of 13.16%, as shown at Appendix 10.21.

Vallarpadam International Container Transshipment Terminal

- 10.63 The Prime Minister of India laid the foundation stone for Vallarpadam International Container Transshipment Terminal in 1995. Completion of this prestigious project would make the Cochin port a major hub port in the Indian Ocean region.
- 10.64 At present containers from the Indian sub continent are being transshipped to Colombo. With the development of Vallarpadam Mother Vessels come to Cochi and consolidate and carry the containers from other ports of India to the outside world.
- 10.65 All statutory clearnces required for the Terminal construction were received. The first stage work of Capital Dredging for providing 12.5 m draft at the existing Rajiv Gandhi Container Terminal was completed in 2006.
- 10.66 Regarding the construction of ICTT at Vallarpadam, Soil stabilization work with stone columns and band drains commenced and is in progress. Supporting infrastructure project namely stage-II capital dredging for providing 14.5 m draft at ICTT, National High Way connectivity at a route length of 17.2 kms and Rail connectivity with route length of 8.86 Km are at various stages of execution.

Vizhinjam Deep Water International Container Transshipment Terminal

- 10.67 Government of Kerala has construed a project on Public Private Partnership (PPP) basis, to develop an International Deep Water Sea Port and Container Transshipment Terminal at Vizhinjam, 7 km South of the State Capital Trivandrum in South Indian Peninsula. This sea port and container transshipment terminal will serve the South Asian region as a hub port which currently does not exist in India. The proposed port site Vizhinjam is just 10 nautical miles from the International Shipping Lane.
- 10.68 Government of Kerala has set up a fully owned Government company viz Vizhinjam International Sea Port Ltd. (VISL) with the main objective of providing external infrastructure. VISL would also act as the 'Nodal Agency' for facilitating selection of developer through a transparent and competitive bidding process. Government of Kerala through VISL will provide the external support infrastructure (road/rail linkage, water and power supply) concurrent to the proposed construction.
- 10.69 The construction of a Terminal at Vizhinjam will increase the country's proximity to the international sea route, which links Europe, Persian Gulf and the Far East. Vizhinjam Deep Water Container Transshipment Terminal when completed would be able to cater to container vessels up to 8000 TEUs in the initial phase and 10000 to 12000 TEUs sizes in the subsequent phases.
- 10.70 Government of Kerala invited global tender for the project and is under processing. The estimated cost of the Project is worked out at Rs. 5348.00 Crores and the first stage of the project is expected to be completed within three years.
- 10.71 The natural draft of 16 m at the berth is proposed to be increased to 18.7 m in the final phase. Proposed phase-I development at Vizhinjam foresees for 2 main lines and 4 feeder berths with a quay length of 1.4 km. The final phase has 4 main lines and 9 feeder berths with a total quay length of 3.5 km. The initial project cost for developing state-of-the-art facilities and

equipment is estimated to be Rs. 23.9 billion (approximately US\$ 580 million or Euro 425 million)

Table.No.10.4

Phase	Berth Length (meter)	Capacity (Million TEUs)	Project cost (Rs. Billion)	
Phase – I	1245	1.8	23.9	
Phase – II	1900	3.0	11.0	
Phase – III	2860	5.3	18.6	
Total			53.5	

Competitive Advantage of Vizhinjam

- ?? Located on Southern tip of Indian Peninsula
- ?? Only 10 nautical miles from the major international sea route and East-West shipping axis
- ?? Natural water depth of more than 20 m within a nautical mile from coast.
- ?? Minimal capital dredging (1 million cubic metres in Phase I).
- ?? Least Littoral transport.
- ?? Negligible maintenance dredging
- ?? Central to the eastern and western coast lines of India-can cater to the needs of both west and east coast.
- ?? Greenfield nature- flexibility in design & connectivity.
- ?? No significant environmental/social issues
- ?? Proximity to rail (10 Km), road (3Km) network & airport
- ?? No tariff regulations
- ?? Being Greenfield Project no legacy of excess personnel.
- ?? Autonomy and freedom in operations to operate competitively
- ?? No acquisition of land needed for the Port itself
- ?? Nearer to State capital city, that has an International airport, the required human resources and social infrastructure.
- ?? Scope for tourism infrastructure due to proximity to Kovalam (Cruise Terminal, Marina)

Non Major Ports

- 10.72 The Non Major ports are under the direct control of State Government. The Government agencies involved in the development of ports in the State are Port Department, Harbour Engineering Department, Hydrographic Survey Wing and Kerala State Maritime Development Corporation.
- 10.73 Commodity wise traffic handled in the non major ports during the year 2007-08 are shown in appendix 10.22. Cargo handling during 2007-08 was confined mainly to Kozhikode, Vizhinjam and Azhikkal ports. The numer of steamers and sailing vessels that called at non-major ports during 2006-07 are shown at appendix 10.23. 550 steamers ad sailing vessels called at non-major ports during 2007-08 with registered tonnage of 433171. This is against the figure of 462 and 346067 respectively during 2006-07.

- 10.74 The number of crafts privately owned registered at these ports are shown in appendix 10.24. Alappuzha port recorded the top with registration/renewal of 1648 numbers.
- 10.75 Statement showing the revenue collection at the non-major ports during 2006-07 is shown in Appendix 10.25. The revenue collected during the year 2007-08 is Rs. 171.13 lakh against the collection of Rs. 212.54 lakh during 2006-07.

Development of Beypore Cargo Harbour

10.76 Steps were initiated to appoint a consultant for the feasibility study and preparation of a Detailed Project Report (DPR) to develop Beypore through Public Private Participation. Special repairs to Tug Azhikkal and maintenance dredging at Beypore port are the works undertaken during 2008. Construction of passenger terminal, repairs of the godown and repairs of the light house are the other works carried out. Construction of 100 m wharf, transit shed, parking and loading area completed. Repairs to approach road to the department quarry at Pulikkal 2nd reach progressing.

Development of Azhikkal Cargo Harbour

10.77 Construction of approach road, weigh bridge installation and land acquisition completed. Water supply works completed. Construction of wharf and maintenance dredging are at progress. Steps were initiated for the appointment of a consultant for reviewing and updating the project report prepared for the development of Azhikkal Port. Repairs to Tug Zamorine is in progress.

Development of Vizhinjam Port

- 10.78 Dredging works completed and repairs to the Mobile Crane is in progress. Casting and placing of concrete Blocks over main breakwater completed. Rectification of damages to the cargo wharf at Vizhinjam Leeward Breakwater completed.
- 10.79 Resurfacing of road from Azhakulam to fire station and road to Theatre junction at Vizhijam were completed. Work of watchmen shed at leeward breakwater sanitary facilities for the port staff, electrification of Ist floor of building to signal station, providing rolling shutters to transit shed, providing water supply and sanitary arrangements to the first floor of signal station and maintenance of road from light house to Azhakulam were completed.

Cargo Berth at Thangassery

10.80 Renovation of Port godown at Thangassery and construction of compound wall around port area progressing. Steps initiated for the construction of a transit shed and procurement of 600 HP Tug for the port.

Hydrographic Survey Wing

10.81 The Hydrographic Survey Wing was constituted in 1968 as a component of the Kerala State Port Department with a view to cater to the requirements of Hydrographic Investigation for the development of the non major ports of Maritime State of Kerala. There is no similar establishment in India run by a State Government.

10.82 Since its formation, the Wing has been conducting pre-dredging and post-dredging, pre-monsoon and post-monsoon surveys to ascertain various aspects such as requirement of dredging, data required for the construction of Fishing Harbours, Fish Lading Centers, Small ports etc. In addition to the routine pre-monsoon and post-monsoon survey at 16 non-major ports they also undertakes survey work for other departments like Irrigatiion, Inland Navigation, PWD and Research Institutions like Kerala Engineering Research Institute etc.

10.83 During the year 2008 pre- dredging hydrographic survey at Koyilandi, Vizhinjam, Cochin Kayal, Malpa (Karnataka) and coast line survey at Neendakara Fishing Harbour were carried out. Training Programme was conducted for the technical staff of the wing in Hypack Software. Stage payment for the construction of a new survey vessel was effected and steps initiated for the renovation of survey vessel M.V.Surveskhanam.

Inland Water Transport

National Scenario

10.84 Inland Water Transport, is a fuel efficient and environment friendly mode of transportation. India is richly endowed with navigable waterways, comprising rivers, canals, backwaters, creeks, etc. It is estimated that a total of 14500 km of the waterways could be used for passenger and cargo movement. About 44 million tones of cargo is being moved annually by inland water transport. But, this means of transport s important only in few States, namely, Assam, West Bengal, Bihar and Kerala. Also, it is operational only in restricted stretches of Ganga-Bhagirathi-Hooghly river; the Brahmaputra river; the Barak river; the rivers in Goa; the backwaters in Kerala; Inland waters in Mumbai and the deltaic region of the Godavari-Krishna rivers.

10.85 Besides, the capacity of this sector is under-utilized, because most navigable waterways suffer from hazards like shallow water and narrow width of channel during dry weather; silting of river beds and erosion of banks; absence of adequate infrastructural facilities like terminals for loading and berthing and surface road links.

10.86 Hence, as a part of the Government's policy to optimally develop and harness the potential of Inland Waterways in the country, the 'Inland Waterways Authority of India (IWAI)' was set up under the 'Inland Waterways Authority of India Act, 1985'. The IWAI has been established for the development and regulation of Inland waterways for shipping and navigation and for matters connected therewith or incidental thereto. The Inland Waterways Authority of India Act, 1985, empowers the Government to declare waterways with potential for development of shipping and navigation as National Waterways.

Currently, three waterways have been declared as National Waterways:-

- 1. National Waterway No.1:- The Ganga between Allahabad-Haldia (1629 km) in UP, Bihar, Jharkhand and West Bengal.
- 2. National Waterway No.2:- The Sadiya-Dhubri stretch of river Brahmaputra (891 km) in Assam; and
- 3. National Waterway No3:- The Kollam Kottapuram stretch of West Coast Canal along with Champakara and Udyogmandal Canals (205 km) in Kerala.

10.87 Also, in order to provide an impetus to the development of Inland water transport modes, an Inland Water Transport Policy has been announced. It includes several fiscal concessions and guidelines for encouraging private sector participation in development of

infrastructure and ownership and operation of Inland vessels. IWAI is also authorized for joint ventures and equity participation in BOT projects.

Inland Water Transport in Kerala

- 10.88 The State of Kerala, with numerous backwaters, is one of the State in India, where waterways are successfully used for commercial Inland Water Transport. The transportation is mainly done with country craft and passenger vessels. There are 41 navigable rivers in Kerala. The total length of the Inland Waterways in the State is 1687 Kms.
- 10.89 The main constraints to the expansion of Inland Water transport in the State are lack of depth in the waterway caused by silting, lack of maintenance of navigation system and bank protection, accelerated growth of the water haycinth, lack of modern inland craft terminals and cargo handling system.
- 10.90 The government agencies engaged in the development of Inland Water Transport in the State are Coastal Shipping and Inland Navigation Department (CSIND), State Water Transport Department (SWTD) and Kerala Shipping and Inland Navigation Corporation Ltd. (KSINC).

12th Finance Commission Award.

- 10.91 The 12th Finance Commission has awarded an amount of Rs. 225 crores for Inland Water Transport development in the State during the period 2006-2010. The works proposed to be undertaken under the award are divided into two phases. Phase I programme comprises deepening of the existing canal, side protection works and phase II programme comprises construction of boat jetties and aprons, reconstruction of bridges and formation of canals in the uncut portion.
- 10.92 Government has accorded administrative sanction for Rs.52.25 crores for the works of the year 2006-07. 101.64 kms of the waterway is scheduled to be covered during the first year of the programme with deepening and widening to the state waterway standards providing side protection with pile, slab and gabion structures and improvement of important feeder canals. 119 works were taken up during 2006-07 of which 61 Nos. completed.
- 10.93 The total expenditure registered under the scheme is Rs.17.86 crores. The main reason for the poor expenditure was the delay in settling encroachment disputes which has been settled off late. The Action Plan for the remaining period 2007-10 for Rs. 151.98 crores was approved and the total number of works sanctioned is 125.

State Water Transport Department

10.94 State Water Transport Department operates passenger boats in the water logged areas of Alappuzha, Kollam, Kottayam, Ernakulam, Kannur and Kasaragod districts. The gross route distance is 6018 kms with scheduled trips of 689. The number of boats in operation is 47 during 2007-08. The number of passengers carried by these services decreased to 147.77 lakhs during 2007-08 against 159lakhs in 2006-07. The total revenue receipt of the department during 2007-08 is Rs.449 lakhs. At present the department is employing 779 persons against the figure of 786 in 2006-07. The revenue loss of the department increased from Rs. 1114 lakhs in 2006-07 to Rs. 1278 lakhs during 2007-08 (Appendix10.26). The department procured 4 new steel boats and payments made for the procurement of 10 FRP boats during 2008.

Kerala Shipping and Inland Navigation Corporation Ltd.

10.95 The Corporation was formed in 1989 by the statutory amalgamation of Kerala Inland Navigation Corporation Ltd. (KINCO) and Kerala Shipping Corporation Limited (KSC) two Government of Kerala Companies. The main objective of the company is to develop passenger and cargo transportation through Inland Waterways of Kerala, docking and repair of marine vessels, construction of boats, conducting navigation training programmes, conducting tourist cruises, providing navigational aids and maintenance in National Waterway-III.

10.96 The corporation at present has 12 barges, 11 boats, and 2 Jhankars. With the commissioning of Goshree bridges the ferry services of the Corporation slumped and have since diversified into tourism sector.

10.97 Construction and repair of boats, barges and other marine vessels of the Corporation and customers in the public and private sector are carried out by the corporation leasing a slipway complex from Cochin Port Trust since 1991.

10.98 The Corporation had also started a Marine Training Institute for giving training for operating Inland Vessels and Crafts. Three batches have completed training. The volume of cargo carried by the corporation during 2006-07 is 518624 (000 tonnes). The Corporation is employing 258 persons. The operational statistics of the KSINC Ltd. are shown at Appendix 10.26.

Railways in Kerala

10.99 The Indian Railways in Kerala are doing an admirable job linking all the states of India with an efficient network of services. The Railways are perhaps the most important system of transport in India, ensuring a smooth transition from one place to another.

10.100 There are 2000 Railway stations in Kerala. This extensive network connects places both within and outside the state of Kerala. Local train services and long distance express trains ply all over the state making it a convenient and quick method of transport. Long distance trains connect the state to major Indian cities like Kolkata, Coimbatore, Chennai, Hyderabad, Mumbai, and New- Delhi. They also connect Jammu and Kashmir and the North-East.

10.101 The entire length of the rail route is around 1148 kms and covers 13 Railway routes within its fold. The Railways in Kerala connect it to other states, the Kollam-Madurai and the Shornur-Erode Railway lines are important rail routes. The Railway divisions at Thiruvananthapuram, Palakkad and Madhurai jointly carryout transport operations in Kerala. Total route length in Thiruvananthapuram Division is 625 km. Two new train services started from Kerala during 2007-08, one from Kochuveli- Lokamanyatilak (via Kottayam Konkan Railay) and another from Nagercoil – Coimbatore(viaTirunelveli). Details of Railway operations in Thiruvananthapuram and Palakkad divisions during 2007-08 is given in the Table.10.5

Table 10.5
Performance of Railway Divisions in Thiruvananthapuram and Palakkad

Parameters	Thiruvananthapuram	Palakkad
1. Total No. of passengers through		
Railway in the division		
a) originating (lakh)	857.00	690.00
b) Terminating (lakh)	882.00	669.00
2. No. of trains operated	58020	20335
3. Revenue receipt form passenger	437.90	359.18
traffic (in crores)		
4. Revenue receipt from goods	122.92	171.36
traffic (in crores)		
5. No. of railway station	105	80
6. No. of new train service started	2	Nil
7. Length of road maintained by	54.525	42.65
Railway (km)		

Source: Railway Divisions, Thiruvananthapuram and Palakkad

Air Transport

10.102 Kerala has three airports at Thiruvananthapuram, Kochi (Nedumbassery) and Kozhikode handling both international and domestic flights. Thiruvananthapuram and Kozhikode airports are owned by Government of India and Kochi airport in owned by Cochin International Airport Ltd. (CIAL), a company set up by government of Kerala with public private participation. Details of flights operated and passengers travelled during 2007-08 from the three airports are show in Table -10.6

Table 10.6
Performance of the three airports during 2007-08

	Intern	ational	Domestic		
Airport	Flighs (Nos)	Passengers (Nos)	Flighs (Nos)	Passengers (Nos)	
Thiruvananthapuram	12968	1375646	10677	512273	
Kozhikode	9343	1063638	6224	239866	
Kochi	16335	1770612	22833	1567530	
Total	38646	4209896	39734	2319669	

10.103 Both Domestic and International Flights and passengers increased during 2007-08 compared to 2006-07. The details of flights operated by various agencies from the three airports are given in Appendix 10.27 (A),(B) and (C)

Cargo Traffic

10.104 KSIE is the official export house for the promotion of exports as recognized by the government of India. Major activity of the Company is the management of the two Air Cargo Complexes at Trivandrum and Calicut Airports. The Company is also engaged in trading activities through its three Sales Emporia at Trivandrum, Ernakulam and Kozhikode and also through its e-com site keralacade.com. KSIE also continue to act as the Virtual Office in Kerala

of Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce, Government of India.

10.105 During the year 2007-08, the total turn over of the Company was Rs. 1367.07 lakhs with a profit (before tax) of Rs. 573.97 lakhs, as against a turnover of Rs.1216.95 lakhs and profit (before tax) of Rs. 501.36 during the previous year. During the year 2007-08, 28479 MT of export cargo and 17821 MT of import cargo were handled by the two Air Cargo Complexes.

10.106 Following are the achievements of the Company during 2007-08

- i)A policy decision has been taken by the Government of India that KSIE would continue to manage the Trivandrum Air Cargo Complex after shifting of the international terminal to Chackai side, inspite of the claim put forward by AAI for the custodianship of Cargo Complex.
- ii) A new building structure was constructed and inaugurated on 8/2/08 at the Export Bay in Calicut Air Cargo Complex for providing sufficient facilities for handling export cargo.
- iii) Further, second phase expansion of the Calicut Air Cargo Complex has been taken up under ASIDE scheme, at a total cost of Rs. 500 lakhs.
- iv) A project for construction of a Shopping Mall cum Office Complex at Thampanoor, at an estimated cost of Rs. 42 crores is being taken up by the company.

10.107 Details of Export and Import through Air Cargo Complexes at Thiruvananthapuram and Kozhikode from 2003-04 to 2006-07 is given in the Table 10.7

Table 10.7

Details of Export and Import through Air Cargo Complexes at Thiruvananthapuram and Kozhikode

Year	Export (MT)	Import (MT)	Value (Rs lakh)
2003-04	25545	12177	571.13
2004-05	25550	13482	681.32
2005-06	24166	14990	1017.32
2006-07	30075	18896	1216.95
2007-08	28479	17821	1367.07

Source:KSIE

Passport and Emigration

10.108 The three passport offices at Thiruvananthapuram, Kochi and Kozhikod altogether received 721994 passport application during the year 2007-08 as against 568922 during 2006-07. Number of passports issued increased to 726748 during 2007-08 from 583982 in 2006-07. Number passports issued from the three passports offices from 2000 onwards is given in Appendix 10.28.

10.109 The Protector of Emigrants, Cochin under the Ministry of Overseas Indian Affairs, Government of India, issued emigrance clearance to 65705 emigrants as against 67303 applications received for the period from April 2007 to September 2008.

Communications

10.110 Communication in India is mainly through Postal Services and Telecommunications.

Postal Services

10.111 India has the largest network in the world. At the time of independence there were 23,344 post offices throughout the country. Now the country has about 1.6 lakh post offices spread all over the country.

10.112 Kerala postal circle provides postal needs of whole Kerala State, Union Territory of Lakshadeep and Mahe, a part of Union Territory of Pondichery. There are 5070 post offices functioning in the State. The growth of post offices in Kerala during the last nine years is given in Appendix 10.29. The number of post offices increased to 5083 in 2004 from 5069 in 2000 and decreased to 5070 in 2007 and 2008 as shown in the fig.10.5.

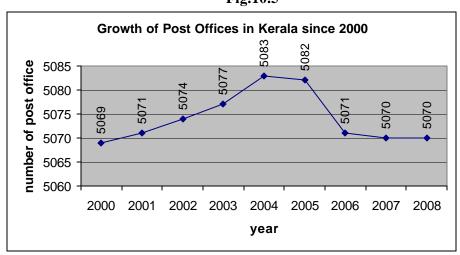


Fig.10.5

10.113 There are 51 Head 1452 sub offices, 468 Extra Departmental Sub offices and 3099 Extra Departmental Branch offices in Kerala. The Category wise services in postal and other postal services are detailed in Appendix 10.30. Kerala Postal Circle is divided in to 24. Division wise and category wise post offices under Kerala Circle is given in Appendix 10.3. Urban/Rural Split of post offices as on 31.3.2008 is given in Appendix 10.32. District wise details of area and population served by one post office during 2007-08 is given in Appendix 10.33

10.114 All 51 Head pots offices and 626 Departmental sub post offices have been computerized. 40 offices of Kerala postal circle have been connected to National Data Centre through wide Area Net Work and steps had been taken to connect 79 offices.

Telecommunication

10.115 For the past decade or so telecommunication activities have gained momentum in India. A large population, low telephony penetration levels, and rise in consumer income and spend owing to strong economic growth have contributed to making India the fastest growing telecom market in the world. The first and largest operator is the state owned incumbent BSNL, which is also the seventh largest telecom company in world in terms of number of subscribers.

10.116 Kerala Telecom circle serves the whole of Kerala State, the union Territory of Lakshadweep and part of Union Territory of Pondicherry (Mahe). Kerala has an impressive record of performance in Telecom Sector. The circle with a population of 3.19 crores has a telephone density of 520 per thousand population as on 30.09.2008 from all the operators. The

market share of BSNL in Kerala is 36.15%. The tele density of BSNL alone is 200 per 1000 population where as rural telephone density is 164 per 1000 population and urban telephone density is 303 per 1000 population. District wise details of telephone network in Kerala is given in Appendix 10.34.

10.117 All the panchayats and all the villages in the circle have been provided with public telephones and there is a wide network of over 127369 public telephones. The state is served by 1242 automatic exchanges all of which are digital electronic. Of the 63.86 lakhs telephone connections 35.40 lakh are land line, 5.6 lakh are wireless line and 22.83 are Mobile connection.

10.118 There are 463850 internet customers and 150742 broad band customers in this circle as on 30-09-08. A public grievance cell is working at circle level with '12727' and district level '12728' other than 198 computerized fault repair services. Call centre with '1500' is fully functioning for Kerala Call Centre for Mobile Service is 9447024365. Internet helpline is also working at 12678 for Kerala Circle. Achievements of BSNL during 2007-08 is given below.

- ?? 146812 new wire line connections provided
- ?? 171086 new cellular connections provided
- ?? 201217 new cellular connections provided
- ?? 1651.55 km of cable laid
- ?? 43441 Internet connections provided
- ?? 62842 Broad Band connections provided

10.119 BSNL was created by corporatization of the erstwhile DTS (Department of Telecommunication Services), a government unit responsible for provision of telephony services. Subsequently, after the telecommunication policy was revised to allow private operators, companies such Bharati Telecom, Tata Indicom, Vodafone, MNNL, Idea BPL lane etc entered the space. However rural India still lacks strong infrastructure

Urban Development

10.120 Urbanization is a global phenomenon. In fact all the developed countries in the world are generally urbanized. Population growth is more prevalent in urban areas and it provides better economic opportunities.

10.121 The urbanization trend in the state of Kerala shows marked peculiarities. Generally, increase in urban population growth rate is the result of over concentration in the existing cities especially metropolitan cities. But in Kerala, the main reason for urban population growth is the increase in the number of urban areas and also urbanization of the peripheral areas of the existing major urban centers.

10.122 The urban sector in Kerala consists of 5 Municipal Corporations and 53 Municipalities . More than one fourth of the population live in urban areas (25.96%) and this is a little less than the National average. Compared to other states the urban- rural system in Kerala have many distinct characteristics. It is very difficult to say where the rural area ends and the urban area starts since the features in rural and urban areas are almost alike. Urbanization trend in the state shows slow progress and it is presented in Table -10.8

Table No.10.8
Trends in Urbanization of Kerala 1901-2001

Sl.No.	Census Year	Total number of Urban Towns	Total Population (in crores)	Total Urban Population (in crores)	Percenta ges of Urban Populati on	Decennial growth (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1901	21(9)	0.64	0.04	7.11	
2	1911	27(14)	0.71	0.05	7.34	+15.44
3	1921	44(23)	0.78	0.07	8.73	+29.78
4	1931	53(23)	0.95	0.09	9.64	+34.58
5	1941	62(23)	1.10	0.12	10.84	+30.47
6	1951	94(25)	1.35	0.18	13.48	+52.72
7	1961	92(30)	1.69	0.25	15.11	+39.89
8	1971	88(32)	2.13	0.35	16.24	+35.72
9	1981	106(48)	2.55	0.48	18.74	+37.64
10	1991	197(65)	2.91	0.77	26.39	+60.97
11	2001	159(60)	3.18	0.83	25.96	+7.64

Source: Census 2001 Government of India, New Delhi Note: Number of statutory towns are given within brackets

10.123 This table shows that number of urban agglomerations /towns has increased over the period from 1901 to 2001, but the change from 1991 to 2001 is only marginal. There were 197 census urban towns (65 statutory towns and 132 census towns) in the state in 1991 which was changed to 159 (60 statutory towns and 99 census towns) in 2001.

10.124 The population of Kerala has increased from 255 lakh in 1981 to 291 lakh in 1991 and 318 lakh in 2001. This growth marks an increase of 14.12 per cent during 1981 to 1991 and 9.28 percent during 1991 to 2001. The population density was 747 persons per sq km in 1991, increasing to 819 persons per sq km in 2001. The density of population varies from the coastal plains to the highland regions, the highest in the coastal land and the lowest in the highland. The share of urban population in Kerala recorded steady growth from 7.11% in 1901 to 26.39% in 1991, but then declined to 25.96% in 2001.

10.125 The settlement pattern of Kerala is most intriguing on account of the limited land availability and the composite nature of family income. The population has got settled all along the transportation routes in non-nucleated settlements with the conjuration points wherever community facilities have been created such as schools, administration and market centres etc. The geographical features, availability of subsoil water, climatic factors, easy access to transportation corridors and the socio-economic factors have contributed to the development of a dispersed settlement pattern spread all over the State. The effectiveness of investments in infrastructure development and social services is considerably reduced since the scarce resources are spread too thinly throughout Kerala and the accruing benefit is only marginal.

10.126 In Kerala, urban content has been increasing from 7.11% in 1901 to 26.39% in 1991, but a slight decline seen in the decade from 1991 to 2001. This is partially due to the

declassification of Pandalam, Piravom, Koothattukulam and Mannarkad municipalities during 1991-2001. The declassification of Eloor and Earattupetta municipalities has not affected urbanization due to classification of the area contained in these municipalities as census towns in 2001 census.

10.127 Declassification of a few census towns in 2001 as rural has also contributed to the lower proportion of urban population in the state. Among the districts, the percentage of urbanization has varied from 3.8% in Wayanad to 50.4% in Kannur. Ernakulam District follows Kannur with 47.6% urban population. In six districts of Kannur, Ernakulam, Kozhikode, Thiruvananthapuram, Alappuzha and Thrissur, the percentage of urban population is higher than the state average. In three districts namely Wayanad, Malappuram and Idukki, the urban population is 10% or less.

10.128 It is seen that more urban centres are located along the main transportation routes with about 75% by the side of National Highway or the railway line. The average distance between these urban centres is about 15 Km. The settlement pattern is characterized by scattered settlements of varying sizes. The overall development presents a rural urban continuum or 'rurban' character. This has led to the development of evenly spaced urban centres. Due to the nearness of the urban centres and the easy availability of infrastructure facilities even in rural areas, there is practically no push factor to urban areas from rural areas. The fast urbanization trend noticed in Kerala is not due to the rural to urban migration, but rather due to the transformation of the rural areas due to occupational shift.

Urban Slum Population

10.129 The concept of slums and its definition vary considerably across the states depending upon the socio-economic conditions or local perceptions prevailing in the society. There are regional differences in the names of slums but physical characteristics in most of these are essentially the same. As per 2001 Census, a total of 425.8 lakh population live in slums of 640 cities/towns across 26 states and union territories, which constitutes 4% of the total population of the Country. In terms of percentage of slum population to the total population of cities/towns having reported slums, Meghalaya has the highest proportion of slum population (65%) followed by Maharashtra (33.3%) and Andhra Pradesh (32.2%).

Box.No.10.1

Kerala has the lowest proportion of slum population (2%) as compared to the total population of 13 cities/towns having reported slums.

10.130 The slum population constitutes nearly 15% of the total urban population of the country. Among the states, Maharashtra has the highest proportion of slum population (27.3%) followed by Andhra Pradesh(24.9%) and Haryana(23.2%). Kerala has the lowest percentage of slum population in the urban area (0.8%) while Goa (2.2%) and Assam (2.4%) have also a very low proportion of slum population.

10.131 In Kerala only 13 cities/towns reported slums with a population of 64556 persons which constitute 0.8% of the urban population. Details of slum population of 13 cities/towns are given in Appendix –10.35. As compared to the urban population more than 13% of the children in 0-6

age group are living in the slums. The details of slum population as compared to the urban population of Kerala are given in Table 10.9

Table 10.9

Details of slum population as compared to the urban population in Kerala

Sl.No	Items	Urban	Slum	Percentage
1	Total Population (Nos.)	8266925	64556	0.78
	Male	4017332	31699	0.79
	Female	4249593	32857	0.77
2	Child (0-6) Population	935460	8645	0.92
3	Sex Ratio ('000 Males)	1058	1037	-
4	Child (0-6) Sex Ratio	958	935	-
5	Literacy rate	93.2	83.9	-

Source: Census India 2001

Urbanization Policy for Kerala

10.132 Urbanization is an important aspect of the process of economic and social development and is connected with many problems such as migration from villages to towns, relative cost of providing economic and social services in the towns of varying sizes, provision of housing for different sections of the population, provision of facilities like water supply, sanitation, transport and power, pattern of economic development, location and dispersal of industries, civic administration etc. The main objective of Urban Development Policy as envisaged by the National Commission on Urbanization included the following:

- i) Saving the super-metros and national cities and also reviving their economies
- ii) Development of fast growing intermediary level urban centres by ensuring financial investment for maintaining the existing infrastructure and augmenting it to a level wherein they will be more efficient urban entities and
- iii) Development of stagnating towns by providing gainful employment opportunities

10.133 In Kerala situation, the development of tertiary sector is the main cause of urbanization. It is not the outcome of accelerated industrialization and urbanization, as seen in Tamil Nadu, Maharashtra, Andhra Pradesh and Karnataka. Kannur district, with an urban population of 50.4% is ranked first in urban content, but 11th in per capita income. This is mainly due to the prevalence of low-income generating small-scale industries. Ernakulam District with an urban content of 47.6 % is ranking second in urban content and first in per capita income. This is due to production specialization in industrial activities and port induced service sector development. Idukki district though ranks 13th in urban content, is second in per capita income. This is due to production specialization in plantation crops.

Urban Development Strategy

10.134 The National Commission on Urbanization suggested that urbanization strategy should be a part of the major strategy of generating economic growth. Urbanization and Economic Development have long been recognized as concomitant factors. The State Government also accept the special economics interrelated to urban development. The State Urban development Strategy prepared in 1996 states that the first priority in the strategy for urban development shall be given for Kochi Urban Agglomeration. Second priority is for Thiruvananthapuram Urban

Agglomeration and the third for Kozhikode Urban Agglomeration. Major parameters considered in evolving the State Urban Development Strategy were:

- ?? Density of population
- ?? Functional linkage with parent settlement
- ?? Functional dependency of the surrounding panchayats
- ?? Corridor development along major arterial roads
- ?? Transportation and land use
- ?? Functional category of town in the region

Urban Development Programmes

10.135 The major Urban Development Programmes implemented at the state level are given below.

1. Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

10.136 Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) was launched during the year 2005-06 to improve the infrastructure in small and medium towns in the Country in a planned manner. The scheme is for a period of seven years. In Kerala, 54 urban local bodies (excluding Thiruvananthapuram, and Kochi Corporations, Thrippunithura and Kalamasseri Municipalities) are eligible for getting financial assistance under the scheme. The objectives of this Scheme are:

- ?? Improving infrastructural facilities and helping in the creation of durable public assets in small and medium towns having potential to emerge as regional centres of economic growth and employment, thereby reducing the inclination of the people belonging to rural and smaller urban areas to migrate to bigger cities and towns for jobs or settlement.
- ?? Decentralising economic growth and employment opportunities and promoting dispersed urbanization while taking due advantage of the functional interlinkages between villages, towns and cities through a regional planning approach.
- ?? Increasing the availability of sites for housing, commercial and industrial uses and promoting the principles of planned and orderly spatial development.
- ?? Integrating spatial and socio-economic planning as envisaged in the Constitution (74th Amendment) Act, 1992 and preparing and implementing Town/City Development Plans.
- ?? Promoting resource-generating schemes for the urban local bodies to improve their overall financial position and ability to undertake long-term infrastructure development programmes on their own as well as to repay the borrowed capital and usher in necessary municipal reforms.

10.137 The funding pattern is 80:20 shared by the Central and State Governments. The State Share (20%) would be equally shared (ie.10% each) by State Government and the participating Urban Local Self Governments. Details of projects approved under UIDSSMT are given in Table-10.10.

Table -10.10
Details of projects sanctioned under UIDSSMT

(Rs. in Crore)

Sl.No	Name of Towns	Component	Approved Cost
1	Neyyatinkara	Solid Waste Management	3.49
2	Attingal	Solid Waste Management	3.06
3	Punalur	Solid Waste Management	4.82
4	Changanassery	Solid Waste Management	3.90
5	Pathanamthitta	Solid Waste Management	3.80
6	Perinthalmanna	Solid Waste Management	5.22
7	Payyannur	Water supply	40.19
8	Alappuzha	Water supply	91.94
9	Trissur	Water supply	110.64
10	Chalakkudy	Sewerage	49.78
	Total		316.84

Source: Department of Town & Country Planning

2. Capital City Development Project

10.138 The Capital City Development Project was introduced during 2003-04 to improve the quality of life in the capital city by strengthening and improving the critical infrastructure like roads, water supply augmentation, solid waste management, and surface water drainage and city beautification. Details of projects under taken by Capital city Development Programme is given in Appendix.10.36

3. Development Authorities

(i) Thiruvananthapuram Development Authority (TRIDA)

10.139 TRIDA is the primary implementing agency for the overall developments in the Capital city. TRIDA has been appointed as the nodal agency for the land acquisition related works as a part of the Capital Region Development Programme. Under Capital Region Development Programme, 12 roads totaling to a distance of 42.6 Km have been taken up for improvements. Out of which 13.74 Km road works have been completed. The construction of an under ground passage at Palayam is also completed. The construction of a fly over at Bakery Junction has been started. 95% of the land acquisitions for the project have been completed and remaining land acquisition is in the final stage. The other road projects taken up by TRIDA are Vellayambalam – Thycaud road (balance 1.5kms), Bakery- Poojappura road(2.6kms), Renovation work of Baker road, Renovation work of Boat House at Vallakkadavu &Widening of Karamana-Pappanamcode road(2.4kms).

(ii) Greater Cochin Development Authority (GCDA)

10.140 Greater Cochin Development Authority is the Planning and Development Authority of the metropolitan area of Cochin which is the urban hinterland of Cochin port. The jurisdiction of GCDA extends to Kochi Corporation, 6 municipalities and 25 intervening Panchayats covering an area of 632sq.kms. Details of major programmes under taken by GCDA are given in Appendix 10.37

4. Kerala Sustainable Urban Development Project (KSUDP)

10.141 The Kerala Sustainable Urban Development Project is an externally aided project funded by the ADB in the sectors of (1) Water Supply, (2) Sewerage and Sanitation, (3) Urban Drainage, (4) Solid Waste Management, (5) Roads and Transportation and (6) Poverty Alleviation in the five Municipal Corporations of Thiruvananthapuram, Kollam, Kochi, Thrissur and Kozhikkode. The overall development goal of the project is to ensure sustainable growth and reduce poverty in the Municipal Corporations of Kerala. The development purpose of the project is to assist Local Self Governments to "Promote good urban management, develop and expand urban infrastructure to increase economic opportunities and to reduce vulnerability to environmental degradation and urban poverty". The projects are being evolved with technical assistance from ADB with the following components.

- ?? Promote good governance in Municipal Management.
- ?? Develop and expand urban infrastructure.
- ?? Formulate support programmes for improving urban social services for the elderly, destitute, women and street children.
- 10.142 Details of major projects included under KSUDP are given in Appendix 10.38

5. Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

- 10.143 Cities and towns of India constitute the world's second largest urban system. Government of India has approved a Mission Mode approach for implementation of urban infrastructure improvement programme in a time bound manner in selected cities. The mission entrusted with this task is known as the Jawaharlal Nehru Urban Renewal Mission. The mission was launched in 2005 and will continue until 2012. Corporations of Thiruvananthapuram and Kochi were selected as mission cities from Kerala State. The Mission objectives are:
 - ?? Focused attention to integrated development of infrastructure services in the cities covered under the Mission.
 - ?? Secure effective linkages between asset creation and asset management so that the infrastructure and services created in the cities are not only maintained efficiently, but also become self-sustaining overtime.
 - ?? Ensure adequate investment of funds to fulfill deficiencies in the urban infrastructure services.
 - ?? To take up urban renewal programme, ie. Redevelopment of inner cities area to reduce congestion.
 - ?? For providing basic service to urban poor.
- 10.144 Admissible components included in the mission are redevelopment of inner city areas, water supply and sanitation, sewerage and solid waste management, construction and improvement of drains/storm water drains, urban Transport including roads, highways/expressways/MRTS/metro projects, parking lots/spaces on Public Private Partnership basis, development of heritage areas, prevention and Rehabilitation of soil erosion/landslides only in case of special category states where such problems are common and preservation of water bodies. Details of projects approved for implementation under JNNURM is given in Table 10.11

Table 10.11
Projects approved for implementation under JNNURM

(Rs. in lakh)

Sl. No	Name of project	Approved cost
	Thiruvananthapuram	
1	Improvement of water supply scheme	8716.00
2	Improvement of sewerage system	21541.00
3	Solid waste management scheme	2456.00
	Kochi	
1	Water supply scheme	8812.00
2	Sewerage system	7841.00
3	Solid waste management scheme	20117.00
4	Surface water drainage scheme	978.00
G	Total	70461.00

Source: KSUDP

CHAPTER-11

EDUCATION

Kerala's achievements in the Social Sectors are unparalleled. Educational advancement of the state acts as the main channelising factor for these achievements in the social sector. The educational progress of the state has brought laurels to it from within the country and outside. Kerala tops in India in indicators like literacy rate, higher enrolment of students, percentage of girl students in school, schools and colleges in each village, low dropout rate among students etc. State Government and Local Self Government Institutions are committed in providing good quality infrastructure and hygienic environment in schools.

11.2 To a greater extent public spending on education has been equitably distributed between the sexes and between different social groups and regions in the state. The investment the state has made in education sector over the decades has made rich dividends in the form of talented human resource base. The state is making concerted effort in sustaining the achievements in the elementary education sector and improving the quality of higher education, technical education and research.

Literacy

- 11.3 Kerala's literacy rate is comparable to the most developed countries of the world. Kerala's literacy rate which was only 47.18% in 1951 has almost doubled to 90.92% in 2001. The male, female literacy gap which was 21.92% in 1951 has been narrowed down to 6.34% in 2001. Kerala's literacy rate from 1951-2001 is given in Appendix.11.1.
- 11.4 District wise analysis of Kerala's literacy rate according to 2001 census shows that Kottayam district has the highest literacy rate in the state followed by Pathanamthitta and Alappuzha districts. Literacy rate by sex for districts by 1991 and 2001 census are given in Appendix 11.2.
- 11.5 There are 12646 schools in Kerala as per the figures of 2007-08. Out of these 4500 are Government schools, 7284 are aided schools and 862 are unaided schools. This means aided schools comprise 57.60% of total schools in the state and Government and unaided schools form 35.58% and 6.82% of total schools respectively.
- 11.6 Aided schools outnumber Government schools in all sections. Malappuram District has the largest number of schools in the state followed by Kannur and Kozhikode Districts. Malappuram District has also the largest number of Government schools and unaided schools in the state. But largest number of aided schools is functioning in Kannur District. Details of District-wise and stage-wise number of schools in Kerala during 2007-08 is given in Appendix 11.3. Stage-wise number of schools in the state in 2007-08 is given in Table 11.1.

Table 11.1 Stage wise number of schools -2007-08

	High schools	UP schools	LP schools	Total
Government	999	953	2548	4500
Private Aided	1429	1869	3986	7284
Unaided	375	220	267	862
Total	2803	3042	6801	12646

Source: Directorate of Public Instruction.

11.7 Apart from schools in state syllabus, there are 727 schools functioning in the state. This include 587 CBSE schools, 100 ICSE schools, 26 Kendriya Vidhyalaya and 14 Jawahar Navodayas. District-wise details of schools other than state syllabus in the state in the year 2008-09 is given in Appendix 11.4.

Physical infrastructure and facilities in Government Schools

- 11.8 At present 99.38% of Government Schools in Kerala are functioning in pucca building. There are only 28 schools having thatched sheds. Own buildings have to be constructed for 220 Government schools which are now working in rented buildings. District-wise details of Government schools having building facilities are given in Appendix 11.5.
- 11.9 The proactive intervention of Local Self Government Institutions and programmes like SSA has contributed much to the overall development of physical infrastructure and common facilities in Government schools in the state. Data available in 2008 shows that 96.11% of Government schools have access to drinking water and 97.13% of total government schools in the State have urinals/latrine facilities. District —wise details of government schools having drinking water/latrines/urinal facilities in Kerala in 2008 is given in Appendix 11.6.

Enrolment of Students

11.10 Enrolment of students in the state has been showing a slight decline over the recent years. Change in demographic pattern of the state due to low birth rate is the main reason attributed for this phenomenon. In 2008-09, 45.46 lakh students are enrolled in schools in the state. Enrolment of students in 2008-09 shows 1.74% decline over the last year. There was a decline of 51,624 students in LP section, 16,728 students in UP section and 12,233 students in High school section. LP section accounted for more than 64% of total reduction in the enrolment of students. But the reduction in enrolment is not as steep as in the year 2007-08. The stage-wise enrolment of students in schools in Kerala during the years 2006-07, 2007-08 and 2008-09 are given in Table 11.2.

Table-11.2
Enrolment of Students in Schools in Kerala stage-wise 2006-07,2007-08 and 2008-09
(in lakhs)

Year	LPS	UPS	HS	TOTAL
2006-07	17.89	14.64	14.66	47.19
2007-08	17.18	14.69	14.39	46.26
2008-09	16.66	14.53	14.27	45.46

Source: Directorate of Public Instruction.

11.11 Enrolment of Students in Lower Primary, Upper Primary and High School sections are 36.65%, 31.96% and 31.39% respectively. 30.30% of total students are studying in Government

schools. 61.64% of students are enrolled in aided schools and the remaining 8.06% in unaided schools. Details of management-wise and standard wise enrolment of students in schools in Kerala in 2008-09 is given in Appendix 11.7. District-wise and stage-wise enrolment of students in the state in 2008-09 is given in Appendix 11.8.

Enrolment of Girl students

11.12 Girl students constitute 49.27% of total student enrolment in schools. Thiruvananthapuram District is the sole exception as the Girl students outnumber Boy students in this District. All other districts in the state show more or less uniform pattern in the enrolment of Girl students.

SC/ST Enrolment

- 11.13 SC students constitute 10.84% of total students in the state in 2008-09. The percentage of SC students in Government schools, private aided schools and private unaided schools are 13.50%, 10.52% and 3.23% respectively.
- 11.14 ST students constitute 1.63% of total enrolment in schools. The enrolment of SC/ST students at school level in 2008-09 is given in Table 11.3.

Table 11.3
Enrolment of SC/ST students at school level 2008-09

Section	Total	SC	% to total	ST	% to total
LP	1665993	187508	11.26	33781	2.03
UP	1452540	161243	11.10	24449	1.68
HS	1427293	144034	10.09	15882	1.11

Source: Directorate of Public Instruction

11.15 The Standard-wise strength of SC/ST students in the state in the year 2008-09 is given in Appendix 11.9.

Drop-out rate

- 11.16 Among the Indian states Kerala has achieved the distinction of the state having the lowest dropout rate among school students. In the year 2006-07 dropout ratio among school students in Kerala was 0.81%. The drop-out ratio in Lower Primary Section, Upper Primary Section and High School Section were 0.59%,0.52% and 1.38% respectively.
- 11.17 Among the Districts, Wayanad has the highest drop out ratio in the Lower Primary section (1.89%), Upper Primary (1.92%) and High School Section (2.56%). District-wise/Stage-wise dropout ratio in schools in 2006-07 is given in Appendix 11.10. Drop-out ratio among SC students in Kerala as per the figures of 2006-07 was 1.04% and that of ST students was 4.18%.

Number of Teachers

11.18 The number of school teachers in Kerala including TTI teachers during 2007-08 was 1,74,978. Out of this 1,06,143 teachers are working in aided schools and 14,535 teachers are working in private unaided schools. This means that 68.97% of total teachers in the state are working in private management schools. The remaining 31.03% of teachers are working in Government schools.

- 11.19 50.33% of total teachers in the state are teaching in High schools, 25.75% in upper primary schools, 23.42% in Lower Primary schools and the remaining 0.5% in TTI's. One of the noteworthy achievements of Kerala's school system is the predominance of female teachers. 70.72% of total teachers are women. The teacher pupil ratio during 2007-08 works out to be around 1:27.
- 11.20 Stage-wise and management-wise number of teachers in schools in Kerala during 2007-08 is given in Appendix 11.11.

Protected Teachers

11.21 The number of protected teachers in Kerala in 2007-08 stood at 3133. Out of this 1641 teachers are deployed in Government schools, 1028 are retained in parent school and 247 are deployed in other aided Schools. The remaining 217 protected teachers are undeployed. Kozhikode district has the largest number of protected teachers in the state followed by Kannur and Kollam districts. The details of protected teachers in the State in 2007-08 is given in Appendix 11.12.

Uneconomic Schools

11.22 As per the figures of 2007-08 there are 3415 uneconomic schools in Kerala. Out of this 1721 are Government Schools and 1694 are in the Aided Sector. District-wise analysis shows that most number of uneconomic schools are in Kannur District followed by Pathanamthitta and Ernakulam district. Wayanad district has the lowest number of uneconomic schools in the state. The peculiar feature of uneconomic schools in Kannur district is that more than 70% of the uneconomic schools in the district are aided lower primary schools. District wise details of uneconomic schools in the state in 2007-08 is given in Appendix 11.13.

Box. No. 11.1 Quality Education –Pupils Right

Quality Education- Pupils Right is a special programme which was started during the academic year 2006-07 to enhance the academic and physical standard of the schools having only 33% of result in the SSLC Examination March 2006. The scheme envisages a time bound programme for improving the SSLC result and quality of education in 104 schools and to bring the results of these schools to the level of state average. This scheme has achieved its objective as the SSLC result in the state in March 2007 has shown a remarkable improvement compared to previous year. SSLC result which was only 69.33% in 2006 rose to 82.23 % in 2007. The pass percentage of SSLC examination in 2008 was 92.08%.

Pass Percentage in SSLC Examination

11.23 In the year 2008 SSLC result has shown a considerable improvement compared to the result in 2007. The pass percentage of SSLC examination in 2008 is 92.08% while in 2007 it was 82.23%. A total of 4,51,479 students appeared for SSLC examination in 2008. Out of this 228482 (50.61%) are girls. SC and ST students constitute 9.17% and 1.07% of total students respectively. The pass percentage of SC students is 83.37% and that of ST students is 82.46%. The details of result of SSLC examination in the years 2006,2007 and 2008 are given in Appendix. 11.14.

Box. 11. 2 Quality Education for Challenged Children

Government has taken special interest and deliberate initiative in addressing the needs of children with special needs. In Kerala at present 308 schools are catering to the needs of mentally challenged children as well as children with learning disabilities. Most of these schools are run by voluntary organizations and have 16000 children. Only some of these institution have received financial assistance/ grant from Government of India. The scheme Quality Education for Challenged Children is envisaged in the Annual Plan 2008-09 with a view to financially support the institutions which are not getting any financial support from the central Government.

Sarva Shiksha Abhiyan

- 11.24 Sarva Shiksha Abhiyan is Government of India's flagship programme for achievement of Universalization of Elementary Education (UEE) in a time bound manner, as mandated in 86th amendment to the Constitution of India making free and compulsory education to the children of 6-14 years age group, a fundamental right. SSA is being implemented in partnership with State Governments to cover the entire country and address the needs of 192 million children in 1.1 million habitations. SSA has a special focus on girls' education and children with special needs. SSA also seeks to provide computer education to bridge the digital divide.
- 11.25 There are 152 Block Resource Centres (BRC) functioning in various districts. On an average every BRC has 84 schools. There are 559 Alternative and Innovative Education Centres (Multi Grade Learning Centres) with about 13172 children. The pattern of funding during the 10th Five Year Plan period between Government of India and State government was 75% and 25% respectively. The funding pattern from 2007-08 has been changed to 65:35 between Central and State governments.

Box.11. 3 ViCTERS

The Virtual Classroom Technology on EDUSAT for Rural Schools (ViCTERS) programme aim to provide high speed net connectivity to schools and for implementing learning management solutions. Two channels (interactive and non interactive) of EDUSAT ViCTERS is completely operational and full fledged telecast of programmes is now going on.

Higher Secondary Education

- 11.26 The Higher Secondary courses were a part of the higher education system for many decades. In 1990-91, the process of delinking higher secondary education from colleges and attaching to the school education has started. This process was completed within a decade.
- 11.27 There are at present 1703 Higher Secondary Schools in the state. Out of this 735 (43.16%) are Government Schools, 529 (31.06%) are Aided Schools and the remaining 439 (25.78%) are unaided schools.

- 11.28 There are 4491 batches for higher secondary courses in 2008. Science group has the maximum batches followed by Commerce and Humanities. Among the districts Malappuram has the largest number of Higher Secondary Schools in the state.
- 11.29 District wise/Management-wise number of Higher Secondary Schools and number of batches are given in Appendix-11.15.
- 11.30 The pass percentage of students in Higher Secondary Schools in 2007-08 is 72.78%. The pass percentage of SC students and ST students in Higher Secondary Schools in 2007-08 is 56.94% and 49.12% respectively. Details are given in Appendix 11.16.

Vocational Higher Secondary Education

- 11.31 Vocational Higher Secondary Education was introduced in the state in 1983-84 in 19 Government High Schools. Vocational Higher Secondary Education in the state has the objective of enhancing individual employability and providing an alternative for those pursuing higher education without any particular interest or purpose. At present, there are 389 Vocational Higher Secondary Schools with a total of 1100 batches for 42 courses. The intake capacity is 25 students per batch with a total of 55,000 students for the two year course.
- 11.32 Out of the 389 Vocational Higher Secondary Schools 261 are in the Government sector and 128 in the Aided sector. 47,021 students are studying in Vocational Higher Secondary Schools in 2007-08. Out of this 24,431 are girls (51.96%). SC students constitute 8.73% of total students in Vocational Higher Secondary Education and ST students constitute 2.32% of total students. Kollam District has the largest number of Vocational Higher Secondary Schools in the state. District wise details of Vocational Higher Secondary Schools and courses during 2008-09 is given in Appendix.11.17.
- 11.33 The pass percentage in 2008 March Vocational Higher Secondary Examination is 78%. Number of students appeared and passed Vocational Higher Secondary Examination from the year 2000 to 2008 is given in Appendix 11.18.

University and Higher Education

11.34 There are a total of 7 universities functioning in the state. Out of which 4 universities viz. Kerala, Mahatma Gandhi, Calicut and Kannur are general in nature and are offering various courses. Sree Sankaracharya university of Sanskrit, Cochin university of Science and Technology and Kerala Agricultural University offer specialized courses in specified subject areas.

Grant to Universities

11.35 The State Government provide Plan and Non plan grants to universities which are a major source of their revenue. Rs. 169.51 crore is earmarked as grant to universities in the year 2008-09. Out of this, Rs. 142.01 crore (83.78%) is provided under non plan head. Rs. 27.50 crore is earmarked under plan head in the year 2008-09. Kerala university has received the maximum assistance from state government in the year 2008-09. In the year 2008-09, 9.74% increase is registered in financial assistance to Universities over 2007-08 Revised Estimate. Details are given in Table. 11.4.

Table 11.4
Plan and Non plan grant to Universities in Kerala

(Rs.Crore)

Name of	2004	2006-07 Accounts		200	7-08 Rev		2008-09 Budget		
University	2000-07 Accounts				Estimate	e	Estimate		
	Plan	Non	Total	Plan	Non	Total	Plan	Non	Total
	1 1411	Plan	Total	1 Ian	Plan	Total	1 Iaii	Plan	
Kerala	4.75	53.10	57.85	4.75	55.00	59.75	5.50	58.85	64.35
Calicut	3.75	36.32	40.07	3.75	39.95	43.70	6.00	42.75	48.75
Mahatma	4.75	21.95	26.70	4.75	22.89	27.64	5.50	24.49	29.99
Gandhi	4.73	21.93	20.70	4.73	22.09	27.04	3.30	24.47	29.99
Sree	1.50	10.48	11.98	1.5	10.48	11.98	2.50	11.21	13.71
Sankaracharya	1.50	10.40	11.70	1.5	10.40	11.70	2.50	11.21	13.71
Kannur	7.00	4.00	11.00	7	4.40	11.40	8.00	4.71	12.71
Special fund to									
encourage	2.00		2.00						
innovation in	2.00		2.00						
universities									
Total	23.75	125.85	149.60	21.75	132.72	154.47	27.50	142.01	169.51

Source: Detailed Budget Estimates 2008-09, Vol .1 Government of Kerala

Arts and Science Colleges

11.36 There are 189 Arts and Science Colleges in the State. Of this 39 are Government Colleges and 150 are Private Aided Colleges. Ernakulam district has the largest number of Arts and Science Colleges in the state followed by Kottayam district. Thiruvananthapuram district has the largest number of Government Colleges in the state. District-wise number of Arts and Science Colleges in the state in 2008 is given in Appendix 11.19.

Enrolment of Students

11.37 The total number of students enrolled in various Arts and Science colleges (excluding unaided colleges) under the four general universities in Kerala during 2008 is 1.88 lakh compared to 1.73 lakh in 2007. University wise and stage-wise enrolment of students in Arts and Science Colleges in the state is given in Table 11.5

Table 11.5 University-wise and Stage-wise Enrolment of Students in Arts and Science Colleges in Kerala 2008

Name of University	Degree			Post Graduate			
	Boys	Girls	Total	Boys	Girls	Total	
Kerala University	16469	30201	46670	1408	3958	5366	
Calicut University	15657	28321	43978	1311	3876	5187	
M.G. Univesity	14201	26315	40516	1128	3768	4896	
Kannur University	12301	23947	36248	1022	3621	4643	
Total	58628	108784	167412	4869	15223	20092	

Source: Directorate of Collegiate Education

- 11.38 Out of the total 1.67 lakh students enrolled for Degree courses, 44..41% enrolled for BA Degree courses, 39.30% enrolled for BSc Degree courses and 16.29% enrolled for B.Com Degree course. 16 subjects are offered for BA Degree courses. Among the subjects, Economics has the largest number of enrolment of students. 15 subjects are offered for BSc course and Mathematics has the largest number of student enrolment. Details of enrolment of students in Arts and Science Colleges for BA, BSc and B.Com are given in Appendices 11.20 to 11.22.
- 11.39 During 2007-08, 20,092 students are admitted to post graduate course in the state, of this, 75.76% are girls. Details of enrolment of students in Arts and Science Colleges for MA, MSc and M.Com courses are given in Appendices.11.23 to 11.25.
- 11.40 The number of teachers in Arts and Science Colleges in 2007-08 is 9810. Out of this 45.34% are women. The maximum number of teachers in Arts and Science Colleges in the state are working in colleges which are affiliated to Mahatma Gandhi University. University-wise number of teachers in Arts and Science Colleges in the year 2005-06, 2006-07 and 2007-08 is given in Appendix.11.26.
- 11.41 Apart from this, there are 160 unaided colleges in the state offering various arts and science courses. Of this 12 are affiliated to Kerala University, 56 to M.G University, 61 to Calicut University and 31 colleges to Kannur University.

SC, ST Students

- 11.42 The enrolment of SC students in Degree and Post graduate courses are 23,397 and 2547 respectively. SC students constitute 13.87% of total students
- 11.43 2870 Scheduled Tribe students enrolled for courses in colleges in 2008. Girls constitute 59.76% of total ST students in Arts and Science Colleges. Enrolment of SC and ST students in Arts and Science Colleges in Kerala in 2008 is given in Appendix.11.27.
- 11.44 2547 Arts and Science College Teachers in the state have PhD degree. Details are given in Appendix 11.28. A total of 1363 Guest Lecturers are working in Arts and Science Colleges of the state. Details are given in Appendix.11.29.

Kerala State Higher Education Council

- 11.45 On the basis of Kerala State Higher Education Council Ordinance 2006, Kerala State Higher Education Council was set up on 16th March 2007. The ordinance was replaced by the Kerala State Higher Education Council Act 2007. Higher Education Council is a high profile academic body, which has His Excellency, the Governor of Kerala as the patron, Hon'ble Chief Minister of Kerala as the visitor and Hon'ble Minister for Education as its Chairman. The Council has a three tier structure consisting of Advisory Council, Governing Council and an Executive Council. The major functions of the council are:
 - a) Render advice to the Government, Universities and other institutions of higher education in the state.
 - b) Co-ordinate the roles of the Government, Universities and apex regulatory agencies in higher education within the state.
 - c) Initiate new concepts and programmes in higher education.
 - d) Provide common facilities in higher education without impinging upon the autonomy of other institutions of higher education.

National Cadet Corps (NCC)

11.46 NCC is managed and administered jointly by the Central and State Government. In Kerala NCC is functioning in 226 Colleges and 489 Schools. The present cadet strength is 73324 consisting of senior/ junior division boys of Army, Navy and Air force, senior wing and junior wing girls. At present 31% of the enrolled strength comprise of girls. The NCC activities have undergone a remarkable change since its inception. From drill and weapon training in the beginning, the spectrum of NCC activities has expanded considerably to include games, sports, adventure activities, career counseling and personality development. 105 cadets from the State participated in the Republic Day Camp 2008 at New Delhi.

National Service Scheme (NSS)

National Service Scheme intends to inculcate the spirit of voluntary work among students and teachers through sustained community interaction. The NSS programme is funded by Government of India and the State Government. The expenditure of the scheme is being shared by the Central and State government in the ratio 7:5. National Service Scheme has two types of programmes- regular activities and special camping programmes. Regular activities include activities undertaken in campus, village adopted and slums. Duration of these service is 120 hours. Special camping programme is a camp of ten days duration in adopted places and it provides unique opportunities to the students for group living, collective experience sharing, sharing responsibilities, addressing various developmental issues of regional and national importance and constant interaction with the community.

Technical Education

11.48 Directorate of Technical Education is the nodal department for Technical Education in the state. The details of Technical institutions under the administrative and financial control of Directorate of Technical Education is given in Table-11.6

Table – 11.6
Technical Institutions under Directorate of Technical Education

Sl. No.	Institutions	Nos
1	Government Engineering Colleges	9
2	Private Aided Engineering Colleges	3
3	Government Polytechnic Colleges	36
4	Government Women's Polytechnic Colleges	7
5	Private Aided Polytechnics	6
6	Fine Arts Colleges	3
7	Government Technical High Schools	39
8	Government Commercial Institutes	17
9	Tailoring and Garment making training	42
10	Vocational Training Centres	4
	Total	166

11.49 The other major institutions functioning under this Department are Regional Directorate of Technical Education (2 Nos), Curriculum Development Centre, Supervisory Development Centre, Office of the Joint Controller of Technical Examinations, State Project facilitation unit of TEQIP Programme of World Bank and Industry Institute Interaction Cell.

Engineering Colleges

11.50 There are 84 Engineering Colleges in the state with a total sanctioned intake of 25492 in 2008. Out of the 84 Engineering Colleges, 70 (83.33%) are self financing colleges, 11 (13.10%) are Government Colleges and 3 (3.57%) are private Aided Colleges. Mahatma Gandhi University, Kottayam has the largest number of Engineering colleges affiliated to the university. The details are given in Table. 11.7

Table-11.7
University wise number of Engineering Colleges in Kerala 2008

Sl.	Name of University	No. of Colleges
No.		
1	Kerala University	18
2	Mahatma Gandhi University	22
3	Calicut University	18
4	Kannur University	5
5	CUSAT	19
6	Agricultural University	2
	Total	84

Source: Directorate of Technical Education

- 11.51 Among the 11 Government Engineering Colleges in the state, 2 Colleges are managed by Kerala Agricultural University. These colleges are college of Dairy Science and Technology, Mannuthy and Kelappaji College of Agricultural Engineering and Technology, Tavannur, Malappuram.
- 11.52 District-wise analysis of Engineering Colleges shows that Thriuvanathapuram District has the largest number of Engineering Colleges in the state followed by Ernakulam and Thrissur Districts. District-wise and management wise number of Engineering colleges and sanctioned intake are given in Appendix-11.30. Branch-wise distribution of seats in Engineering colleges in 2007-08 is given in Appendix. 11.31.
- 11.53 As per the figures of 2008-09 there are 3023 permanent teachers working in Government and Aided Engineering Colleges in the state. 4182 students are studying in Government and Aided Engineering Colleges for Graduate Courses in the year 2008-09. 381 students are studying in Government and Aided Engineering Colleges for Post Graduate courses in the year 2008-09. Details are given in Appendix. 11.32.

Polytechnics and Technical High Schools

11.54 There are 43 Government Polytechnics and 6 Private Aided Polytechnics in Kerala during 2008-09. The annual intake of students in Government Polytechnics and Private Aided Polytechnics are 8400 and 1500 respectively. The total number of students in Government Polytechnics during the year 2008-09 is 25100 and that of private Aided Polytechnics is 4499. 15.31 % of total students in Polytechnics are girls. Details of annual intake and students strength in Polytechnics from the year 2006-07 to 2008-09 is given in Appendix.11.33. 7.89% of total students in Polytechnics belong to SC community and 2.30 % belongs to ST community. Details of Trade-wise annual intake of students in Polytechnics of the state in 2008-09 is given in Appendix 11.34.

- 11.55 1775 teachers are working in Polytechnics of the state. Women teachers constitute 21.01% of the total teachers in Polytechnics. SC/ST teachers constitute 6.42% of teachers. Details of number of students and teachers in polytechnics in the year 2007-08 is given in Appendix11.35. Number of SC/ST students and SC/ST teachers in Polytechnics in the year 2007-08 to 2008-09 is given in Appendix.11.36.
- 11.56 39 Government Technical High Schools are functioning in the state. Total number of students in Technical High Schools in the year 2008-09 is 6285, out of which girls constitute a meagre 9.16%. There are 1010 teachers working in Technical High Schools of the state. Women teachers constitute 17.43% of teachers in Technical High schools. Number of students and teachers in Technical High Schools from 2006-07 to 2008-09 is given in Appendix.11.37. SC students in Technical High Schools accounted for 8.59% of total students. ST students in Technical High Schools constitute 1.75% of total students. Details are given in Appendix. 11.38

Cochin University of Science and Technology (CUSAT)

- 11.57 Cochin University of Science and Technology was set up in 1971 through an act of legislation for the promotion of graduate, post graduate and advanced research in applied science, technology, industry, commerce, management and social science.
- 11.58 There are 5701 students in the university studying for graduation, post graduation and research. Girls constitute 27.47% of total students. Though the girls outnumber boys in post graduate courses and in research, the percentage of girls for graduation courses is as low as 15.42%.
- 11.59 14 self financing courses are offered through various centers of CUSAT during 2008-09. Details are given in Appendix.11.39.

Institute of Human Resource Development (IHRD)

11.60 IHRD is an autonomous institution fully owned and controlled by Government of Kerala. IHRD was established in 1987 for imparting quality education especially in the Technical Education sector for development of manpower of the required level of competence to match the growing demand of the industry for well equipped manpower in the field of Electronics, Computer, IT and other emerging technologies. IHRD has a network of 77 institutions which include 9 Engineering Colleges, 7 Model Polytechnics, 27 College of Applied Science, 26 Technical Higher Secondary Schools, 6 Extension Centers and 2 Regional Centers.

Kerala State Science and Technology Museum and Priyadarsini Planatorium

11.61 Government of Kerala established the Kerala state Science and Technology Museum in 1984. The institution was registered under Travancore-Cochin Literary Scientific and Charitable Societies Act with a view to create scientific temper among common men. Many developmental activities are undertaken by the Museum. Science and technology museum has established observatory and Ham Radio station and both are opened to public. The Science and Technology museum has plans to work in collaboration with other Museums, industrial organizations, research centers, professional institutions, educational institutions and other suitable agencies in India and abroad for mutual benefit in general and for updating the museum in particular.

Kerala State Audio Visual and Reprographic Centre

11.62 The main objective of the centre is to undertake printing and reprographic works for the Government Departments/Autonomous Bodies/Public as per the rate approved by the governing body of the centre from time to time. Centre has the head office complex at Vattiyoorkavu, Thiruvananthapuram and city centre at Punnapuram, Thiruvananthapuram. In addition to this, centre has sub centers at 9 places in the state.

LBS Centre for Science and Technology

11.63 LBS centre for Science and Technology was constituted in 1976 with a main objective to act as a link between Technoial institutions, universities and other professional bodies in the state and industry including public utility undertakings. For the last three decades, the centre is actively involved in consultancy services and its core capacity is civil Engineering with emphasis on site surveying, preparation of architectural design, geo-technical investigation, foundation design, structural design, quantity survey and preparation of tender documents.

Expenditure on Education

11.64 Rs. 5410.49 crore is earmarked for Education under plan and non plan heads in 2008-09. 80.65% of total outlay on education is earmarked for Elementary and Secondary Education. As high as 96.44% of total assistance in 2008-09 is given as Non-plan assistance. Rs. 3838.82 crore is the total expenditure reported in the Education sector in 2006-07. Rs. 4770.31 crore is provided for the sector as per the Revised Budget Estimate of 2007-08. The details are given in Table 11.8

Table: 11.8
Budget Estimate and Expenditure on Education

(Rs. Crore)

SI :	Stage		Expenditure 2006-07		Revised Budget Estimate 2007-08		Budget Estimate 2008-09			
N o		Plan	Non plan	Total	Plan	Non plan	Total	Plan	Non Plan	Total
1	Elementary Education	14.22	1618.42	1632.64	11.64	1957.00	1968.64	14.44	2091.14	2105.58
2	Secondary Education	23.53	1404.67	1428.2	55.72	1826.11	1881.83	82.10	2175.89	2257.99
3	University and Higher Education	28.67	509.49	538.16	42.74	631.89	674.63	46.64	722.89	769.53
4	Adult Education	1.99	0.20	2.19	2.10	.0001	2.10	3.30		3.3
5	Language Development	2.14	17.67	19.81	1.81	22.19	24.00	2.35	22.52	24.87
6	General	24.95	5.20	30.15	11.50	9.27	20.77	11.47	7.80	19.27
	Sub Total General Education	95.50	3555.65	3651.15	125.51	4446.46	4571.97	160.3	5020.24	5180.54
7	Technical Education	41.61	146.06	187.67	23.6	174.74	198.34	32.51	197.44	229.95
	Total Education	137.11	3701.71	3838.82	149.11	4621.2	4770.31	192.81	5217.68	5410.49

Source:- Demand for Grants and Detailed Budget Estimates 2008-09 vol. 1. Government of Kerala

Sports and Youth Services

11.65 Kerala is a State renowned for its commendable achievements in sports both at national and international levels. The Government provides financial assistance to Kerala State Sports Council, Directorate of Sports and Youth Affairs, Directorate of Public Instruction and Collegiate Education for promoting sports activities and to Kerala State Youth Welfare Board for youth empowerment activities.

Kerala State Sports Council

- 11.66 Kerala State Sports Council is an autonomous body formed in 1954. It has been made a statutory body with the enactment of Kerala Sports Act 2000 which extends the concept of sports for all. There are District Sports Councils to look after the affairs at district level. In accordance with the objectives of the Act, the entire spectrum of sports promotion and allied activities in the state has been brought under the purview of Kerala State Sports Council.
- 11.67 Kerala State Sports Council is the apex agency for the promotion and development of Sports and Games and allied activities. There are 19 centralized sports hostels, 30 sports hostels in colleges and 16 sports hostels in schools which are financially supported and administered by the Council. The council has been organizing coaching camps and tournaments, upgrading sports infrastructural facilities and assisting District Sports Councils for the conduct of hostel selection trials and district level tournaments. The sports council provided assistance to 8 sports clubs during the report year for procuring sports equipments.
- 11.68 State Championship Tournament 2007-08, district and state level rural sports tournaments were conducted. Sports events were also organized for women, from block to state level.
- 11.69 Modernisation works of High Altitude Training Centre, Munnar, Aquatic Complex Pirappancode, District Sports Complex Attingal and Pavillion at Maharajas College Ground, Ernakulam are still being continued.
- 11.70 The Kerala State Sports Council in collaboration with AFC has launched a novel scheme for promotion of football in the state. This scheme envisaged identification of talented school students at the age of 11 years and to impart advance training in football for moulding them into players of international standard. As an initial step 7 districts were selected for the purpose and the same will be extended to other districts. As a part of 'Health for All' Project 'Total physical Fitness Programme' was inaugurated on Ist November 2007 in which 2000 school children in the age group of 5 to 9 were covered.
- 11.71 The syllabus for introducing Physical Education as a curriculum subject in schools has been approved. The books and other materials are being prepared by the experts.
- 11.72 Sports council provides financial assistance for infrastructure development of play fields, renovation of ponds, construction of stadium etc. for Panchayats/Schools and conducting water sports like Champakulam and Thiruvallam Vallamkali.
- 11.73 Medal winners in the national and international sports events were given cash awards.
- 11.74 Kerala State Sports Council have conducted refresher course for coaches and deputed coaches/officials as observers to National and International meet, Operation Olympia, mini games, summer coaching camp, distribution of G.V.Raja cash awards during 2007-08.

- 11.75 Kerala State Sports Council organized a civic reception on 09.12.08 at Thiruvananthapuram to felicitate Dr.Abhinav Bindra, Gold Medalist in Beijing Olympics 2008 and coach, Prof. Sunny Thomas.
- 11.76 The necessity for enhancement of people's awareness and interest in sports and the conduct of mega national sports events in Kerala assume significance. Kerala has been honoured with the privilege of hosting National Games 2010.

Kerala State Youth Welfare Board

- 11.77 Kerala State Youth Welfare Board is an autonomous body constituted in 1985 to function as an apex body for co-ordination and implementation of all youth welfare schemes in the state. Kerala State Youth Welfare Board with its headquarters at Thiruvananthapuram have a state youth centre and 14 district youth centres, a National Adventure Academy at Devikulam, Idukki district and a sub centre of the Academy at Muzhuppilangadu, Kannur district.
- 11.78 As a part of spreading Board's activities into youths it has established youth centres in all districts. These are working as youth development centres. Through these centres youth can get information about carrier guidance, self employment training and various other activities of the Board. These centres are very active in ensuring the involvement of the clubs and NGOs. Youth centres organized youth leadership camp, exhibition for youth, adventure activities etc.
- 11.79 As a part of encouraging spirit of adventure among youth, 540 youths have been trained in various adventure sports like trekking, paragliding etc at the National Academy Devikulam. Programmes like adventure carnival, paragliding, wind surfing, parasailing, trekking, mountaineering, rappelling etc have been implemented during the report year at the sub centre of the academy at Muzhuppilangad, Kannur. Board gave financial assistance to the Academy for mountaineering and adventure sports at Neyvattinkara, Thiruvananthapuram district.
- 11.80 The youth clubs play a vital role in organizing and implementing various environment awareness programmes, social forestry programmes and formation of nature clubs at local levels. Board has formulated several awareness building programmes such as seminars, workshops and publicity through media against substance abuse, HIV/AIDS, social evils like dowry, child marriage, gender injustice etc. During 2007-08 the Board has given financial assistance to 66 youth clubs for conducting various awareness camps & seminars.
- 11.81 Board started yuvasakthi project in 573 Grama Panchayats 34 Municipalities and 4 corporations of Kerala during 2007-08 with the objectives of ensuring youth participation and formulation of productive sector projects with the support of youths.
- 11.82 Kerala State Youth Welfare Board started Karshika Clubs at each Block and allotted Rs.5000/- each for promoting agriculture.

Table 11.9
District wise Details of Financial Assistance to Youth Clubs
During 2007-08

Sl.	District	Number of Clubs	Sanctioned
No.		allotted Financial	Amount
		Assistance	(Rs.)
1	Thiruvananthapuram	6	24,000/-
2	Kollam	Kollam 9	
3	Pathanamthitta	3	12,000/-
4	Alappuzha	1	4,000/-
5	Kottayam	4	14,500/-
6	Idukki	6	21,500/-
7	Ernakulam	2	8,000/-
8	Thrissur	5	21,000/-
9	Palakkad	7	24,500/-
10	Malappuram	6	24,000/-
11	Kozhikkode	6	25,000/-
12	Wayanad	1	4,000/-
13	Kannur	6	21,000/-
14	Kasaragod	4	14,000/-
	Total	66	2,50,000/-

Source: Kerala State Youth Welfare Board

11.83 Kerala Youth Forum organized by the Board during 2008 had a wide variety of programmes such as job fair, national integration camp, youth exhibition, traditional folk arts training and its performance. Job fair was conducted as detailed below. 25 to 30 corporate houses and service providers participated in job fair.

Candidates Registered - 6100 (Nos)

Candidates short listed - 1214 (Nos)

Candidates selected for jobs - 525 (Nos)

- 11.84 Keralolsavam a unique festival for the rural as well as urban youth of Kerala enables them to participate in the cultural, artistic, sports and games competitions. This mega fest is implemented through Grama Panchayats, Block Panchayats, Municipalities and Corporations in addition to district level competitions and state level competitions. Every youth get a chance to participate in the mega festival. The winners of district level, state level Keralolsavam were given prize money in addition to the certificates. About 15 lakh youths are participating in this festival every year.
- As per the National Youth Policy the definition of youth cover all individuals in the age group of 13 to 35. Kerala State Youth Welfare Board introduced a new scheme for "Empowering Adolescents" during 2007-08. As a part of it formed teens clubs in all districts and 'Sanadha Ballyam' intended for the benefit of deprived children in Orphanages, care homes etc. were organized. During 2008-09 Sanadha Ballyam started in 84 Orphanages (Care homes).

- 11.86 Board assisted youth clubs/organizations etc for organizing training in self employment to the jobless youth in DTP, mobile phone servicing, computerised financial accounting, auto driving, electrical and electronics equipment maintenance, agricultural production processing and marketing etc.
- 11.87 Board decided to distribute sports kits to rural youth clubs with the aim of promoting sportsman spirit among rural youth. Board selected and gave financial assistance to 186 youth clubs for distributing sports kits during 2007-08.
- 11.88 Information guidance centres named Jalakam are functioning in district youth centres with computer internet facilities, services of counselors etc. Jalakam Website includes information centre, internet facility, e-employment exchange and the website address of important Government Departments. Youth can use these facilities at the District Youth Centres in Thiruvananthapuram and Kozhikode district.

Sports and Youth Affairs

- 11.89 Directorate of Sports and Youth Affairs was established in 1987 for the development of proper and quality infrastructure for sports and games, imparting awareness on sports and games among public, providing facilities for proper training for grooming sports persons of international standards.
- 11.90 The Directorate financially support sports infrastructural development activities and maintenance of sports assets in the state. Financial assistance is given to recognized sports associations for conducting tournaments, training and coaching camps to sports persons for participation in international tournaments, to injured sports persons for treatment, for purchase of sports equipments, providing facilities/financial assistance to talented sports men to participate in tournaments abroad or giving cash awards in having won tournaments. All requests are processed on merit and financial assistance provided to the extent possible.
- 11.91 Grama Panchayat will be eligible for financial assistance for the construction of play fields/stadium up to 50% of the total estimated cost subject to a maximum of Rs. 5 lakh per play field and Rs.10 lakh per stadium which ever is less. Government have sanctioned for releasing matching grant of Rs. 3 crores for distribution among the Grama Panchayat/Municipality/Corporation. This scheme was started on 2007-08. As per this scheme matching grant was sanctioned to 47 Local Self Governments.
- 11.92 Government of Kerala is implementing a scheme for the maintenance/ development of play fields in the state, grama panchayat, block panchayat, district panchayat, town panchayat, municipalities, corporations, government educational institutions, aided educational institutions, unaided educational institutions, universities, registered societies, co-operative institutions, autonomous bodies etc.
- 11.93 During 2007-08 Government have sanctioned an amount of Rs. 67.02 lakh for maintenance/development of play fields of 27 institutions.
- 11.94 Government have implemented a scheme for providing pension to circus artists in indigent circumstances. The revised rate is with effect from 14-99. The rate of monthly pension is fixed as Rs. 525 (Rs. 500 (pension)+ Rs. 25 (money order charge). During the period under review an amount of Rs. 69.05 lakh was sanctioned to circus artists.

- 11.95 Taekwondo is a Korean martial art and it has gained world wide acceptance to include in competition for Olympics as well. It instills the concept and spirit of self defence, self discipline and an ideal of moral rearment. Hence a training programme to school children below the age of 18 years was started for boys & girls. The training programme has been conducted in 42 schools in the State and in each training centres 30 children were trained during the period under review.
- 11.96 Similar other sports disciplines which are being promoted in Kerala include Karate, Judo etc. Karate is a martial art to achieve physical fitness, improve mental discipline and emotional equanimity, learn self defence skills and develop sense of responsibility for oneself and others. During 2008-09, Directorate of Sports sanctioned Rs. 2,15 lakh for the implementation of Karate training for 300 students. Judo is an item of Olympic Games adopted from traditional Japanese martial art. The Directorate of Sports & Youth Affairs launched a scheme for imparting Judo training by starting 14 district training centres, each school identified for this purpose in each district.
- 11.97 As a part of the development and promotion of ancient martial arts of Kerala a festival on Kalarippayattu is conducted every year and arranged as a joint venture of Kerala Kalarippayattu Association and the Directorate of Sports and Youth Affairs. About 380 participants including women from different districts of Kerala participated in the festival. During the year 2007-08 Government have sanctioned an amount of Rs. 3 lakh for the conduct of Kalarippayattu festival at Thirunavaya in Malappuram district. Establishment of Kalaripayattu (Martial Art) Academy at Poovar, Thiruvananthanpuram district was completed.
- 11.98 District-wise details of fund allotted to District Martial Art Centres during 2007-08 are given in Table 11.10.

Table 11.10 Fund allotted to Distsrict Martial Art Centres

Sl. No	Centres	Amount
1.	Thriuvananthapuram	1,00,000
2.	Kollam	1,00,000
3.	Ernakulam	70,000
4.	Kottayam	73,000
5.	Thrissur	90,989
6.	Malappuram	1,00,000
7.	Kannur	66,000
8.	Wayanad	50,000

Source: Directorate of Sports and Youth Affairs

- 11.99 Rajiv Gandhi Sports Medicine Centre at the Directorate of Sports is the only sports medicine centre in the state to promote excellence in sports by lending scientific and prompt medical assistance and rehabilitation therapy to sports persons. Every year approximately 3000 sports persons are getting treatment from this centre. Under the review period this centre has given medical treatment to 1800 sports persons. District Sports Medicine centres are also started to provide necessary service at district level.
- 11.100 During the report year District and State level selection were conducted in Athletics, Football, Badminton, Table Tennis, Volleyball, swimming and powerlifting. AICS Shuttle Badminton tournament was held at Jimmy George Indoor Stadium.

.

Art and Culture

- 11.101 Though geographically a small strip of land, one could find in Kerala a large number of different streams of cultural heritage. Kerala's legacy in art and culture dates back to centuries. Ancient rulers of the state took special interest in promoting the art and culture of the state. Kerala also prides itself for its repertoire of rich cultural heritage. Vivid visual effects and stunning music are hallmarks of Kerala's performing arts. No other state in India can match the grandeur and creativity of Kerala's performing arts.
- 11.102 Over the last fifty years, Government has established many cultural institutions for the promotion of art and culture. Academies, publishing houses, cultural centres, institutions of fine arts and folk arts, research centres and directorates like museums and zoos, archives etc are such institutions. In the year 2007-08, government provided Rs.1426.00 lakhs as plan assistance to this sector and 60% of the amount was spent.
- 11.103 The following section presents a brief summary of activities carried out by these institutions in the year 2007-08

1. Kerala Sahitya Academy

- 11.104 The Kerala Sahitya Academy is an autonomous institution established for the promotion and development of Malayalam language and literature. The Academy organises literary programmes, publishes books, honours writers and participates in literary exhibitions.
- 11.105 The Academy has a publication and sales section. During the report year the academy published 19 books and now its total number of books published has increased to 325. The periodicals like Sahitya Chakravalam, Sahitya Lokam and Malayalam Literary Survey were improved in content and outlook.
- 11.106 During the report year, memorial lectures, debates and seminars were organized in honour of renowned writers of Kerala like Edasseri, M.P.Sankunni Nair, P.Bhaskaran, R.Viswanathan, M.N.Vijayan, C.V.Sreeraman, V.M.Kuttikrishna Menon, Appan Thampuram, V.K.N, P.K.Kalan etc. Portraits of famous literary men who contributed to Malayalam literature were drawn in the Academy. The Academy also celebrated the birth centenary of V.M.Kuttikrishna Menon and Chirackal T.Balakrishnan Nair. Awards were given to eminent writers who contributed to language and literature. The Academy also conducted many cultural exchange programmes and book exhibitions.

2. Sangeetha Nataka Academy

11.107 The Academy is the nucleus of all amateur arts clubs and training institutions in the state and it always stands for the betterment of art forms. The Academy is affiliating all cultural institutions in the state. The Academy conducts festivals, competitions and seminars for promoting dance, drama and music. During 2007-08, the Academy held the state level professional and amateur drama competitions. It has also conducted the International Drama festival 2008 during the year. The details are given in Box No 11.4. Renowned musicians performed and seminars were conducted in the Shadkala Govinda Marar Sangeetholsavam organized by the Academy. In February 2008, the Academy held a cultural exchange programme named 'Octav 2008' in which artists from 8 North Eastern States of India performed classical arts and martial arts. The Academy also organised "Bavul Music Fest" in which Bavul music, a traditional music form of Bengal which synchronized dance, music and instruments, was

performed. Dance festival and Swathi Sangeetha Festival were the other cultural events organised during the year.

Box No. 11.4

International Theatre Festival of Kerala, 2008

The first International Theatre Festival of Kerala (ITFOK – 2008) organised by the Kerala Sangeetha Nataka Academi was held at Thrissur from December 22-31, 2008.

The ten day long festival, conducted as part of the Golden Jubilee celebrations of the Sangeetha Nataka Akademi, focussed on plays from Asian countries this year. Theatre groups from China, Iran, Pakistan, Bangladesh, Sri Lanka and Nepal, as well as from different States of India took part in the festival. 120 foreign artists participated. Face-to-face sessions with theatre directors from different countries, seminars, presentations of small performances and exhibition of theatre photographs were held as part of the festival.

A special venue, with a seating capacity of around 2000 was constructed near the Corporation Stadium premises opposite the Akademi's Regional Theatre for the staging of performances including the Peking Opera. The festival was dedicated to the memory of the late Marathi playwright Vijay Tendulkar and the venue for the seminars was dedicated to the memory of the Malayalam playwright Jose Chirammel.

Source: Sangeetha Nataka Academy

3. Kerala Lalithakala Academy

- 11.108 The Academy promotes the talents of painters and sculptors through camps, demonstrations and exhibitions. During 2007-08, the academy organised many national and state level camps and exhibitions on drawing, sculpture, photography etc in which renowned artists took part.
- 11.109 In February 2008, the Academy organized a painting exhibition in which artists from North Eastern States of India and Kerala took part. In March 2008, the Academy, in association with Bhopal Indira Gandhi Rashtriya Manava Samgrahalaya, District Tourism promotion Council, Kozhikode and Directorate of Kirthads, organised a folk and tribal sculptors' workshop named 'Kammala' in which tribal sculptors from Chattisgarh and traditional bell metal casting sculptors of Mannar, Kerala took part.
- 11.110 In April 2008, another camp for tribal sculptors named 'Aala' was organised by the Academy. A seminar on "Art and Traditional Knowledge" was organised in this camp.
- 11.111 The Academy financially assisted many artists during the year for exhibiting their paintings and drawings.

4. Kerala Folklore Academy

11.112 The Kerala Folklore Academy is an autonomous institution closely associated with folklore subjects. The objectives of the Academy are promotion of traditional folk arts of Kerala, scientific recording of these arts and their classification and publication of books promoting culture and traditional art forms.

- 11.113 During 2007-08 the Academy carried out many programmes for popularising folk art forms. The Academy held a tribal festival at Udinoor in association with South Zone Cultural Centre, Thanjavoor. In the festival, a seminar was arranged on "Tribal Life and Culture" and the journal of the Academy, Poli was released. For the first time the Academy helped the Tourism Directorate by arranging about 40 folk art forms at Thiruvananthapuram in connection with the Onam Festival 2008.
- 11.114 Adivasi Kalolsavam was held in Idukki in which reputed folk artists were honoured. In March 2008, the Academy in collaboration with Kumaran Asan National Institute of Culture and South Zone Cultural Centre conducted a National Seminar on Ethnomusicology at Thiruvananthapuram. A folk festival on magical rituals was held in association with Sreestha Grameena Kala Samithi. Two Theyyam sculptures were purchased and showcased in the Folklore Museum.
- 11.115 Women performances were conducted at Kalpetta, Thonnakkal, Palakkad, Thiruvananthapuram etc. Folklore clubs have been established. Now there are 155 clubs affiliated with the Academy.

5. Chalachitra Academy

- 11.116 The Kerala State Chalachitra Academy is the only academy for motion pictures in India. It works for the promotion of cinema as a cultural expression.
- 11.117 During 2007-08, the Academy organised many programmes for promoting Film and TV media. The Academy organised the 12th International film festival in December 2007. Due importance was given to Asian, African and Latin American movies. About 210 movies including 160 foreign movies were screened in the festival. In May 2008, for the first time in India, International Video film Festival was held in Kerala. Documentaries, video films, animation movies etc were screened in this festival. The Academy also hosted the Spanish Film Festival and European Union Film Festival during the year. The 13th IFFK was organized in December 2008. The details are given in Box No. 11.5.
- 11.118 Touring Talkies Programme were organised in many parts of the state for showing movies and for the development of film societies. State Films awards for the year 2006 and 2007 were given during this year. Scholarships are being given to students of Film Institute.

Box No. 11.5 13th International Film Festival of Kerala, 2008

The International Film Festival of Kerala (IFFK) is a film festival held annually in Thiruvananthapuram. This festival was started in 1996 and is organised by Kerala State Chalachitra Academy on behalf of the Department of Cultural Affairs of the State Government. The festival is held in November/December every year. Competition is restricted to films produced in Asia, Africa and Latin America. The festival also has a section devoted to malayalam cinema. Contemporary world cinema, new malayalam cinema, retrospectives of major filmmakers, homage and tributes, contemporary Indian cinema, short films and documentaries are screened during this film festival. Film market and seminars on important issues concerning cinema are being scheduled in the festival. The festival is always noted for its public support. The festival is perhaps the only one to have screenings for residents of a jail, a juvenile home and a poor home.

The 13th International Film Festival of Kerala was held from 12 to 19 of December 2008. It was inaugurated by the Chief Minister of Kerala. Argentinean filmmaker Fernando Birri and veteran actress K.R.Vijaya were the chief guests. The opening film of the festival was Laila's Birthday, by Palestinian director Rashid Masharawi. The eight-day long festival had 182 films from 53 countries. 14 films, including two Malayalam films, were in the competition section. Lucia Murat (Brazil) headed the jury, which also consisted of Samira Makhmalbaf (Iran), Sitora Alieva (Russia), Allain Jalladeau (France) and Jabbar Patel (India) and members representing FIPRESCI (International Federation of Film Critics) and NETPAC (Network for the Promotion of Asian Cinema).

The Honours

The winners in the competition section were:

Suvarna Chakoram and cash prize of Rs.10 lakhs for the Best Film: Parque Via by Enquire Rivero.

Rajatha Chakoram and cash prize of Rs.3lakhs for Best Director: Mariana Rondon for Postcards from Leningrad.

Rajatha Chakoram and cash prize of Rs.2 lakhs for Best Debut Film: My Marlon and Brando by Huseyin Karabey.

Special Jury Award: for the Best Debut Film: Firaaq by Nandita Das.

Special Jury Award: The Yellow House by Amor Hakkar.

Audience Award for the best film: Machan by Uberto Pasolini.

FIPRESCI award for Best Film: Postcards from Leningrad.

FIPRESCI award for the best Malayalam Film: Manjadikkuru by Anjali Menon.

NETPAC award for the best Asian film: My Marlon and Brando. NETPAC award for the best Malayalam film: Adayalangal by M.G.Sasi.

Hassankutty award for the best Indian debut director: Anjali Menon for Manjadikkuru.

Source: Chalachitra Academy

6. State Institute of Children's Literature

11.119 The Institute was established with the ultimate aim of all-round literary and cultural prospects of the children of the state. With a view to promote the creative and cultural growth of the children belonging to the different strata of the society, the institute organises programmes, literary competitions and publishes children's books and periodicals.

- 11.120 During the year 2007-08, the Institute has published 28 books for children. The children's monthly magazine "Thaliru" has been brought out in new form since June 2007. A camp was held for children in collaboration with State Institute of Languages. A training programme was arranged for talented children in literary field during December 2007. In the "Thaliru" scholarship examination held in 38 educational districts, 228 students were selected for the scholarship.
- 11.121 The printing of Technology Encyclopaedia is in progress. 8 books were published according to the new curriculum. The printing works of 12 books are at the final stages.

7. The State Institute of Languages

- 11.122 The State Institute of Languages publishes books, organises seminars, festivals, exhibitions and other activities for the enrichment of Malayalam language.
- 11.123 During 2007-08, the institute has published 103 books on various subjects, authentically dealing with Kerala's social and cultural transition over a period of time and the manner in which they have influenced Kerala's development. Besides, in memory of 50 years of Kerala State formation, the Institute has introduced a novel programme to publish 50 books under the general title of '50 years 50 books'.
- 11.124 For the development of Malayalam language the institute has initiated a new mission called "Language Computing Programme" in association with state IT mission. The institute declared awards for books on various subjects during this year. The institute inaugurated in February 2008, a year long programme 'Bhashabimana Varsham' for the development of Malayalam Language. The Institute has decided to celebrate the 40th anniversary of the Institute by commencing a year long programme which was inaugurated in September 2008.
- 11.125 The Institute has conducted book exhibitions in rural areas with the help of the mobile book selling unit. For the purpose of university studies the Institute has published 46 books with the help of the grant received from Commission for Scientific and Technical Terminology (CSTT). Under the programme of the translation of Dr. Ambedkar Sampoorna Krithikal the Institute has published 19 to 23 volumes with the help of the grant given by Ambedkar Foundation, New Delhi.

8. Kerala Book Marketing Society

- 11.126 Kerala Book Marketing Society is an agency for selling publications of Government Institutions, Kerala Sahitya Academy and National Book Trust. Books are sold through their ten branches. The society participates in exhibitions and organises book fairs for promoting sales.
- 11.127 During this year, KBMS participated in the International Book Fair conducted by National Book Trust, New Delhi and exhibitions organised by Library Council and SSA. Book fairs were organised in Thiruvananthapuram, Kollam, Pathanamthitta etc.
- 11.128 The society has initiated steps for supplying books to 104 Government High Schools. The income of the society during the year through sales exceeded 34 lakhs

9. Kerala State Library Council

- 11.129 State Library Council provides grant to 6640 member libraries and assists in the library service strengthening activities.
- 11.130 A model village library has been started in all the 14 districts. These libraries function as social and cultural development centres with separate wings for women, children, youths, farmers etc. The Council has started academic study centres in one selected library from each district. Reference facilities are provided for college students and researchers in these centres. Financial Assistance was provided to Jail/Juvenile library services and Orphanage library services. Reference books were provided to selected libraries. 5 tribal libraries are functioning under the library council.
- 11.131 A new scheme namely, 'Reference Book kits and Book Shelves' was introduced in 100 selected libraries of the districts during 2006-07. During 2007-08, steps were taken to provide reference books and shelves to these selected libraries. Computer and other accessories were also provided to 56 selected libraries.

10. State Central Library

- 11.132 State Central Library is functioning under the Higher Education Department. The Library is the first one of its kind in the nation which is fully computerised and provided with most modern technology of Radio Frequency Identification System and Digital Wing. It has a variety of documents for reference in all subjects including Industrial Production, Fine Arts and Braille collections.
- 11.133 The total membership of the library has exceeded 60,000. As on 1st October 2008, the total number of documents available in the various branches comes to 3,33,412. The library is now subscribing to all the leading dailies in English, Malayalam, and Tamil along with 202 periodicals of different nature.
- 11.134 To cope up with the development of information Technology, a High Speed Internet Browsing centre for the members and the public has been provided at State Central Library, subject to verification of identity.
- 11.135 The modernisation activities of the library is in progress. It is fully computerised and books and periodicals are issued through Libsys Software. Radio Frequency Identification System which enables self check in and check out system, prevention of theft and stock verification of the books has been commissioned. Digitisation of old, precious and ancient books was taken up in the first phase and 707 ancient and rare books containing 3,28,268 pages have been digitised and opened for use of the public. The children's wing of the library has been strengthened to compensate the inadequacy of children's section in school libraries to a certain extent. Similarly extension activities have also been organised at frequent intervals to create awareness about the importance of library and benefits of reading.

11. Kerala Council for Historical Research (KCHR)

11.136 Kerala Council for Historical Research (KCHR) is an autonomous academic institution committed to scientific research in History and Social Sciences. It is a recognised research centre of the University of Kerala and has academic affiliations with leading research institutions and universities inside and outside the country. Research, publication, documentation, training and

co-ordination are the major activities of the council. KCHR has been identified as a nodal agency in undertaking research projects in the conservation of Kerala's cultural and historical heritage. As a part of Muziris Heritage Project, the council has taken steps to conserve the historical monuments of the Kodungaloor/Paroor region and has undertook the multidisciplinary excavation work in Pattanam region which had the involvement of various government agencies and national level research institutions. The analysis of the various artifacts unearthed in Pattanam are underway in various laboratories.

- 11.137 During the year, a history project study for UP/High School students across the state with Environmental History as the core theme "Charithranwesha Yathrakal Journey into History" was launched.
- 11.138 Academic and organisational support is being offered to local government institutions and cultural organisations in the state to undertake research, writing and mapping of local history, which includes various activities like survey, data collection, analysis, compilation, editing etc.
- 11.139 The printing of the book 'Londonum Parisum' by Barrister G.P. Pillai has been taken up and the work is nearing completion. Explanatory notes and illustrations are being prepared for the publication of the Encyclopaedia on Malayalam proverbs. History colloquiums and seminars have been conducted during this year.

12. The Centre for Heritage Studies (CHS, Thrippunithura)

- 11.140 Centre for Heritage Studies incepted in the year 2000, is an autonomous academic and research centre for promoting heritage and cultural studies. The centre conducts P.G. Diploma in Archaeology & Museology and Archival Studies. Conservation and Heritage Tourism Management and research programmes are also being undertaken. It is also a training centre for teachers and demonstrators in theoretical and practical subjects like primitive, ancient, medieval and modern art.
- 11.141 During this year, the centre has conducted short term job training courses for the B.A History students of five colleges. A special training programme on Heritage Eco-Tourism has been started exclusively for 15 students among the tribal community of Wayanad for a period of six months. A three day workshop on heritage and tourism was organised in collaboration with Kerala Institute of Tours and Travels. A workshop on heritage awareness and conservation was organised for a selected group of 30 students of 10th, 11th and 12th standards. In April 2008 the centre conducted a two-day national seminar on "1857-The Role of Tribal, Peasants and Artisans" sponsored by the Indian Council of Historical Research, New Delhi. The centre hosted a month long workshop for folk and tribal artisans organised by Kerala Lalithakala Academy.
- 11.142 In February 2008, special programme for creating awareness on the importance of medicinal plants was organised in which saplings of medical plants were distributed. World Environment Day has been observed by the centre by planting seedlings on 5th June 2008.

13. Margi

11.143 Margi is a cultural centre for promoting 'Kathakali' and 'Koodiyattam'. Koodiyattam has been proclaimed as a World Heritage art by UNESCO in 2001. A large number of tourists visit this centre every year. Margi has a permanent group of forty traditionally trained senior artists. Margi staged seventy six Kathakali and seventy nine Koodiyattam and Nangiarkoothu programmes during the year 2007-08. Programmes were staged in temples, koothambalams,

colleges, university centres and other institutions. Many of these programmes were sponsored by Kendra Sangeetha Nataka Academy, Ministry of Culture, Government of India and UNESCO Japan Funds-in-Trust.

11.144 Under Festival of India series a month long tour of Japan, Hong Kong, Indonesia and Korea was organised by Margi under the sponsorship of ICCR. Ten Kathakali programmes and a detailed lec-dem in Kathakali were arranged in Hong Kong in which several universities in China participated

11.145 Part time training in Kathakali is given to school students without fees to promote interest in youngsters in traditional arts. Special training is given with stipends in Koodiyattam under a special programme of the Kendra Sangeetha Nataka Academy, New Delhi.

14. Kerala Kalamandalam

- 11.146 Kerala Kalamandalam is an institution for training and research in classical art forms such as Kathakali, Mohiniyattam, Chakyarkoothu, Thullal and Kalari arts. Kalamandalam gained the status of a Deemed University in 2006. Kalamandalam has initiated several measures for upgrading the institution to the standards of a Deemed University. The institution has introduced PG and research courses, initiated infrastructural developmental activities, enhanced the library referral unit etc by adhering to UGC norms. 75 students have registered for PG courses and 41 students have registered for M.Phil/Ph.D.
- 11.147 As a part of the efforts to perpetuate and promote classical art forms, seminars and workshops are conducted. State level seminars on Kathakali, Thullal and Kudiyattom and National level seminar on Dance Choreography was conducted during 2007-08. 'Kathakali Noorarangu' is a new project which aims to take Kathakali to the masses and create new Kathakali lovers. The statewide inauguration of this project was held in August 2008. 65 artists are working as part of this project and 6000 persons have participated in the workshops.
- 11.148 In order to record and document the history, evolution, trends, teaching methodology etc of traditional art forms, it was decided to document and record traditional art forms like Kathakali, Mohiniyattam and Koodiyattam. The first phase of Mohiniyattam documentation has been completed. The publication of Kalamandalm Newsletter on a bimonthly basis has been started. An introductory guide to Kudiyattom was also brought out.
- 11.149 During the year the academy carried out many modernization and maintenance activities. Construction of girls hostel is nearing completion. The boy's hostel was renovated. All the 32 Kalaries were repaired and painted.

15 Vasthu Vidya Gurukulam

- 11.150 Vasthu Vidya Gurukulam in Aranmula is an institution for promoting the traditional architecture 'Vasthu Vidya' and 'Mural Painting'. Human Resource Development Ministry of India declared Vasthuvidya Gurukulam as nodal agency for Vasthu and other related subjects. Consultancy service in Vasthu principles is rendered for constructing houses and other buildings. Gurukulam has so far designed 200 residential buildings and a number of temples based on Vasthu principles.
- 11.151 During the year under report, Gurukulam published various text books on Vasthuvidya in association with Mahatma Gandhi University. Gurukulam has documented all the important

architectural buildings in South India. Around 481 registration have been done in the consultancy wing. The construction of Koothambalam in the premises of Thrissur Ramanilayam is in progress. Gurukulam is preparing heritage plan of Alappuzha and Thalassery for the State Town Planning Department.

16. Guru Gopinath Natana Gramam

- 11.152 Guru Gopinath Natana Gramam is a cultural institution for imparting training in classical dance and music with special focus on popularising "Kerala Natanam" which is a combination of Kathakali and Koodiyattam. The institution provides necessary facilities for imparting art education to children and training to talented youths.
- 11.153 Natana Gramam conducts regular and vacation classes in dance items, music and other performing arts like Ottanthullal. There are altogether 280 students learning in this Institution.
- 11.154 In the year 2007-08 National Dance Workshop and Natyolsavam were conducted in association with South Zone Cultural Centre, Tanjavoor. Nritha Sandhya, a programme for remembering the talents conceived by Guru Gopinath was enacted in the Natanagramam involving artists who hold the legacy of learning dance directly from the Guru.
- 11.155 The construction of Chilampoli open auditorium is in the initial stages. A Kalaripura for imparting specialised Kerala Natanam was constructed during the year. A half bust statue of Guru Gopinath has been erected in the ambience of Natanagramam.

17. Kumaranasan National Institute of Culture

- 11.156 The memorial in the name of great poet Kumaranasan has become a cultural pilgrimage centre inspiring common man through its cultural and literary activities and beautiful land scaping. The institute has a vast collection of mural paintings.
- 11.157 During the year, International Poets' Meet was held by the institute in which poets from different parts of the world took part. The institute also organised All India Racial Music Seminar. A five day long National Cultural Festival was organised which was enriched with seminars, symposiums, classical and folk dances.
- 11.158 Literary activities for children were organised through Balasree Club. A 50 day long vacation workshop for children was arranged in which seminars were conducted in different subjects.
- 11.159 Many developmental activities were undertaken during the year. As a part of the development of tourism, four large sculptures designed by the renowned sculptor Kanayi Kunjiraman is being constructed in the institute premises. As part of cultural tourism and eco-garden, a complete lighting adjustment programme in the premises of the institute was taken up. In connection with eco-garden programme a plant nursery was set up in the premises. The library was modernised by digitizing the research and reference section.

18. Multipurpose Cultural Complex Society (Vyloppilly Samskrithi Bhavan), Thiruvananthapuram

11.160 Vyloppilly Samskrithi Bhavan is an institution built with the support of Government of India to function as a research, documentation and performance centre of traditional and classical

cultural traditions. It is one of the few institutions of its kind in India and is a UNESCO approved centre for cultural heritage preservation. Large number of foreign tourists visiting Kerala every year also benefit from the resources and facilities offered by MPCCS to experience and understand the cultural heritage of India.

- 11.161 The Mudra Fest is an important annual programme of Samskrithi Bhavan. It is conceived as a forum to study and appreciate the value of classical dances from the great masters of the country. During the report year, 'Mudra Fest' was held in September, 2008. Classical dances and lecture demonstrations were conducted in which renowned artists performed.
- 11.162 Weekly programmes on Kathakali, Chakyarkoothu, Nangiarkoothu, Koodiyattam, Ottanthullal, Vilpattu, Poothappattu, Classical dances, Music concerts and Dramas were organised this year, A five day long literary camp called 'Ezhuthupura' was held for the students who won first and second position in district level youth festivals. Eminent writers and poets participated in the camp.
- 11.163 In May 2008, a week long camp was organised in painting and sculpture for the tribal students of Kerala.

19. Jawahar Balabhayan

- 11.164 Balabhavan imparts training in arts and crafts for children between the age of four and sixteen. Classes are held after school hours and during vacations. Training is imparted in all forms of creative arts and crafts, general knowledge, yoga, electronics, spoken English, personality development, aero modeling, kalaripayattu etc.
- 11.165 Nearly 2200 children attended the vacation classes during the report year. One hundred and eighty one children attended evening classes and three hundred and twenty five children attended the holiday classes.
- 11.166 Balabhavan hosted the preliminary competition for National Balasree Award 2008. Eight children, two each from four sections were selected from Balabhavan. These children will participate in the zonal level camp.

20. Archives

- 11.167 Collection, management and preservation of records are the major functions of the State Archives department. The records transferred from various departments/institutions are scrutinized and arranged as per archival principles. Department follows scientific methods for the preservation of paper and palm leaf records kept in the department. The reprographic section has been modernised by procuring photocopier, printer, computer and other reprographic items. Records from Secretariat Cellar and Health Department were transferred to the State Archives Department. A conservation lab at Central Archives, Thiruvananthapuram, has been set up and sufficient chemicals for the preservation of records were purchased during the period.
- 11,168 As a part of arising archival awareness among the public, the Department conducted exhibitions, seminars and workshops throughout the state and outside Kerala, ie, in New Delhi. International archival week celebration was conducted at Kasargod during the period. Various training programmes were conducted for the staff of the department.

11.169 In order to make the students and teachers aware of the necessity of preserving our cultural heritage the department launched a prestigious project on setting up of heritage clubs at school level. The state level inauguration of the project was conducted during the period. The Department has started the projects on the digitisation of paper and palm leaf records, mobile exhibition unit, etc. under 12th Finance Commission award.

21. Archaeology

- 11.170 Archaeology Department carries out various heritage conservation activities. Periodical explorations and excavations are conducted in search of archaeological remains. Ancient monuments and traditional structures like forts, bridges, caves, buildings etc are protected and maintained. Mural paintings in temples and churches, oil paintings in palaces etc are also scientifically conserved.
- 11.171 During the year, structural conservation works were carried out in Padmanabhapuram Palace, Thalassery Fort, Koikkal Palace, Thiruvananthapuram, St. Philomina's Church, Hill Palace Museum, Thrippunithura and Sreepadam Palace, Thiruvananthapuram. The Sreepadam Palace was acquired by the department from the Travancore royal family.
- 11.172 The Department hosted the Annual Seminar of South Indian Numismatic Society in January 2008 in Kannur.

22. Museums and Zoos

- 11.173 Museums and Zoos have been functioning as tourist spots except the Thiruvananthapuram Zoological Park which is for conservation of wildlife and promotion of research in the field of animal behaviour, nutrition etc. In the year 2007-08, the Directorate carried out many modernising and maintenance activities in the Museum and Zoo institutions, Thiruvananthapuram, Thrissur and Kozhikode. New open enclosures were built for ostritch and zebra and animals like male elephant, lesser adjutant stock, king cobra and peafowls were acquired for the zoo. Renovation works were carried out for ensuring the safety of animals. During the middle of the financial year Foot and Mouth disease broke out in the Zoo. Sanitary measures were taken to eradicate the contagious FM disease. In view of this epidemic which resulted in the closure of Zoo, Thiruvananthapuram for a few weeks, steps have been taken to upgrade the Zoo hospital with modern lab facilities. During the wildlife week celebrations newly constructed reptile house and renovated giraffe enclosure were inaugurated.
- 11.174 Monograph on Raja Ravi Varma was printed. Newly renovated Sree Chitra Enclosure with 14 Mural Paintings done by renowned mural artists in Kerala was opened for the public.

23. Kerala State Film Development Corporation, Thiruvananthapuram

- 11.175 KSFDC (a public limited company) has been providing supporting facilities for the production of theatre films and documentaries since 1975. The Corporation own ten theatres and the Chitranjali Studio.
- 11.176 KSFDC has successfully launched several modernising works and evolved new programmes for raising its revenue during this year. Chitranjali Studio has been modernised by equipping it with modern lights, track, trolley and other latest film equipments. KSFDC has initiated works for modernising shooting floor with garden areas, village houses, telescope etc in order to develop the studio premises into a tourist spot and thus raise the source of revenue. A

film museum, exhibiting the various equipments used at various stages of evolution of cinema was set up which started attracting visitors. A new scheme called 'Chitranjali Plus' was introduced for film production. 23 films were produced utilising the facilities of Chitranjali Studio.

11.177 KSFDC is in the initial process of commissioning one dubbing theatre at Kochi. Centralised Charting System has been introduced for all theatres of KSFDC under a charting committee to ensure film release simultaneously in all theatres. Maintenance works and other modernisation works have been carried out in all the ten theatres.

24. State Institute of Encyclopaedic Publications, Thiruvananthapuram

11.178 The State Institute of Encylopaedic Publications is an institution established for publishing Encyclopaedias and other similar reference books in Malayalam language keeping a high standard comparable to that of renowned Encyclopaedias like 'Encyclopaedia Britannica' and 'Americana'. After its formation in 1976 different schemes were introduced with a view to enlarge its sphere of activities. The most important ones were the publication of Subject Encyclopaedias on World Literature and Environment.

11.179 The Institute has so far published 14 volumes of the General Encyclopaedia and five volumes of the Encyclopaedia World Literature. As such, six volumes of the General Encyclopaedia and five volumes of the Encyclopaedia of World Literature are yet to be published. The preparation of the 15th volume of General Encyclopaedia and 6th volume of the Encyclopaedia of World Literature and revised volume of Malayalam Encyclopaedia are at the final stages. The Institute has proposed to publish Encyclopaedia of Kerala Vijnanakosam and Encyclopaedia of Law. The preliminary work of the same has been started.

CHAPTER 12

MEDICAL AND PUBLIC HEALTH

12.1 The Constitution of World Health Organization (WHO) states, 'enjoyment of the highest standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic and social condition'. According to the "Right to Health" in the Universal Declaration of Human Rights, 'Everyone has the right to a standard of living, adequate for the well being of himself and his family". In the Kerala "Model" of development, the public health system played a major role in making health a social goal and an important determinant of the quality of community life, unlike in any other state of India. This achievement and status of health in Kerala can be quantified in terms of mortality indicators like reduction in death rate, infant mortality rate; raising expectation of life at birth etc through a widespread network of health institutions in the public, private and co-operative sectors. Modern technologies are being utilized to the extent possible such as involvement of space technology in terms of tele-medicine providing specialized medical services even in a hilly remote area. Family Welfare Programmes in health activities and in recent years the investment of National Rural Health Mission in Kerala are playing a major role in its achievements.

BASIC HEALTH INDICATORS

12.2 Table 12.1 below shows the basic health indicators of both Kerala and India during 2008.

Table 12.1
Basic health indicators – kerala and india 2008

Sl.No.	Health Indicators		Kerala	India
1	Birth rate ('000 population	on)	14.7	23.1
2	Death rate (,,)		6.8	7.4
3	Infant mortality rate (,,)		13	55
4	Child mortality rate (,,)		3	17
5	Maternal mortality rate	(per lakh live birth)	110	301
6	Total fertility rate (child	ren per woman)	1.7	2.9
7	Couple protection rate		47.22 (2007)	46.6 (2005)
8	Life at birth	Male	71.3	62.3
		Female	76.3	63.9
		Total	73.8	63.1

Source: Directorate of Health Services

Box 12.1 Current Challenges to Health and Health Systems

Health gaps between countries and among social groups within countries have widened. Social, demographic and epidemiological transformations fed by globalization, urbanization and ageing populations, pose challenges of a magnitude that was not anticipated three decades ago. *Source: The World Health Report 2008.*

INSTITUTIONAL HEALTH CARE – DEPARTMENT WISE INSTITUTIONS

12.3 Kerala's total health care system spread across villages and communities consists of institutions in Government sector, co-operative sector, and in private sector with systems of treatment in allopathy, ayurveda, homeopathy, sidha, and naturopathy. Department wise review highlights the nature and volume of functions in different systems of treatment under Government sector.

DEPARTMENT OF HEALTH SERVICES

DHS is one among the premier establishment in Kerala to look after the basic health needs in the State at the grassroot level. There are 1274 institutions and 36642 beds under the Directorate of Health services. Institutions include 136 hospitals, 929 primary health centres, 114 community health centres, 59 dispensaries, 18 TB clinics/ centres, 29 Grant in aid institutions and 18 leprosy control clinics/ units. Besides, there are 5094 sub centres. Out of the total beds, 23871 (65.14%) beds are in hospitals, 7675 (20.95%) are in primary health centres, 4730 (12.91%) are in community health centres and 190 (0.52 %) are in dispensaries and 176 (0.48%) inTB clinics. Details of major medical institutions under DHS are shown in Table 12.2 below.

Table 12-2 Major Medical Institutions under DHS

Sl.No.	Institution	Nos.
1	Primary Health Centres (including MCH Centres)	929
2	Community Health Centres	114
3	Taluk/District /Women &Children Hospitals	136
4	Dispensaries	59
5	T.B.Clinics/Centres	18
6	Grant-in-Aid Institutions	29
7	Leprosy Control Units	18
8	Sub Centres	5094

Source: Directorate of Health Services

12.5 Category wise major medical institutions and beds in Kerala under DHS is given as Appendix 12.1.

Primary Health Centres

12.6 There are 929 Primary Health Centres in Kerala alongwith 5094 sub centres under Health Department. Primary care of these centres is to be strengthened on the lines of the Indian Public Health Standards. District wise number of PHCs and sub centres with details of beds is given in Table 12.3.

Table 12.3

District wise Number of Primary Health Centres (including MCH Centres) and Sub
Centres with Beds – 2008

Sl.No.	District	No. of PHCs	No. of Beds	No. of Sub Centres
1	Thiruvananthapuram	77	490	455
2	Kollam	65	342	449
3	Pathanamthitta	51	504	260
4	Alappuzha	65	493	368
5	Kottayam	60	544	359
6	Idukki	52	528	231
7	Ernakulam	77	935	351
8	Thrissur	87	640	492
9	Palakkad	82	790	471
10	Malappuram	94	760	508
11	Kozhikode	69	311	389
12	Wayanad	25	318	204
13	Kannur	79	761	352
14	Kasaragod	46	259	205
	Total	929	7675	5094

Source: Directorate of Health Services

Box 12.2 Four Sets of PHC Reforms

PHC reforms reflect the convergence between the evidence on what is needed for an effective response to the health challenges of today's world.

- *Universal coverage reforms to improve health quality
- * Service delivery reforms to make health systems people-centered
- * Public policy reforms to promote and protect the health of communities
- * Leadership reforms to make health authorities more reliable

Source: The World Health Report 2008

Community Health Centres:

12.7 In Health Department, there are 114 Community Health Centres. Major departments like surgery, orthopaedics etc are functioning in some CHCs. The district wise number of CHCs and allotment of beds are given in Table 12. 4 shown below:

Table 12.4
District wise Number of Community Health Centres and Allotment of Beds during 2008

Sl.No.	District	No. of CHCs	No. of Beds
1	Thiruvananthapuram	10	528
2	Kollam	9	413
3	Pathanamthitta	3	66
4	Alappuzha	8	307
5	Kottayam	8	426
6	Idukki	6	219
7	Ernakulam	10	485
8	Thrissur	9	323
9	Palakkad	12	537
10	Malappuram	11	406
11	Kozhikode	11	367
12	Wayanad	5	221
13	Kannur	7	244
14	Kasaragod	5	191
	Total	114	4730

Source: Directorate of Health Services

General Hospitals/District Hospitals/Taluk Hospitals etc.

12.8 There are 7 General Hospitals, 11 District Hospitals, 41 Taluk Headquarters Hospitals and 52 Govt. Hospitals under Health Department. Implementation of speciality cadre departments like cardiology, gynaecology, paediatrics, surgery, orthopaedics, ENT, ophthalmology, dermatology, etc. implies that they are to be well equipped, in tune with the latest development in Biomedical Engineering field and on par with Indian Public Health Standards. District wise total number of hospitals and dispensaries with allotment of beds is shown in Table 12. 5.

Table 12.5
District wise number of Hospitals and Dispensaries with Allotment of Beds under DHS-2008

Sl.No.	Districts	Hospitals		Dispo	ensaries
		No.	Beds	No.	Beds
1	Thiruvananthapuram	18	3762	9	34
2	Kollam	9	1534	0	0
3	Pathanamthitta	8	1291	1	0
4	Alappuzha	10	2457	1	0
5	Kottayam	12	1506	0	0
6	Idukki	3	488	2	0
7	Ernakulam	22	3010	5	80
8	Thrissur	16	2558	5	6
9	Palakkad	8	1147	8	0
10	Malappuram	7	1302	6	0
11	Kozhikode	8	2115	3	0
12	Wayanad	3	374	7	0
13	Kannur	9	1693	9	70
14	Kasaragod	3	644	3	0
	Total	136	23871	59	190

Source: Directorate of Health Services

12.9 District wise details of inpatient/outpatient, major/minor operations conducted in hospitals/dispensaries under DHS during 2007 and 2008 are given in Appendix 12.2.

Women & Children's Hospital

12.10 There are only 5 Women & Children's Hospitals in Kerala. More Women & Children's Hospitals are to be established covering all districts of Kerala, ensuring 100 percent institutionalization of delivery and making pregnancy safe with speciality treatment in gynaecology and early detection of child diseases.

T.B.Clinics/Centres

12.11 There are 18 T.B. Clinics in Kerala under DHS in which district wise distribution of clinics and beds available is given in Table 12. 6 shown below.

Table 12.6
District wise distribution of T.B. Clinics and Beds – 2008

Sl.No.	District	No. of Clinics/Centres	No. of Beds
1	Thiruvananthapuram	1	0
2	Kollam	2	0
3	Pathanamthitta	1	0
4	Alappuzha	2	36
5	Kottayam	2	48
6	Idukki	1	0
7	Ernakulam	1	40
8	Thrissur	1	0
9	Palakkad	1	0
10	Malappuram	2	52
11	Kozhikode	1	0
12	Wayanad	1	0
13	Kannur	1	0
14	Kasaragod	1	0
	Total	18	176

Source:Directorate of Health Services

Leprosy Control Units

12.12 There are 18 leprosy control units in Kerala under DHS for the eradication of leprosy. District wise leprosy control units are given in Table 12. 7 shown below.

Table 12. 7
District Wise Distribution of Leprosy Control Units in Kerala – 2008

Sl.No.	District	No. of Units
1	Thiruvananthapuram	1
2	Kollam	4
3	Pathanamthitta	0
4	Alappuzha	1
5	Kottayam	0
6	Idukki	0
7	Ernakulam	0
8	Thrissur	4
9	Palakkad	1
10	Malappuram	3
11	Kozhikode	2
12	Wayanad	0
13	Kannur	0
14	Kasaragod	2
	Total	18

Source:Directorate of Health Services

Kerala State Institute of Virology & Infectious Diseases, Alappuzha

12.13 KSIVID is a prestigious institute under the Department of Health Services to act against virological and infectious diseases. This Institute was started many years back and has become very critical now considering the periodical outbreak of communicable diseases like Chikungunia, Dengu Fever, Leptospirosis and other occasional threat of some other diseases like Avian Flu, Anthrax, etc. It is necessary to develop this institution into a national level institute.

State Institute of Health and Family Welfare

12.14 An apex training institute with functional autonomy from 2004 onwards, the SIHFW is set up for providing training facilities to the medical and para medical staff of the department to update them with recent changes that need be adopted in the medical field. A new teaching block with hostel facilities was created under the European Commission supported Sector Investment Programme (ECSIP) in 2007. At present trainings under RCH Programme, NRHM and various national health programme like NLEP are being conducted.

Box No.12.3 Checklists save lives

Globally speaking, there are no countries without a high rate of mistakes by operation teams. A World Health Organization initiative to encourage surgeons across the world to use checklists when they operate on patients was launched in June, 2008.

Source: WHO Bulletin, July 2008.

Welfare Society for the Locomotor Disable

12.15 The Welfare Society for the Locomotor Disabled supplies mobility appliances to the poor besides conducting training for the stakeholders, for the early detection of disability and other ameliorative actions.

Society for Medical Assistance to Poor

12.16 A registered society started in 1998 to provide necessary financial assistance to the poor patients for life threatening diseases such as: brain surgery, open heart surgery, pacemaker implantation, angioplasty, renal transplantation surgery, tumor resection and prosthesis, tumor of lumbar thoracic vertebral, cancer, dialysis, and liver transplantation surgery.

Box No.12.4 Low Mortality and High Morbidity

Kerala is well known the world over for achieving high levels of life expectancy and low levels of mortality, in particular infant mortality, at fairly low levels of income. There are few regions in the world with comparable achievements. However, along with such achievements, Kerala reports one of the highest levels of morbidity (perceived ill-health). The morbidity rate of Kerala is twice the all-India average in the rural areas and over 50 per cent higher in the urban areas. *Source: Kerala Development Report, Planning Commission, 2008.*

Para Medical Services

12.17 The following Table 12.8 shows the different type of laboratories functioning for the paramedical services in the State:

Table 12.8
Laboratories And Its Major Functions In The Health Sector

Sl.No.	Institution	Major Functions
1	Public Health Laboratory	Diagnostic needs of patients both from
		government and private sector
2	Government Analyst Laboratory	Testing of food and water samples
3	Chemical Examiner's Laboratory	Caters to the needs of the judiciary in the
	Department	prosecution of criminals by examining and
		certifying material objects involved in
		murder, sexual offences, human poisoning
		cases, animal poisoning cases, liquor
		samples, narcotics etc., to provide expert
		opinion to various courts in the State
4	Drugs Control Department	Testing of Drugs and Cosmetics, licensing
		of manufacturing units and sales premises,
		prosecutions

Public Health Laboratory

12.18 The State Public Health and Clinical Laboratory, Thiruvananthapuram is a pioneer institution in the field of Bio-medical investigations was started in 1937. It caters to the diagnostic needs of patients from both government and private sectors. Technical sections to carry out different type of investigations are: Clinical Pathology (Diagnostic), Biochemistry, Serology, Bacteriology, Cytology, Radioimmunoassay and Central Malaria Lab. In addition to this, a teaching section for Diploma in M.L.T. course and a Voluntary Counseling and Testing Centre (V.C.T.C.) are also functioning. There are two Regional Public Health Laboratory at Ernakulam and Kozhikode.

Box No.12.5 Anaemia Among Women,Men, and Children

More than half of women in India – 55 percent – have anaemia, including 39 percent with mild anaemia, 15 percent with moderate anaemia, and 2 percent with severe anaemia. Anaemia is particularly high for women with no education, women from scheduled tribes, and women in the two lowest wealth quintiles. Women who are breastfeeding or pregnant are also more likely to have anaemia.

Anaemia is more widespread in both women and children than it was seven years ago at the time of NFHS-2, having risen almost 5 percentage points since then in both groups.

One-fourth of men are anaemic, with men under 20 and 40 more likely to suffer from anaemia. About two in five widowed men, scheduled tribe men, and men belonging to the lowest wealth quintile are anaemic.

Source: National Family Health Survey-3, Key Findings.

Government Analyst Laboratory

12.19 Government Analyst Laboratory, Thiruvananthapuram and Regional Analytical Laboratory of Ernakulam and Kozhikode and District Food Testing Laboratory, Pathanamthitta are working for food analysis as well as water analysis need of the State.

Chemical Examiner's Laboratory

12.20 Chemical Examiner's Laboratory is under the administrative control of the Home Department and is issuing certificates after examining material objects involved in criminal cases and also provides expert opinion to various courts. Annual report of its technical work for the year 2007-08 is given below as Table 12.9.

Table 12.9
Consolidated Annual Report of the Technical Works of the Chemical Examiner's
Laboratory Department – 2007-08

Sl. No.	Crime Head	No of cases received during 2007-08		No of cases examined during 2007-08		No of cases pending as on 1-4-2008	
		Cases	Articles	Cases	Articles	Cases	Articles
1	Murder Cases	299	1090	339	1883	179	629
2	Sexual Offences	995	4101	625	2318	763	2778
3	Human Poisoning Cases	3855	14224	4932	18792	19862	78183
4	Animal Poisoning	24	80	2	13	100	559
5	Drunkenness/Blood Alcohol	317	531	167	265	159	281
6	Excise	13629	49585	8778	37210	9726	23954
7	Distillery	3106	8626	3105	8624	1	2
8	Narcotics	543	1729	526	1983	85	736
9	Miscellaneous Cases & Explosives	307	1660	340	1780	61	176
10	Tinctures Under M&TP	48	1126	30	653	61	1403
	Total	23123	82752	18844	73521	30997	108701

Source: Annual Report 2007-08 of Chemical Examiner's Laboratory Department

Articles: It refers to material objects for examination in the Laboratory broadly classified into various categories such as articles suspected to be stained with blood in murder cases, articles suspected to be stained with semen in sexual offences, etc.

Drugs Control Department

12.21 The enforcement of the Drugs & Cosmetics Act 1940 and Rules 1945 which involves the works of (i) Licensing (ii) Inspections (iii) Drawal and analysis of random samples of drugs (iv) Prosecution against offenders of law and other related acts are implemented by the department. The Department regulates drugs manufacturing centres for 69 Allopathic Units, 23 Homeopathic Units, 49 Cosmetic Units, 1245 Ayurvedic Units, 149 Blood Banks and 13 Blood Storage Centres. The Department also regulates allopathic, ayurvedic and homeopathic drugs sales premises.

Kerala State Aids Control Society

12.22 The Kerala State Aids Control Society implements various programmes with the support of Natonal AIDS Control Organisation (NACO) and supported by UNAIDS and WHO. The main programmes of the Society are the following:

- ?? Blood Safety Programme
- ?? Integrated Counseling and Testing Centre (Jyothis/Sneha)
- ?? Sexually Transmitted Disease Control Programme (Pulari)
- ?? Targetted Intervention Programme (Sureksha Programme)
- ?? Anti Retro Viral Treatment Centres (Ushus)
- 12.23 The details of blood units collected in Blood Banks in Kerala monitored by KSACS is given as Appendix 12.3.

Nursing Education – Nursing Schools

- 12.24 There are 14 Nursing Schools under DHS, which provide three year general nursing course. In this, 10 nursing schools are functioning under the State Plan schemes. Though most of the schools were started six to seven decades ago, the infrastructure facilities of these institutions are far below the standards set by the Indian Nursing Council.
- 12.25 Details on the annual intake in different nursing courses during 2008 are given in Annexure 12.4.

Social Security Schemes under DHS

- 12.26 Other than the disease surveillance programmes, medical services and treatments, Department of Health Services had undertaken a number of social security measures embracing a wider perspective on health. Most prominent schemes during 2008-09 are listed below:
 - ?? School Health Programme
 - ?? Control of Food Adulteration, Prevention & Administration
 - ?? Health Insurance for BPL families
 - ?? Society for Medical Assistance to the Poor
 - ?? Tele Health and Medical Education Project with ISRO
 - ?? Tsunami Medical Support Programme
 - ?? Family Welfare Programmes
- 12.27 District wise details of Medical and Para medical personnel under DHS during 2008 are given as Annexure 12.5.

DEPARTMENT OF MEDICAL EDUCATION

- 12.28 The medical education, training and research under allopathy are implemented through government, co-operative and self financing sector. Super speciality departments are mostly located in medical colleges. Out of the total beds numbering 8402, 3446 (41.01%) beds are in MCH, Tvm., 1031 (12.27%) beds in MCH, Alappuzha, 1296 (15.42%) beds in MCH,Kottayam,1107 (13.18%) beds in MCH,Thrissur and 1510 (17.97%) beds in Kozhikode. Outpatients treated increased significantly in the year under review. But major operations conducted during 2008 decreased by 2.78% over 2007. Details of beds, patients treated, major operations conducted, delivery cases attended etc. are given in Table 12.10 below:
- 12.29 Medical and Para Medical Courses conducted in Government Medical Colleges with annual intakes of students under DME is given in Annexure 12.6.

Table 12.10

Beds, Patients Treated and Operations Conducted in Government Medical College
Hospitals during 2008

Sl	Medical College	Beds	Inpatients	Outpatients	Major	Delivery
No	Hospitals	(Nos.)			operations	cases
					conducted	attended
1	MCH,Thiruvananthapuram	1650	69832	644990	15110	0
2	SAT, Thiruvananthapuram	765	38290	149919	1675	10891
3	MCH, Alappuzha	1031	54210	610215	12250	4550
4	MCH, Kottayam	1296	56169	614273	13462	5076
5	Institute of Child Health	203	5834	99322	635	0
	and Children's Hospital					
6	MCH, Thrissur	1107	47657	474083	10399	2560
7	MCH, Kozhikode	1510	57826	283101	6645	0
8	Institute of Maternal and	740	37375	237366	8167	16406
	Child Health, Kozhikode					
9	Institute of Chest Diseases,	100	3435	32668	0	0
	Kozhikode					
	Total	8402	370628	3145937	68343	39483

Source: Department of Medical Education

12.30 Major medical Institutions under Medical Education Department is given below in Table 12.11

Table 12. 11
Major Medical Institutions under DME

Sl.No.	Institutions	Nos
1	Medical College	5
2	Dental College	3
3	Nursing College	3
4	Regional Institute of Ophthalmology	2
5	College of Pharmaceutical Science	1
6	State Board of Medical Research	1
7	Directorate of Radiation Safety	1
8	State Drug Formulary	1
9	Child Development Centre	1
10	Kerala Heart Foundation	1
11	Regional Cancer Centre	1
11	Malabar Cancer Centre	1
12	Indian Institute of Diabetics	1
13	State Institute of Sports Medicine, MCH, Kozhikode	1
14	Para Medic al Council	1

12.31 Details of Personnel (Clinical and Non Clinical) in Medical Colleges under DME are given in Annexure 12.7.

State Board of Medical Research

12.32 The incentive and encouragement for research initiatives and paper presentations at international forums from the teaching institutions is promoted through this scheme. The idea is to provide funds for those who present papers or chair sessions in international conferences, on the lines of Government of India norms.

Medical Colleges

12.33 Five Government Medical Colleges are functioning, at Thiruvananthapuram, Kozhikode, Kottayam, Alappuzha and Thrissur. The minimum requirements expected to keep the Medical Council of India norms seems difficult due to lack of adequate financial resources available in time. The immediate task of these Colleges is to facilitate upgradation activities, creation of new infrastructures, modernization through Information Technology, availability of specialized human power requirements, adequate power generation facilities, hospital waste management etc.

Box No.12.6

New cathlab in Medical College, Kottayam established

Super speciality block in Medical College, Kozhikode inaugurated and MRI scanner has been established

Increased 21 P.G. seats in various Medical Colleges and enhanced seats to 150 from 100 in Medical College, Alappuzha.

Source: Medical Education Department

Dental Colleges

12.34 At present 3 Government Dental Colleges are functioning in Kerala at Thiruvananthapuram, Kozhikode and Kottayam.

Nursing Colleges

12.35 There are three Government Nursing Colleges now functioning under the Directorate of Medical Education at Thiruvananthapuram, Kozhikode and Kottayam. Two new Nursing Colleges at Thrissur and another at Alleppey will be made operational shortly.

Regional Institute of Ophthalmology

12.36 There are Regional Institutes of Ophthalmology at Thiruvananthapuram and Kozhikode. The Regional Institute of Ophthalmology in Government Medical College, Kozhikode is being upgraded to a centre of excellence in eye treatment.

College of Pharmaceutical Science

12.37 In Kerala there is only one College of Pharmaceutical Science at Thiruvananthapuram to provide the needs of pharmaceutical education in the State.

State Drug Formulary

12.38 The main purpose is the updation of the drug formulary currently under use and continuous medical education on the essential drug concept.

Directorate of Radiation Safety

12.39 Directorate of Radiation safety was formed to provide no-objection certificate after examining the radiation safety measures undertaken on installation of x-ray machine, scanning machine etc in hospitals.

Child Development Centre

12.40 Child Development Centre was initiated as a project during 1987, to develop feasible strategies for a policy change towards proactive anticipation of childhood disability and adolescent problems rather than a passive attempt at provision of rehabilitation services alone. Research activities, clinical activities, distance education programme, community extension programme etc are the present activities undertaken by the centre which is now being developed into a National Centre of Excellence in Developmental and Adolescent Pediatrics with 15 new departments/divisions. A total number of 14353 persons have utilized the services of its various speciality clinics during 2007 and 2008 as detailed in Table 12.12

Table 12.12
Details of Beneficiaries Under Child Development Centre

Sl.No.	CDC Clinics	No. of Beneficiaries (2007 and 2008)
1	Pre-School Clinic	776
2	At Risk Baby Clinic	2210
3	Developmental Evaluation Clinic	984
4	Developmental Screening Clinic	1954
5	Adole scent Clinic	453
	Speciality Clinics	
1	DASII	997
2	Early Stimulation	2071
3	Physiotherapy	1728
4	Pre-School Intervention	277
5	Developmental Therapy	975
6	Speech Stimulation	1511
7	PDD Evaluation	183
8	PDD Intervention	234

Source: Child Development Centre

Box 12.7

Child Development Centre has established over 100 teen clubs, adolescent clinics in PHCs and ARSH clinics in all taluk hospitals in Thiruvananthapuram.

Source: Child Development Centre

Kerala Heart Foundation

12.41 Kerala Heart Foundation was formed as an autonomous society with its base unit being the Department of Cardiology in the Medical College Hospital, Thiruvananthapuram. Public health camps, seminars, poster exhibition, free medical check up and blood tests were conducted at Pangappara, Payyannur, Kolenchery, Kundara and Edamala Colony during 2008.

Regional Cancer Centre

12.42 RCC at Thiruvananthapuram is an autonomous institution for Cancer research as well as treatment. Data collected from RCC shows that more patients are treated in the age group of 45-74 years. Cancer usually occurs in the later years of life and with increase in life expectancy to more than 60 years, the numbers would grow. Details of cancer patients treated age group wise are shown in Table-12. 13

Table -12.13

Cancer Patients Treated In RCC By Age Group (Up to September 2008)

Age							
group	0-14	15-29	30-44	45-59	60-74	75+	Total
Patients							
treated	285	326	691	1882	1829	438	5451

Source: Regional Cancer Centre, Thiruvananthapuram

12.43 Cancer in lungs, leukemia and tongue are the leading sites among males. Among females breast, cervix uteri and thyroid are the leading sites of cancer. Details of 10 leading sites of cancer and patients treated by sex in RCC are given in Table .12.14.

Table -12.14
Leading 1st Ten Sites of Cancer and Patients Treated by Sex (Up to September 2008) (Nos.)

Sl.No	Male		Female	
	Site	Patients treated	Site	Patients treated
1	Lung	697	Breast	1411
2	Leukemia's	555	Cervix Uteri	502
3	Tongue	328	Thyroid	485
4	Lymphomas	310	Leukemia	357
5	Mouth (BM)	235	Ovary	237
6	Larynx	234	Lymphomas	157
7	Oesophagus	228	Mouth (BM)	136
8	Stomach	220	Tongue	135
9	Secondaries	213	Secondaries	129
10	Brain	153	Body of Uterus	128
	Total	3173	Total	3677

Source: Regional Cancer Centre, Thiruvananthapuram

Malabar Cancer Centre

12.44 MCC has been established with the aim of providing oncological care and related cancer treatments to the people of Malabar area. The present activities include out patient services, surgery, palliative care, diagnostic services etc. Details of cancer patients treated and operations conducted are given below in Table 12.15.

Table 12.15

Details of Cancer Patients Tre ated at Malabar Cancer Centre – 2008 (Jan – Sept)

Sl.No.	Item	Nos.
1	Total Number of Beds	80
2	In Patients	4096
3	Out Patients	11947
4	Total Patients Treated during 2008	16043
5	Major Operations Conducted	3
6	Minor Operations Conducted	7

Source: Malabar Cancer Centre

12.45 Ten leading diseases of Cancer Patients treated in MCC are given as Table 12. 16 below:

Table 12.16
Leading 1st Ten sites of Cancer and Patients Treated Under
Malabar Cancer Centre – 2008 (Jan – Sept)

Sl.No.	Site	Nos.	Percentage
1	Breast	104	14.1
2	Lung/Bronchus	88	12.0
3	Stomach	39	5.3
4	Oesophagus	38	5.2
5	Tongue	36	4.9
6	Larynx	31	4.2
7	Mouth/Buccal Muccosa	30	4.1
8	Cervix	28	3.8
9	Ovary	18	2.4
10	Brain	17	2.3

Source: Malabar Cancer Centre

Indian Institute of Diabetes

12.46 Indian Institute of Diabetes is functioning at Pulayanarkotta, Thiruvananthapuram as a joint venture of Government of Kerala and World India Diabetic Foundation.

State Institute of Sports Medicine

12.47 Sports Medicine has emerged as an important medical speciality now. The number of professional sportsmen and women are increasing at a fast pace and the absence of a comprehensive sports medicine facility makes it difficult to meet their medical needs. The State Institute of Sports Medicine Centre at Medical College, Kozhikode caters to the much felt need of sportspersons for specialized medical care.

Para Medical Council

12.48 At present a good number of paramedical courses are conducted in government as well as private sector. The courses at Government level are conducted by various Universities and DME; there are 14 courses conducted which include post graduate diploma courses, post graduate courses, degree courses, diploma courses and certificate courses. There is no governing body at present to prescribe a uniform syllabus/curriculum, to check substandard and unauthorized courses to maintain the standards. It is necessary to have a Para Medical Council in the State.

Medical University

12.49 The Government of Kerala has decided to establish a Medical University in the State. As such preliminary activities to make it functional have been initiated.

AYURVEDA

- 12.50 Indian System of Medicine Department renders medical aid to the people through the network of Ayurveda Hospitals, Dispensaries and Speciality Hospitals such as Mental Hospital at Kottakkal, Nature Cure Hospital at Varkala, etc. The major institutions under this department is given below in Table 12.17
- 12.51 District wise distribution of Institutions, Beds, Patients treated under ISM Department during 2007-08 is given in Annexure 12.8.

Table 12.17 Major Institutions under Indian System of Medicine

Sl.No.	Name of Institution	Place
1	Ayurveda Hospitals	District/Taluk H.Q.s
2	Ayurveda Dispensaries	Panchayat/Town areas
3	Mental Hospital	Kottakkal (Malappuram)
4	Nature Cure Hospital	Varkala (Thiruvananthapuram)
5	Marma Hospital	Kanjiramkulam (Thiruvananthapuram)
6	Panchakarma Hospital	Alappuzha
7	Sidha Hospital	Vallakadavu (Thiruvananthapuram)
8	Visha Hospitals	Kadampanadu (Pathanamthitta)
		Vadakkancherry & Madakathara (Thrissur)
9	OUSHADI	Thrissur

Source: Administration Report of ISM Department 2006-07

Ayurveda Hospitals

12.52 During 2008, there are 117 hospitals functioning in 14 districts of Kerala under ISM department with 2764 beds and 51075 in patients and 4932139 out patients.

Ayurveda Dispensaries

12.53 There are 747 Ayurveda Dispensaries throughout Kerala during 2008. The total number of patients treated is 22092421 of which 17160282 were out patients.

Mental Hospital

12.54 The Mental Hospital, Kottakkal, Malappuram treated a total number of 262 inpatients and 6846 outpatients during the report year.

Nature Cure Hospital

12.55 A total number of 794 inpatients and 7381 outpatients were treated in the Nature Cure Hospital, Varkala, Tvm. and Naturopathy section attached in the Govt.Ayurveda Hospital, Ottappalam.

Marma Hospital

12.56 Marma hospital is situated at Kanjiramkulam, Tvm. and there are marma departments attached to other hospitals . The available data show that during the year 3423 inpatients and 119825 outpatients were treated under this system.

Panchakarma Hospital

12.57 The Panchakarma Hospital, Alappuzha and the Panchakarma section attached to other hospitals treated 1403 inpatients and 125515 outpatients.

Sidha Hospital

12.58 The Sidha Hospital at Vallakadavu, Tvm. treated 403 inpatients and 174560 outpatients.

Visha Hospitals

12.59 There are three Visha Hospitals in Kerala, viz: at Kadampanadu (Pathanamthitta), Vadakkanchery and Madakathara (Thrissur). A total number of 1325 inpatients and 279330 outpatients were treated.

OUSHADI

12.60 The institution originally established as Sree Kerala Varma Ayurvedic Pharmacy in 1941 by His Highness the Maharaja of Cochin was for taking care of the Royal family, and for supplying medicines to Govt. Ayurvedic Hospitals. In 1959, this unit was converted and registered as Co-operative Pharmacy & Stores Limited, Thrissur. On 8th September 1975, this was incorporated under the Companies Act, 1956 and was renamed as 'The Pharmaceutical Corporation (Indian Medicines) Kerala Limited, Thrissur. At present the turnover during the financial year came to Rs.25.37 crores. Now OUSHADI is the largest manufacturer of Ayurvedic medicines all over India in Government &ctor functioning especially as a profit making public sector undertaking. The details of turnover for the period from 2000-01 to 2007-08 are given below in Table 12.18.

Table 12.18

Details of Turnover, Sales and Profit of OUSHADI from 2000-01 to 2007-08

(Rs.in lakhs)

Year	Capital	Sales to ISM	Total	Profit	Profit	Dividend
	Received	Department	Sales	Before	After Tax	paid to
				Tax		Govt. of
						Kerala
2000-01	16.66	271.86	1082.68	98.50	38.50	11.55
2001-02	22.16	243.82	1045.86	91.88	66.13	17.43
2002-03	66.66	294.49	1175.74	132.62	84.20	17.55
2003-04	34.00	393.61	1304.57	100.46	65.92	22.26
2004-05	32.00	458.03	1425.34	133.55	91.92	27.55
2005-06	40.00	720.10	1933.77	308.99	207.42	29.50
2006-07	88.00	701.51	2199.58	229.51	150.30	AUA
2007-08	25.00	728.18	2537.31	260.59	170.51	AUA

AUA=Accounts Under Audit

Source: The Pharmaceutical Corporation (IM) Kerala Ltd., Thrissur

AYURVEDA MEDICAL EDUCATION

- 12.61 Of the 14 Ayurveda Colleges meant to promote Ayurveda medical education in Kerala 3 are in government sector, 2 in private sector and 9 in self financing sector. The major institutions under the control of Ayurveda Medical Education Department are given below in Table 12.19
- 12.62 Details on annual intake of students and courses in Ayurveda Colleges under DAME are given in Annexure 12.9.

Table 12.19
Major Institutions under Ayurveda Medical Education Department

Sl.No.	Name of Institution	Place
1	Ayurveda Medical Colleges	Thiruvananthapuram, Thrippunithura
		and Kannur
2	Kerala Ayurvedic Studies and Research	Malappuram
	Society, Kottakkal	
3	Panchakarma Hospitals	Selected areas

Ayurveda Medical Colleges

- 12.63 There are 3 Government Ayurveda Medical Colleges situated at Thiruvananthapuram, Thrippunithura and Kannur. The details of beds, patients treated in Ayurveda Medical Colleges 2008 are given in Table 12.20
- 12.64 Intake capacity of BAMS students is enhanced to 50 from 30 in Thrippunithuram.
- 12.65 Kerala Ayurvedic Studies and Research Society is functioning at Kottakkal in Malappuram to promote research and studies in Ayurveda.

Table 12.20
Beds And Patients Treated in Ayurveda Medical Colleges – 2008

Sl.No.	College Hospitals	Beds	OP	IP	Total
1	Govt.Ayurveda College,	410	84207	4259	88466
	Thiruvananthapuram				
2	Govt.Ayurveda College,	489	225653	2638	225653
	Thrippunithura				
3	Govt.Ayurveda College,	150	65673	1254	66927
	Kannur				
	Total	1049	375533	8151	383684

Panchakarma Hospital

Panchakarma hospital, Poojappura, Thiruvananthapuram is one of the prestigious institutions under Ayurveda Medical Education. This hospital is imparting specialized Panchakarma treatment. The total bed strength is 52. It is proposed to convert this centre into a National Institute of Panchakarma and Research Centre.

HOMEOPATHY

12.67 Major institutions under the Homeopathy Department are given in Table 12.21 shown below and district wise distribution of institutions, beds, and patients treated under Homeopathic Department is given as Annexure 12.10.

Table 12.21
Major Institutions Under Homeopathy Department

Sl.No.	Name of Institution	Nos / Place
1	Homeo Hospitals	31
2	Homeo Dispensaries - Rural	487
3	" - Urban	38
4	HOMCO	Alappuzha

Homeo Hospitals

12.68 Out of 31 homeo hospitals, 14 are district homeo hospitals and 17 other hospitals. Total bed strength in these hospitals comes to 970. During 2008, 127.32 lakh patients sought homeopathy treatment and out of them, 0.12 lakh were inpatients and 127.20 lakh outpatients.

Homeo Dispensaries

12.69 In 2008, there are 525 homeo dispensaries in the Homeopathy Department of which 487 are rural dispensaries and 38 urban dispensaries.

The Kerala State Homeopathy Co-operative Pharmacy Ltd. Alappuzha (HOMCO)

12.70 The medicine manufacturing unit of HOMCO was established in Alleppey in 1975 which started production in 1978. This centre is the sole supplier of medicines to hospitals and dispensaries under Department of Homeopathy. It also meets other professional needs and has entered into the national market. The HOMCO has started a medicinal farm with the assistance of the State Government and the National Medicinal Plant Board. The production of drugs in the Pharmacy has gone up during the last five years as shown below in Table 12.22, which is the physical achievement after completing the expansion programme under CSS and State Govt. grant -in -aid:

Table 12.22
Details on the Production of Medicines during the Last Five Years

Sl.No.	Year of Production	Production of Medicine in Value (Rs.in lakhs)
1	2003-04	167.00
2	2004-05	271.00
3	2005-06	240.00
4	2006-07	345.00
5	2007-08	573.00

Source: The Kerala State Homeopathy Co-operative Pharmacy Ltd., Alappuzha

12.71 At present HOMCO is planning the expansion of a second unit and the production capacity of the present unit with respect to mother tinctures and dilutions shall be expanded with increased production capacity. The net profit registered for 2006-07 is Rs.47.96 lakhs based on the sales of Rs.345 lakhs and in 2007-08, Rs.106 lakh as net profit was made out of a sale of Rs.573 lakhs. Bulk purchase orders are received from various State Governments and local self government institutions.

12.72 ISO audit for HOMCO has been completed and duly recommended for ISO certification.

HOMEO MEDICAL EDUCATION

12.73 The Homeo Medical Education Department is formed to promote education, research and training in the field of homeopathy in Kerala. An independent building for the Directorate which is yet to materialize is now under the control of a Controlling Officer, so as to provide and facilitate its functions. The Directorate is now housed in the building of the Govt. Homeopathic Medical College, Thiruvananthapuram. Under the HMED, there are two Govt. Homoepathic Medical Colleges, one functioning at Thiruvananthapuram and the other at Kozhikode. There are BHMS and PG Courses conducted with 50 seats for BHMS and 18 seats for PG courses in each college. Alongwith this, BHMS courses with 50 seats each are conducted in three other nongovernmental institutions viz, (i) ANSS Homeo Medical College, Kottayam (ii) Dr.Padiar Memorial Homeo Medical College, Ernakulam and (iii) Shree Vidyadhiraja Homeo Medical Colleges are functioning with 100 beds. During 2008, 77073 and 138911 patients were treated in Homeo College Hospitals at Tvm. and Kozhikode respectively.

12.74 Annual intake of students and courses in Homeo Colleges are given in Annexure 12.11.

Box 12.8

Introduced centralized oxygen supply system to Pain and Palliative Care Unit and established a CCU at Kozhikode Homeo Medical College.

Source: Homeo Medical Education Directorate

Co-operative Sector

12.75 There are 73 co-operative hospitals with 5826 beds and 757 doctors and 3183 nurses and para medical staff in Kerala. However, among these some hospitals are under liquidation and some are not functioning. The patients treated as inpatients during 2007 was 2.90 lakh and as outpatients 2.67 lakh. District wise details are given in Appendix 12.12.

Private Sector

12.76 Details of private health care facilities in Kerala are available only for 1995. A study conducted by Department of Economics and Statistics shows that there were 4288 allopathic medical institutions with 67517 beds, 4922 ayurveda institutions with 2595 beds and 3118 homeopathic institutions with 394 beds in the year 1995.

Insurance Medical Services

12.77 There are 12 ESI hospitals with 1123 beds and 137 dispensaries in the State. There are 241 doctors working in hospitals and 316 doctors in dispensaries. The number of other paramedical staff including nurses working both in hospitals and dispensaries comes to 740. Institution-wise details of ESI hospitals, beds, inpatients, outpatients, major operations, minor operations etc are given in Appendix.12.13.

NATIONAL RURAL HEALTH MISSION (NRHM):

12.78 The National Rural Health Mission was launched on April 12, 2005, to provide accessible, affordable and accountable quality health services to the poorest households in the remotest rural regions. The thrust of the Mission was on establishing a fully functional, community owned, decentralized health delivery system with inter-sectoral convergence at all levels, to ensure simultaneous action on a wide range of determinants of health like water, sanitation, education, nutrition, social and gender equality. Under the NRHM, the focus is on a functional health system at all levels, from the village to the district. (Economic Survey 2007-08 of Govt. of India 2008.

ACCREDITED SOCIAL HEALTH ACTIVIST (ASHA):

12.79 One of the key players under the NRHM is a community health worker, i.e., Accredited Social Health Activist for every village (with a norm of 1,000 population). The role of ASHA vis-à-vis that of Anganwadi Worker (AWW) and Auxillary Nurse Mid-wife (ANM) is also clearly laid down. Under the implementation framework for the NRHM, the scheme of ASHA has now been extended to almost all States including of course the 18 high focus States.

MEDICAL SERVICES CORPORATION

12.80 The Medical Service Corporation was registered as a company on 28th December 2007 and started functioning from 1st April 2008 for the procurement and distribution of quality drugs,

purchase of surgical items, medical equipments etc for the hospitals in Health Services Department at low cost.

CRITICAL DISEASES PREVALENT IN KERALA

Cancer

- 12.81 Cancers in all forms is causing about 12 percent of deaths throughout the world. In the developed countries cancer is the second leading cause of death accounting for 21% (2.5 million) of all mortality. In the developing countries cancer ranks third as a cause of death and accounts for 9.5% (3.8 million) of all deaths. Tobacco, alcohol, infections and hormones contribute towards occurrence of common cancers all over the world.
- 12.82 Cancer has become one of the ten leading causes of death in India. It is estimated that there are nearly 1.5 2 million-cancer cases at any given point of time. Over 7 lakh new cases of cancer and 3 lakh deaths occur annually due to cancer. Nearly 15 lakh patients require facilities for diagnosis, treatment and follow up at a given time. Data from population-based registries under National Cancer Registry Programme indicate that the leading sites of cancer are oral cavity, lungs, oesophagus and stomach among men and cervix, breast and oral cavity among women. Cancers, namely those of oral cavity and lungs in males and cervix and breast in females account for over 50% of all cancer deaths in India. WHO has estimated that 91 percent of oral cancers in South East Asia are directly attributable to the use of tobacco and this is the leading cause of oral cavity and lung cancer in India. An estimate shows that the total cancer burden in India for all sites will increase from 7 lakh new cases per year to 14 lakh by 2026.

HIV/AIDS

- 12.83 For the world as a whole now, HIV/AIDS is the leading cause of death among adults aged 15-59 years. It has already killed more than 20 million people and an estimated 34-46 million people are living with this disease. Today one in every 12 African adult has HIV/AIDS. The American and the Caribbean have the second highest prevalence of HIV in the world after the Sub Saharan Africa. In Asia, an estimated 7.4 million people are living with HIV, around half a million are believed to have died of AIDS in 2003 and about 1.1 million are suspected to have become newly infected with HIV.
- 12.84 HIV infection and AIDS cases were detected in India in 1986. With more than 5.1 million estimated HIV positives in the country, India has the largest population of HIV infected people outside South Africa. Six states in India viz. Manipur, Nagaland, Maharashtra, Andhra Pradesh, Karnataka and Tamilnadu are identified as high incidence states because the prevalence of HIV/AIDS in the general population is more than 1%. Over 32% of all reported AIDS cases in India occur among young people in the age group of 15-29 years. AIDS cases reported in India since 31st July 2005 shows that the total cases reported was 111608 in India. Out of this, 79041 are male and 32567 are female.
- 12.85 First HIV positive case was identified in Kerala in 1987. Till 2004, number of AIDS cases reported from different parts of Kerala is 2003, of whom 619 persons died. AIDS cases reported through two Care Centres of Kerala State AIDS Control Society during 2005 is 218, out of which 67 persons died. Kerala has an estimated HIV population between 70,000 and 1,00,000. Roughly 500 children are born with HIV every year. It is likely that there are at least 3500 HIV positive children below 10 years in the State. During 2008, 855 AIDS cases were reported and 186 died in Kerala. Details are given in Table -12. 23.

Table 12.23
AIDS cases reported during 2008 (Upto October 2008)

Category	AIDS cases reported	Death
Male	547	133
Female	270	49
Children	38	4
Total	855	186

Source: Kerala State AIDS Control Society

12.86 Integrated counseling to test the HIV status and Testing Centres (ICTC – Jyothis/Sneha) are functioning in the State. In addition to this HIV counseling and testing facilities are available in 58 centres functioning at 24 hour PHCs in the State.

Second Generation Problems and Life Style Diseases

- 12.87 Kerala faces three major problems in the health sector in the beginning of the 21st century.
 - 1. Difficult access to health care and impoverishment of a sizeable segment of population owing to high out of pocket health expenditure.
 - 2. Rapidly increasing prevalence of diseases associated with lifestyle and ageing.
 - 3. Prevalence of environment related diseases owing to problems of community hygiene and pollution.
- 12.88 Higher prevalence of the mental health problems including the higher suicide rates, health problems and death due to road traffic accidents and other traumas are other dimensions of the health problems in Kerala.

Chronic Diseases

- 12.89 Among chronic diseases, Cardio vascular disease, Cancer, Hypertension and Diabetes Mellitus stand at the top. Sedentary lifestyle, lack of physical activity and obesity increases the risk of chronic diseases.
- 12.90 The number of attack and death due to major principal diseases during 2007-08 is given as Annexure 12.14.

Mental Health

- 12.91 It is estimated that about 1% of the population at any given time suffers from mental illness. Similarly another 2 to 3% may suffer from mental disorders which may not be severe. The tendency of committing suicide is a major problem in Kerala, which is reported at 28.8 per one lakh people. According to Crimes Record Bureau the suicide rate in Kerala is almost three times the national average of 11.6 per one lakh. Kerala accounts for 10.1% of all suicides in India while the state population is only 3% of India.
- 12.92 Mental Health Care in Kerala is confined to three mental hospitals at Thiruvananthapuram, Thrissur and Kozhikode. A few beds are also attached to Medical Colleges and a few district hospitals. There are 1714 beds in mental hospitals. But mental health personnel to deal with

mental patients are relatively very few in Kerala. For instance, in Kerala there are only 85 psychiatrists in government service and 157 in private service. Number of psychiatrists is only 0.77 per one-lakh mental patients. Also there are no nurses specialized in psychiatry in Kerala. Details of facilities in Mental Health Centres are given below.

Table -12.24

Mental Health Services in Kerala

Sl.No.	Facilities	(Nos.)
1	Mental Hospital Beds	
	(i) 3 Mental Hospitals	1342
	(ii) Medical Colleges	216
	(iii) General Hospital	156
	Total	1714
2	Man Power	
	(i) Private Service Psychiatrists	157
	(ii) Government Service Psychiatrists	85
	Total	242
3	Clinical Psychologists	7
4	Psychiatric Social Worker	11

Box 12. 9

Blood Units

Blood Banks in Kerala are registered under Central Drugs and Cosmetics Act. Of the 149 licensed blood banks 33 are in government/autonomous sector and the remaining in the private sector. Details of blood units collected in the report year is given in Appendix 12.3 *Source:Kerala State Aids Control Society*

Prevalence Rate of Public Health Diseases

12.93 The prevalence rate of public health diseases to be faced in Kerala during 2008 is given in Table 12.25below:

Table 12.25
Prevalence Rate of Public Health Diseases in Kerala 2008

Sl.No.	Diseases	Prevalence in Kerala(%)	
1	Leprosy	0.23	
2	Filaria ('000 population)	0.29	
3	Malaria (,,)	0.057	
4	Pulminary Tuberculosis	0.36	
5	Accute Diarrhoel Diseases	15.8	
6	Pneumonia	0.47	
7	Entericfever	0.13	
8	Measles	0.08	
9	Accute Respiratory Infection	229.3	
10	Chickenpox	0.49	
11	Viralhepatitis-A	0.19	
12	HIV/AIDS	0.26	

Source: Directorate of Health Services

Immunization coverage

12.94 Kerala has almost attained universalisation of immunization. During 2007-08, the coverage of BCG was 539947. Similarly the coverage of DPT, Polio, Measles and TT for pregnant women are shown in the table given below. Target and achievements of immunization programmes in Kerala during 2005-06, 2006-07 and 2007-08 are given in Appendix-12.15. The coverage of immunization programmes in Kerala during 2007-08 is given in Table.12.26.

Table -12.26 Coverage of Immunization Programme in Kerala (2007-08)

Sl. No.	Programme	Coverage (No. of beneficiaries)	
1	DPT	509175	
2	Polio	509004	
3	BCG	539947	
4	Measles	486788	
5	TT for Pregnant Women	523078	
6	TT for 5 years	379557	
7	TT for 10 years	318494	
8	TT for 16 years	381515	
9	Nutritional anaemia-Women	451487	
10	" - Children	280340	

Source: Directorate of Health Services

Family Welfare

Box No. 12.10 Food And Nutrition Insecurity

India has more persons suffering from endemic or chronic hunger, whether measured by calorie intake or anthropometric indicators of malnutrition, than any other country. National Sample Survey shows a clear trend of decline in calorie intake. In rural India, the average calorie intake per capita per day fell from-

2.266 Kcal in 1972-73 to

2,183,, in 1993-94 and further to

2,149., in 1999-2000.

Almost 77% of the rural population consumed less than the poverty line calorie requirement of 2.400 calories.

One third of the World's malnourished children are in India.

Source: Yojana, Page 15, May 2007.

12.95 Family welfare programme in Kerala is implemented through a network of government hospitals and community health centres in urban areas and primary health centres in rural areas. Family welfare programmes is also implemented by private hospitals and clinics as well as non-governmental organizations. Kerala's achievement in family welfare front has been impressive in terms of major indicators viz. birth rate, death rate, maternal mortality rate, infant mortality rate, couple protection rate etc. State has achieved couple protection level of 53.48% in 2007 and 47.22% in 2008. District wise details of family welfare programmes and couples protected by effective family planning methods are given in Appendices-12.20 and 12.21.

Box:12.11 Rashtriya Swastha Bima Yojana and Comprehensive Health Insurance Scheme

The Union government has launched a Health Insurance Scheme, the **Rashtriya Swastha Bima Yojana** (RSBY) for BPL workers *as defined by the Planning Commission* and their families in the unorganized sector, to be implemented by the Labour Department. (see: Chapter on Labour and Employment). This scheme was launched in Kerala on October 2nd 2008 to cover all districts and a total of 11.79 lakh (Absolute Poor) households as part of a more ambitious insurance programme, the **Comprehensive Health Insurance Scheme** (CHIS) which covers the non-RSBY population also. The Health Department together with NRHM has undertaken a number of measures to upgrade/strengthen facilities in the public health system so that a large part of the insurance premium paid by the Central and State governments should flow back into the public system.

Expenditure on Medical and Public Health

12.96 Kerala spends fairly substantial amount on medical and public health compared to other Indian states. The plan fund earmarked for Medical and Public Health in the Eleventh Five Year Plan and annual plan for 2007-08 and 2008-09 is given in Table -12.27

Table – 12.27 Annual Plan Outlay and Expenditure on Medical and Public Health During Eleventh Five Year Plan

(Rs.in lakhs)

Sl	Sector	Outlay(2	Outlay	Expenditure	Outlay 2008-09	Anti.Exp.20
No		007-12)	2007-08	2007-08		08-09
1	Allopathy – Health Services	57687.00	5746.00	3010.55	5453.00	5453.00
2	Medical Education	21750.00	4691.61	1627.81	3505.00	3505.00
3	Ayurveda	1650.00	149.00	154.78	750.00	750.00
4	Ayurveda Medical Education	4600.00	404.48	277.58	896.00	896.00
5	Homeopathy	882.00	258.00	79.20	607.00	607.00
6	Homeo Medical Education	1600.00	275.00	84.74	325.00	325.00

Source: First and Second Year's Programme of Eleventh Five Year Plan

12.97 District wise medical institutions and beds in Allopathy, Ayurveda and Homeopathy, details of registered medical practitioners, and details of registered para medical practitioners are given in Appendix 12.22, 12.23, 12.24.

CHAPTER 13

HOUSING

The State has always been implementing innovative schemes to house the houseless among the weaker sections of the population despite the paucity of resources with the government. The problem of housing in urban and rural areas relates to high input cost of construction as well as affordability.

- 13.2 Next to food and clothing, house as a shelter is a basic human need. Housing is one the leading sectors in Kerala by way of employment and income generation for a large number of people of varying skill levels. It is estimated that overall employment generation in the economy due to investment in housing/construction is eight times the direct employment.
- 13.3 Kerala has been a pioneer in the housing sector with the historic One Lakh Housing Programme launched in 1972. This was followed by the programmes such as SASH, Maithri, Kairali, Thanal etc, which became support and shelter for the poor.

Demand for Housing

- 13.4 The population in Kerala State as per 2001 Population Census was 3.18 per cent of the country's population, but the housing stock in Kerala is 66 lakh, which was 3.75 per cent of the total stock of housing in the country. Estimates based on 2001 Census show that there was only a numerical shortage of 0.63 lakh housing units in the State. However, housing inequality has widened in the State. More than 8 per cent of the households live in dilapidated houses. Taking into consideration the reconstruction of dilapidated houses and major repairs and renovation of a substantial numbers of houses, the total demand by 2011-12 is assessed at around 10 lakh units (see Economic Review 2007). Another aspect is the relatively high number of vacant houses in the State. As per 2001 Census more than 7.3 lakh houses are listed as vacant houses. Of this 5.1 lakh houses are in rural areas (7.4 per cent of rural houses) and the remaining 2.2 lakh in urban areas (9.1 per cent of urban houses).
- 13.5 Several agencies have made more recent estimates of the housing situation in Kerala. The total number of houses constructed during 1996-2006 was 5.77 lakh according to a survey conducted by the Housing Commissionerate based on a small sample of Panchayats, Municipalities and Corporations. The number of dilapidated houses worked out at 15.45 lakh and the houseless families were found to be 10.85 lakh. As per the data collected from different agencies by the Housing Commissionerate, 7.19 lakh houses have been constructed under assisted schemes and 7.46 lakh units under loan scheme for the last 10 years. The percentage of assisted housing works out to be approximately 50% of the total houses constructed during the period. So it can be inferred that 45 to 50% of the total number of houses being constructed need assistance from Government/ Governmental agencies.

13.6 The number of landed but houseless people in the State of Kerala is 3.72 lakh and the number of landless and houseless people is 333 lakh, as per the data received from the Commissioner, Land Revenue. Considering the present trend in increase in population and houses, the population in 2011 is projected to be around 3.38 crore and number of houses will be 83.42 lakh.

Governmental Agencies

- 13.7 Several Governmental agencies are implementing housing schemes in the State. These agencies are mainly funding the house construction of the lower & middle income groups, the poor and destitutes. These agencies are the Kerala State Housing Board, Kerala State Co-operative Housing Federation, Kerala State Development Corporation for SC/ST, SC/ST Development Department, Rural Development Department (including 'Ashraya' housing scheme of Kudumbasree for the destitutes), Fisheries Department, Sainik Welfare Department, Nirmithi Kendra, Kerala Police Housing and Construction Corporation Ltd, Kerala State Co-operative Agricultural and Rural Development Banks, Nationalised Banks and Local Self Governments.
- 13.8 Non-governmental agencies such as COSTFORD, Habitat Technology Group, Canfin Homes and Housefed have also helped in constructing houses.
- 13.9 The above agencies/departments have provided assistance to construct 8.57 lakh houses during 2004-08. Out of this 1.5 lakh house construction was in 2004-05 and 4.75 in 2006-07. During 2007-08 a total number of 0.82 lakh houses were constructed. Details are given in the following Table:

Table 13.1 Houses constructed by various agencies 2004-2008 (Numbers)

Year	Houses constructed
2004-05	155929
2005-06	110621
2006-07	474529
2007-08 (Revised)	81748
2008-09 (up to 30.09.08)	34570
Total	857397

Source: Housing Commissionerate

- 13.10 During 2007-08 Rural Development Department had provided financial assistance for the construction of 0.37 lakh houses, SC Development Department 0.08 lakh houses and Fisheries Department 0.01 lakh houses (Appendix 13.1).
- 13.11 In the recent Government effort to rebuild damaged houses for those affected by Tsunami along the coast, several NGOs have also contributed significantly towards construction of houses.

Kerala State Nirmithi Kendra

- 13.12 Kerala State Nirmithi Kendra (KESNIK) was established in 1989 to actively engage in the field of housing and habitat development through the propagation of Cost Effective and Environment Friendly (CEEF) technology. The objectives of Kerala State Nirmithi Kendra are transfer of technology from lab to land, dissemination of CEEF technologies, training in alternative housing and building material technologies, implementing/demonstrating CEEF technologies by undertaking construction and consultancy projects.
- 13.13 The activities of KESNIK are technical consultancy and housing guidance, through Regional Rural Nirmithi Kendras, Information Centres at Panchayat Nirmithi Habitats / Gurukulam, Research and Development, Information and Extension Division, Applied Technology and Training Centre, Material Testing Lab, Production Centres, Revival of Traditional Architecture, Rain Water Harvesting and Training Programmes for Local Bodies.
- 13.14 The construction work of 2500 houses for BPL SCs in 7 districts has been entrusted to Kerala State Nirmithi Kendra. The total outlay comes to Rs 17.5 crore with a unit cost of Rs 70000/-. Government have entrusted Nirmithi Kendra to construct 279 houses also additionally. The entire construction is in steady progress. Construction of 100 houses for Scheduled Tribes at Wayanad at a total cost of Rs 90 lakh and construction of 76 houses at a total cost of Rs 76 lakh for STs at Kuriotumala, Punalur is also in progress.
- 13.15 'Kalavara' Fair price shop is a novel venture in the field of marketing building materials to curb the ever-increasing price of building materials in the State. The first market has started functioning at Nirmithi compound of RNK, Kalamassery on May 2008. Around 1500 bags of cement and 75 tonnes of steel were supplied through this fair price shop during 2007-08.
- 13.16 Two more fair price shops started functioning at NIT Campus, Kozhikode and at Regional Nirmithi Vattiyoorkavu, Thiruvanannthapuram.
- 13.17 The Laurie Baker Nirmithi Training & Research Institute, the academic wing of Kerala State Nirmithi Kendera is poised to take greater initiatives in conducting Post Graduate Programmes, Diploma level courses and short duration programmes on different aspects of housing, construction and project management including allied activities such as garden making and landscaping.

Kerala Police Housing and Construction Corporation Ltd

13.18 The Kerala Police Housing & Construction Corporation Ltd was established in 1990 with the objective of taking up construction activities for the Police, Fire & Rescue Services, Prisons, Vigilance and Anti-Corruption Bureau.

- 13.19 For the Police Department, major projects that are presently being undertaken by the Corporation utilizing state funds are Police Headquarters Complex, Thiruvananthapuram, upgradation of buildings and other facilities in Armed Police Battalions, Women Police Cells and Community Police Resources Centers.
- 13.20 The details of projects completed from 1.4.2006 to 31.3.2007 are furnished in the following Table:

Table 13.2
Projects completed by the Kerala Police Housing and Construction Corporation Ltd (1.4.2007 to 31.3.2008)

(Numbers)

Sl.No	Projects	Completed
1	Police Stations	7
2	Women Police Constable Rest Room	22
3	Lower Subordinate Quarters	193
4	Upper Subordinate Quarters	122
5	Circle Inspector Office	5
6	Extension to Police Stations	15
7	PHQ Single Tower	1
8	Sub Divisional Police Office	3
9	Traffic Police Station	2
10	Kernels	3
11	District Police Control Room	2
12	District Passport Cell	1
13	Model Police Station KEPA	1
14	DCRB	1
15	Forensic Science Laboratory	1
16	Coastal Security Police Station	1
17	Jail Works	6
18	National Virology Institute, Alappuza	2
17	Other Miscellaneous works	4

Source: The Kerala Police Housing & Construction Corporation Ltd

13.21 Besides the allocation in State budget, Finance Commission Awards and Government of India schemes like 'Modernisation of Police Force' Corporation raises institutional finance from HUDCO and LIC. During 2007-08 as well as in 2008-09 till date no amount was raised from HUDCO. The details are given below:

Table 13.3
Funds raised by Kerala Police Housing & Construction Corporation Ltd.

(Rs lakh)

Year	HUDCO	State budget	Other agencies
2004-05	120.00	289.00	3680.57
2005-06	300.00	350.00	4411.15
2006-07	300.00	350.00	1042.50
2007-08(Revised)	0	350.00	970.75
2008-09(up to 30.09.08)	0	450.00	910.00

Source: The Kerala Police Housing & Construction Corporation Ltd

Kerala State Housing Board

- 13.22 Kerala State Housing Board has been implementing public housing schemes, plotted development schemes, construction of commercial complexes and revenue towers by mobilising institutional finance. To overcome its financial problems the KSHB should initiate rigorous action to raise more resources by way of aggressive loan recovery, consultancy services, sale of developed house plots, sale of completed houses, enhancing rents of rented out revenue towers etc.
- 13.23 Suraksha Housing Scheme: The Scheme is to give financial assistance for construction of house to economically weaker houseless sections of people in both urban and rural areas having at least 2 cents of land. Government subsidy of Rs 25000/- per house is granted for constructing a house with the help of voluntary organisations or NGOs. The Board has given sanction to construct 2209 houses till 30.09.08, out of which 1474 houses were completed under this scheme. The voluntary organizations/NGOs shall give assistance to the beneficiary to build the structure up to roof level and the government subsidy shall be disbursed on completion of the roof. The financial pattern of the scheme is as follows:

Total	Rs 100000/-
Government subsidy	Rs 25000/-
Share of voluntary organization	Rs 50000/-
Share of beneficiary	Rs 25000/-

13.24 Reconstruction of houses under One Lakh Housing Scheme: The one lakh housing scheme was launched in 1972 and a substantial number of houses are in need of renovation/reconstruction. The scheme has been renamed as MN Lakshamveedu Punarnirmana Padhathi on 19.09.08. During 2007-08, 634 houses were reconstructed with government share of Rs 126.80 lakh. During 2008-09, Rs 77.90 lakh has been disbursed up to 30.09. 2008 for the re-construction of 389 houses. The estimated cost of renovation of one house amounts to Rs1 lakh. The pattern of financing of one house is:

Government subsidy

Rs 50 000/- (for ST category)

Rs 37500/- (for SC category)

Rs 25000/-(for General category)

The balance amount shall be met by the Local Bodies / voluntary organizations/philanthropic individuals.

- 13.25 An innovative scheme was envisaged from 2008-09 to provide modern dwelling units to urban workers who commute from long distances to their workplace. Housing would be in the nature of flats with necessary infrastructure and community facilities. One third of the dwelling units would be allotted to female headed households. Preliminary works have been initiated for the implementation of the Ist phase of the scheme at Thrikkakkara.
- Tsunami Rehabilitation Programme: KSHB has been designated as nodal agency for the implementation of the coastal housing and re-settlement programme (CHRP) under TRP and entrusted the construction of houses in Trivandrum, Malappuram, Kozhikode, Kannur and Kasaragod districts. The number of houses that the Housing Board has to directly execute is Thiruvananthapuram (31), Kasaragod (270), Kannur (128), Kozhikode (567) and Malappuram (208).
- 13.27 A Consultancy Division has been constituted to fulfill the construction needs of LSG's, PSUs and other organizations. KSHB has also obtained "A' class contract license from PWD.
- 13.28 In the case of loan component HUDCO was the main banker. But during the last 3 years HUDCO has not granted any amount by way of loan due to a large outstanding liability of the Housing Board. An effort was made by the HB to mobilize funds through a Vishu Bumper lottery. Rupees 6.16 crore was received from the sale of tickets. During 2007-08 KSHB had received Rs 1917.37 lakh by way of financial assistance from the State government. But no amount was received from any other agencies during 2007-08 and 2008-09 so far. The details are given in the following Table:

Table 13.4 Fund raised by KSHB

(Rs lakh)

	Fund flo			
Year	State government	HUDCO	Others	
2003-04	4100	1480.79	0	
2004-05	5770	445.49	22.82	
2005-06	6500	0	4552.69	
2006-07	4820	0	5.07	
2007-08 (Revised)	1917.37	0	0	
2008-09 (up to 30.09.08)	0	0	0	

Source: KSHB

Kerala State Co-operative Housing Federation

- 13.29 Kerala State Co-operative Housing Federation Ltd, registered on 23.09.1970 is the apex body for financing the Primary Co-operative Housing Societies in the State. At present 206 Primary Housing Co-operative Societies are affiliated to the Federation. The main sources of funds to the Federation are share capital contribution from member societies and State government and borrowing from LIC, National Housing Bank and Housing and Urban Development Corporation. The main objective of the Federation is to provide financing facilities for the affiliated Primary Co-operative Housing Societies for the construction of houses.
- 13.30 The Federation has received Rs 1663.08 lakh as share capital contribution from government till 30.09.2008 leaving an outstanding balance of Rs 1052 lakh. The Federation had mobilized Rs 4000 lakh in 2006-07 and Rs 4000 lakh in 2007-08 till 30.09.08 to strengthen the housing activities of the State. The details in this regard from 2004 to 2008 are furnished in the following Table:

Table 13.5
Fund Flow to Kerala State Co-operative Housing Federation (2004-05 to 2007-08)
(Rs lakh)

Year	Funding agencies	Fund raised
2004-05	NHB	4500
	Canara bank	5000
2005-06	Canara bank	4000
	Federal bank	2500
2006-07	LIC of India	4000
2007-08(up to 30.09.08)	LIC of India	4000

Source: KSCHF

13.31 During the period up to 30.09.08, construction of 0.09 lakh housing units was assisted by the Federation by disbursing an amount of Rs 12152.03 lakh. Out of this 662 houses were for economically weaker sections (Appendix 13.2).

Financial Institutions

13.32 A large number of financial institutions have been providing assistance for house construction along with the government agencies in the State. The financial institutions in this respect are Nationalized Banks, HUDCO, HDFC, LIC Housing Finance Ltd, Sundaram Home Finance, GIC Housing Finance, HOUSEFED, Dewan Housing Finance, Canfin Homes, BOB Housing Finance, Kerala State Co-operative Bank, Kerala State Co-operative Agricultural and Rural Development Bank Ltd, and HSBC. Consequent to the growing competition among these agencies in bank deposit rate and lending rates, the rates of housing loans are also changing within short spells of time, and in recent months the rates of interest on housing loans have risen. However counter cyclical policies announced by the GOI and the Reserve Bank of India are likely to bring down the effective interest rates on housing loans in the coming months.

13.33 The lowest current floating interest rate for house loan is 8.75 per cent (up to 5 years, 30 lakh rupees, Bank of India). The floating and fixed interest rates in the case of 31 institutions as on 31.11.08 are furnished in Appendix 13.3

HUDCO

- 13.34 HUDCO has extended financial assistance for housing and urban infrastructure schemes all over the country since 1970. Deposits were mobilized from individuals and institutions for the HUDCO Public Deposit Scheme. HUDCO also functioned as an appraisal agency for extending Central government grant assistance in housing sector under Basic Services for Urban Poor (BSUP) and Integrated Housing and Slum Development Programme (IHSDP) under Jawaharlal Nehru National Urban Renewal Mission (JNNURM).
- 13.35 Besides housing finance, HUDCO is funding the construction of sanitation units, development of plots and urban infrastructure projects. In Kerala, HUDCO had granted funds to all the local bodies which had placed their requests. Besides, a good number of government and semi-government organizations received financial assistance from HUDCO. Development Authorities, Police Housing and Construction Corporation, Kerala State Backward Classes Development Corporation, Kerala State Co-operative Bank, Kerala State Development Corporation for SC/ST, Kerala State Handicraft Apex Co-operative Society Ltd., Kerala State Housing Board, Kerala School Teachers & Nonteaching Staff Welfare Corporation, Kerala Urban & Rural Development /Finance Corporation, Kerala State Co-operative Federation for Fisheries Development Ltd and Kudumbashree are among the institutions which received assistance from HUDCO.
- 13.36 In urban infrastructure sector, assistance amounting to Rs 48 crore in 2007-08 and Rs 18 crore in 2008-09 were sanctioned to Kerala State Road Transport Corporation (KSRTC) for fleet augmentation by purchase/body-building of 416 and 144 buses respectively. An amount of Rs 22 crore was sanctioned to Corporation of Kochi in 2007-08 for land acquisition and land development for phase-I of Solid waste Management Plant at Brahmapuram, Kochi.
- 13.37 Details of assistance regarding units, amount sanctioned and amount released by HUDCO during 2004-2008 are furnished below:

Table 13.6 Assistance provided by HUDCO to individuals

(Rs lakh)

Year	Unit	Amount sanctioned	Amount released
2004-05	370	1129.03	900.76
2005-06	116	344.6	1003.31
2006-07	82	228.83	210.75
2007-08 (Revised)	99	512.91	355.63
2008-09 (up to 30.11.08)	72	332.93	321.29

Source: HUDCO

LIC Housing Finance Ltd

- 13.38 The Life Insurance Corporation of India assisted the establishment of LIC Housing Finance. There are presently 115 offices of the company in India. The company was established in 1989. It mainly caters to the financial needs of individuals who require funds to buy, build or remodel houses.
- 13.39 LIC Housing Finance has been doing exceptionally well in the last few years and its net profit has increased from Rs 37.46 crore in 2006 to Rs 46.70 crore in 2007. The amount of loan disbursements by LIC Housing Finance rose from Rs 1080 crore to Rs1222 crore.
- 13.40 The details of loan provided in the financial years 2006-07, 2007-08 and target for the financial year 2008-09 from Thiruvananthapuram area office are furnished in the following Table:

Table 13.7
Loan provided during 2006-08
by LIC Housing Finance Ltd, Thiruvananthapuram (Area office)

(Rs lakh)

Year	Numbers	Amount
2006-07	322	1450
2007-08	297	1838
2008-09	400	4000

Source: LIC Housing Finance Ltd

13.41 The income from interest on housing loans has increased from Rs 322 crore to Rs 442 crore and the total income of the company has increased by 36 % in 2007 compared to the profit figures of 2006. The company has also been rated AAA by CRISIL for its efficient operations.

CHAPTER - 14

POVERTY AND SPECIAL PROGRAMMES FOR WEAKER SECTIONS

Poverty is a social phenomenon and can be defined in an inclusive sense as consisting of a number of elements: lack of access to, or availability of income-earning opportunities, basic health and education, food security; lack of adequate shelter, water or sanitation; lack of land or employment opportunities; and gender discrimination. The list is sometimes further enlarged to include: lack of participation in civil society, social exclusion, alienation, political instability and conflict. The wider definition, however, robs the concept of its specificity. In fact the more inclusive the definition is, the less specific it becomes. In India, accordingly, a very specific definition has been traditionally used, namely the fulfillment of the nutritional requirement of 2400 calories per person per day in rural areas and 2100 calories in urban areas. The poverty line is defined as that level of expenditure at which a person accesses this minimal level of calorie intake (which is not the same as the level of expenditure required solely for accessing this intake). The practice has been to take the level of expenditure corresponding to the poverty line in some base year and to update it for subsequent years for each state using the Consumer Price Index Number for Agricultural Labourers for rural areas and the Consumer Price Index Number for Industrial Workers for urban areas. Generally accepted definition of poverty, therefore, emphasizes minimum level of living rather than a reasonable level of living

Table 14.1 State Specific Poverty Lines for 2004-05 (Rs/month)

	(Its/month)					
Sl. No.	State	Rural	Urban			
1	Andhra Pradesh	292.95	544.30			
2	Assam	387.64	378.38			
3	Bihar	356.36	461.40			
4	Gujarat	353.93	540.80			
5	Haryana	414.76	504.20			
6	Himachal Pradesh	394.20	504.20			
7	Jammu & Kashmir	391.26	504.20			
8	Karnataka	324.17	603.50			
9	Kerala	429.07	562.90			
10	Madhya Pradesh	324.48	569.00			
11	Maharashtra	362.25	664.50			
12	Orissa	325.65	544.00			
13	Punjab	410.38	456.10			
14	Rajasthan	374.57	531.10			
15	Tamilnadu	351.86	551.70			
16	Uttar Pradesh	369.76	487.10			
17	West Bangal	382.82	446.10			
18	All-India	358.03	540.40			

14.2 The Economic survey 2007-08 published by Government of India Ministry of Finance Economic division has made the following statements.

Incidence of poverty is estimated by the Planning Commission on the basis of large sample surveys on household consumer expenditure conducted by the National Sample Survey Organization (NSSO). The Uniform Recall Period (URP) consumption distribution data of NSS 61st Round yields a poverty ratio of 28.3 percent in Rural areas, 25.7 percent in urban areas and 27.5 percent for the country as a whole in 2004-05. The corresponding poverty ratios from the Mixed Recall Period (MRP) Consumption distribution data are 21.8 percent for rural areas, 21.7 percent for urban areas and 21.8 percent for country as a whole. While the former consumption data uses 30 day recall/reference period for all items of consumption the latter uses 365-day recall/reference period for five infrequently purchased non-food items, namely, clothing, footwear, durable goods, education and institutional medical expenses and 30-day recall/reference period for remaining items. The percentage of poor in 2004-05 estimated from URP consumption distribution of NSS 61st Round of consumer expenditure data are comparable with the poverty estimates of 1993-94(50th round) which was 36 percent from the country as a whole. The percentage of poor in 2004-05 estimated from MRP for consumption distribution of NSS 61st Round of consumer expenditure data are roughly comparable with the poverty estimates of 1999-2000 (55th round) which was 26.1 percent for the country as a whole (Table -14.2).

Table-14.2
Poverty Ratios by URP and MRP

(Percent)

Sl.No	Category	1993-94	2004-05				
В	By Uniform Recall Period (URP) Method						
1	Rural	37.3	28.3				
2	Urban	32.4	25.7				
3	All India	36	27.5				
1	By Mixed Recal	Period (MRP) Me	ethod				
		1999-2000	2004-05				
4	Rural	27.1	21.8				
5	Urban	23.6	21.7				
6	All India	26.1	21.8				

Source: Planning Commission

Consumption Patterns below and above Poverty Line

- 14.4 There are concerns about vulnerability of people who have crossed the poverty line (PL) and are at present above it. Vulnerability is a relative term and could be gauged from the consumption patterns (in the absence of a better available alternative). Give meager resources, higher share of expenditure on food items which is the most basic of all basic needs would be indicative of vulnerability to some extent.
- 14.5 The average per capita consumption expenditure for rural and urban population as per 61st Round (2004-05) is Rs. 558.78 and Rs 1,052.36 respectively . NSSO data also reveals that rural population on an average spends about 55 percent of its consumption on food and remaining 45 per cent on non- food items (Table 14.3).

Table - 14.3 Consumption pattern across different MPCE Classes of population (Percent)

MPCE Classes of	Food	Non -Food
population –rural	55.05	44.9
1. Poor (roughly below PL)		
1. 0-235	68.45	31.55
2. 235-270	67.16	32.84
3. 270-320	66.35	33.65
4. 320-365	64.78	35.22
II. Roughly between PL and 2 PL		
5. 365-410	63.99	36.01
6. 410-455	62.93	37.06
7. 455-510	61.61	38.39
8. 510-580	60.11	39.88
9. 580-690	58.02	41.98
10, 690.890	53.92	46.08
III Roughly above 2 PL		
11, 890-1155	49.8	50.2

Source: NSSO: Estimated from Table 5R of NSS Report

No. 508: Level and pattern of Consumer Expenditure 2004-05

- a. MPCE class having poverty line (PL) at Rs. 356.3
- b. MPCE Class having 1.5 times the poverty line (1.5 PL) at Rs. 534.45
- c. MPCE class having twice the poverty line (2PL) at Rs. 712.60
- 14.6 Rural population divided on the basis of their monthly per capital expenditures (MPCEs) exhibit consumption patterns as follows.
 - ∠BPL families in Rural area are spending about 31 to 35 percent of their total consumption expenditure on non food items and remaining on food items.

 - For rural population between PL and 2PL non-food items take up between 36 percent and 46 percent of the total consumption expenditure.
- 14.7 A Similar classification of urban population indicates a consumption patterns (Table 14.4) as follows.

Table -14.4 Consumption pattern across different MPCE Classes of population

(Percent)

		,
MPCE classes of	Food	Non-Food
population- urban	42.51	57.48
I Poor (roughly below PL)		
1. 0-335	64.86	35.14
2.335-395	63.11	36.89
3. 395-485	60.04	39.96
4. 485-580 ^a	57.3	42.7
II Roughly between PL and 2 PL		
5. 580-675	55.35	44.65
6. 675-790	52.37	47.62
7. 790-930 ^b	49.69	50.31
8. 930-1100 °	46.61	53.39
III Roughly above2 PL		
9. 1100-1380	44.44	55.56
10. 1380-1880	40.17	59.83
4. 485-580 a II Roughly between PL and 2 PL 5. 580-675 6. 675-790 7. 790-930 b 8. 930-1100 c III Roughly above2 PL 9. 1100-1380	57.3 55.35 52.37 49.69 46.61	44. 47. 50. 53.

Source: NSSO: Estimated from Table 5U of NSS Report No. 508: Level and pattern of

Consumer Expenditure 2004-05

- 14.8 While about 43 percent of total consumption on an average is spent on food items and remaining 57 percent is spent on non- food items, urban poor (BPL) are spending about 35 to 43 percent of their total consumption on non food items.
 - ∠ In the group of population between PL. and 1.5 PL., non food items take up between 45 to 50 percent of the total consumption expenditure.
 - MeHowever, in the group of population between PL. and 2 PL., non-food items take up between 45 and 53 per cent of the total consumption expenditure.
 - ZeIt is noticeable that on expected lines, the average consumption pattern of urban population in general is more skewed in favour of non-food items.

Poverty alleviation and employment generation programmes

14.9 To accelerate the reduction in poverty and increase in employment, a number of poverty alleviation, employment generation and basic services programmes are being implemented. Fully recognizing the centrality of the panchayats in effectively implementing poverty alleviation and most other social sector programmes, Government of India has set up the Ministry of Panchayati Raj to carry forward the process of empowerment of Panchayati Raj institutions (PRIs). A number of steps have been taken to devolve functions to PRIs in line with the Constitutional mandate. In Kerala all these functions are entrusted to the Local Self Government Department.

a, MPCE class having poverty line (PL) at Rs. 538.6

b. MPCE class having 1.5 times the poverty line (l.5 PL) at Rs. 807.90-

c. MPCE class having twice the poverty line (2PL) at Rs. 1077.20

New Strategy of Poverty Reduction

14.10 The failure of anti-poverty programmes in the past can be attributed to the fixation of target, lack of involvement of beneficiaries, absence of poor understanding of poverty and its causes and manifestations, the top down approach and the over dependence of bureaucracy, Kerala is seeking to achieve a break in participatory poverty reduction through Kudumbashree, which is implemented by the State Poverty Eradication Mission through the local self governments. All urban local governments and Village panchayats have been included under Kudumbashree.

Kudumbashree Programmes in Rural Areas

- 14.11 State Poverty Eradication Mission implements this Programme by organizing the poor by creating community based structures of women below poverty line with focus on self help, demand led convergence of available services and resources under the leadership of the Local Governments. The key components of the programmes are:
 - ?? Enabling certain minimum needs infrastructure, setting up of micro enterprises and capacity building of the poor
 - ?? Providing high quality support services for the design and implementation of self-employment ventures.
 - ?? Setting up of Challenge Fund to support pro poor policies of the Local Governments, a Technology fund to support transfer of technology relevant for poverty reduction, an Innovation fund to support path breaking innovations in poverty reduction and a common revolving fund to provide seed capital for micro enterprises.
 - ?? Expansion of Asraya: Destitute Identification Rehabilitation and Monitoring Project was launched during 2002-03 in 101 Grama Panchayats and later expanded to all grama panchayaths.
 - ?? Generating jobs for educated youth.
 - ?? Special schools for physically and mentally challenged.
 - ?? Conduct an evaluation study on Kudumbashree.

Community Based Organizations for the Poor

14.12 The Kudumbashree programme covered the entire rural area in the state through 176200 NHGs. Community Based Organizations has mobilized a sum of Rs. 940.0550386 crores as thrift fund and disbursed credit to the tune of Rs. 2503.9394539crores to its members. The Panchayat functionaries and CDS/ADS Office bearers were given training for strengthening the CBOs. [District wise details Appendix 14.2]

Linkage Banking

14.13 The Linkage Banking Programme was launched during 2002-2003 after proper grading of the NHGs as per NABARD norms. During 2002 – 03, and up to November 2008 83608 NHGs were linked with banks. A sum of Rs.58918.95 lakhs have been made available to the NHGs as loan. [District wise details Appendix 14.3]

Lease Land Farming

14.14 The Lease Land Farming programme, initiated in the rural areas during the year 2002-03, has been successfully extended to 855 Grama Panchayats. Through this programme 111663.8 acres of land have been brought under cultivation [District wise details Appendix 14.4]

Bala Sabha

14.15 Bala Sabha is a programme to organize the children of the poor families of the state as part of its approach to community development. The larger goal is recognizing and protecting child rights. Bala Panchyats have been formed in 981 Grama panchayat with the support of UNICEF to support the children who hail from poor socio economic background. During 2004 - 05, Bala Sabha which intends to prevent intergenerational transmission of poverty, has been extended to the rural area also. The total number of Bala sabhas formed is 44991with 788189 children as members [District wise details Appendix 14.5].

IT Enabled services to the Poor

14.16 An innovative component in the Destitute Identification Rehabilitation and Monitoring project is an online monitoring system. As per the project, the CDS Office will be computerized in Panchayats where the destitute rehabilitation project is taken up and the system provided would be utilized for the benefit of the poor.

Micro Enterprises in Rural areas

14.17 The State budget provides support to set up micro enterprises of women. It has been set up in the pattern of the SGSY. So far 4013 groups of micro enterprises of women have been set up in the rural areas as on 31.10.08. The activities are diverse and innovative in nature. [District wise details Appendix 14.6 & 14.7]

Market Interventions of Kudumbashree

- 14.18 Kudumbashree from its very beginning promoted micro enterprises a means of livelihood for the poor women both in the rural and urban areas under various Government schemes. Kudumbashree decided to set up monthly markets in each district on specified days and venue. The entrepreneurs are given opportunity to bring their products and efforts at standardization of product quality and presentation by entrepreneurs. 222 monthly markets were held from October 2007 to July 2008 and had a turnover of Rs.1,92,06,804/-.
- 14.19 Kudumbashree as part of its market development strategy exploited the opportunity of Onam festival, by conducting onam fairs state wide during September 2008. A total 367 number of fairs were conducted all over the state at District/ Block/ Taluk/ Municipal/ Grama Panchayat levels. The total turn over of the fairs which was really 'Janakiya Vilpanamela' is Rs. 2,45,24,237/-

Gender Self Learning

14.20 Kudumbashree serves as the pioneer organizational setup to mobilize and equip women for poverty eradication through economic empowerment. Gender self Learning Programme is an outcome of the improvisation of the strategies for both economic and social empowerment. It initiates capacity to fill the gap so as to achieve equity, equality, recognition, claim on governance, awareness on Domestic Violence Act, rights in decision making governance, indue ownership of assets through Kudumbashree networks. Gender Self Learning modules are prepared by a participatory process and implemented through larger networks of women resource persons. The experiential learning of women is to be documented and analyzed for working our further gender empowerment interventions and address specific issues.

Box 14.1

Self Sufficient, Self reliant and Sustainable CDS

The scaling up of Kudumbashree programme to rural areas has been completed and the CDS System is in vogue in all the Grama Panchayats. But still there is a lot to go to achieve the end goal of Kudumbashree. Therefore, it has been decided to develop a few Panchayats, at least one from each District as a model in poverty alleviation. With the objective of total eradication of poverty, the novel programme 'Self sufficient, Self reliant and sustainable CDS' has been launched.

Kudumbashree – The Journey so far

The significant achievements of Kudumbashree so far are listed below:

- Kudumbashree Programme has been extended through out the State.
- ∠ Thrift Fund collection crossed Rs. 940.0550386 crores
- ✓ Internal lending to the tune of Rs.2503.9394539 crores
- ∠ Under Linkage Banking scheme, 83608 NHGs linked with banks.
- Credit flow Rs. 58918.95 lakh through linkage banking.
- Formed 44991 Balasabhas with 7,88,189 children
- Cluster Development Programme with the support of Industries Department.
- Multi purpose job clubs formed with the financial support of SC Development Department.
- Loan linked Micro Housing scheme launched with the support of Banks.

Source: Kudumbashree, Government of Kerala

Ashraya - A programme for Community based rehabilitation of destitute families.

- 14.21 Ashraya is the first integrated programme for tackling the poorest of the poor who live at the margins of the economy, society and polity without a voice or the power of choice, with no capabilities to access entitlements the really 'excluded'. It originated from the realization that even in a State like Kerala, the benefits of Anti-Poverty policies and programmes do not reach the absolutely poor, who constitute only about two percent of the population.
- 14.22 As of now, there are no schemes akin to Ashraya in India targeting the poorest of the poor. Thus, Ashraya is a pioneer, developing a model, which can be adapted by the rest of the country. Hence, special support from Government of India is expected.

Box 14.2 The key features of the programme 'Ashraya' are:

- 1. It is a sub programme of Kudumbashree, the highly successful anti poverty mission mode programme implemented through community-based organizations of Kudumbashree. This three tier network organization include every poor family in the State and each family being represented by a woman.
- 2. These CBOs identify the poorest of the poor using socially accepted objective indicators of poverty.
- 3. The Grama Panchayats and Municipalities are the real planners of this project with Government playing the role of an active facilitator.
- 4. After transparent identification participatory plans are prepared for each destitute family on the basis of close interaction with the family members and on-site verification of details.
- 5. The plans are implemented by converging services and resources from different sources including PDS, Special Nutrition, Health, Remedial Education, Pensions, Basic Minimum services, Skill Development, etc. Gaps are filled up with funds from Panchayats and Municipalities with the State share being limited to 25% of the project cost or Rs.10 lakhs whichever is lower.
- 6. The entire programme is monitored regularly. The destitute families would be taken care of till they achieve a minimum standard of life. Thus Ashraya is not one-time assistance but is a promise of continuous support till the objective is realized.

Source: Kudumbashree, Government of Kerala

14.23 The destitute identification, rehabilitation and monitoring as a composite programme is an extension of the poverty eradication mission of Kudumbashree through the Community based Organizations of poor. The Mission has rekindled their hope and sensitized the Local Self Government institutions about their new roles focused in poverty eradication through community development.

The Destitutes

14.24 The destitutes are the poorest of the poor. They are the outliers of the development scenario in the negative extreme. They live at the margins of the economy, society and polity. They do not have a voice or the power of choice. They face the worst forms of deprivation and lack of access to the minimum services. They are exposed to all forms of vulnerability and do not have any safety net against risks. Their income is below subsistence and they are dependent. These faceless, powerless people lack capabilities and are neither aware of their entitlements nor can they access them. They neither compete nor bargain. They drift pushed by circumstances. Severity of destitution is by unfavorable physical gender or caste status. That is, disability being a disabled, being a widow, belonging to a scheduled caste or tribe can singly or in combination aggravate the suffering. The collapse of the traditional social support systems has orphaned the destitutes. They are sometimes objects of charity. But they are never subjects of development. They have to be enabled to gain identity, personality and empowered to stand on their own. Only with an Antodaya approach and giving care and support for a reasonable period, the upliftment of the destitutes is possible.

Identification of Destitute families

14.25 The destitute families are identified following the 9-point indices developed by the State Poverty Eradication Mission.

Rural

- 1. No Land /Less than 10 cents of Land
- 2. No house/Dilapidated House
- 3. No Sanitary Latrine
- 4. No access to safe drinking water within 300 meters
- 5. Women headed house hold/ Presence of a widow, divorcee / abandoned lady/ Unweded mother
- 6. No regularly employed person in the family
- 7. Socially Disadvantaged Groups (SC/ST)
- 7. Presence of Mentally or physically challenged person / chronically ill Member in the family
- 9. Families with an illiterate adult member
- 14.26 The identification is done transparently through the Neighborhood Groups (NHG) network of Kudumbashree. The members of Neighborhood Groups belong to poor families but need not be destitute. At the same time, since the members of Neighborhood Groups belong to a specific geographical area, they know better than anyone else, all the specified destitute families within their Neighborhood. The preparation of Micro Plan using the Risk Indices and problem identification mechanism also enable them to identify the destitute families in their vicinity.

Samagra - Local Production Marketing Network

- 14.27 Samagra is an innovative programme independently evolved by Kudumbashree incorporating Rural Business Hub initiative launched by Ministry of Panchayati Raj, Government of India and micro enterprise development activities of Kudumbashree. In general Samagra means comprehensive development job. This is an all inclusive programme encompassing all the components from production to marketing, helping the people involved to derive maximum possible income and thereby improving the returns from livelihood of the people in that area.
- 14.28 This programme is to be implemented by involving all the agencies working in that area under the leadership of the local government with the following objectives:-
 - ?? Productivity improvement
 - ?? Quality enhancement
 - ?? Product diversification
 - ?? Ensuring market for the produce
 - ?? Increased people participation
 - ?? Increased women participation
 - ?? Poverty reduction
 - ?? Capacity Building

Other major poverty alleviation programmes

14.29 Other major poverty alleviation programmes implemented in the state through Panchayat Raj Institutions are Swarnajayanthi Gram Swarozgar Yojana (SGSY), Indira Awas Yojana (IAY), Sampoorna Gramin Rozgar Yojana (SGRY) and Pradhan Mantri Gram Sadak Yojana (PMGSY)

1. Swarnajayanti Gram Swarozgar Yojana (SGSY)

- 14.30 The objective of the programme is to provide self employment to the poor establishing a large number of micro enterprises in the rural areas building upon the potential of the rural poor. Emphasis will be given to group approach in this programme.
 - (1) The objective of SGSY is to uplift every assisted family above the poverty line within three years time. SGSY is conceived as a holistic programme of micro enterprises covering all aspects of self employment viz. Formation of self-help groups, capacity building, and planning activity clusters infrastructure buildup, technology, credit and marketing.
 - (2) This Programme will adopt a project approach in each key activity. SGSY is a credit cum subsidy programme where credit forms the critical component. This programme lays emphasis on skill development through training courses. It also proposes to ensure technology up gradation in identified activity clusters.
 - (3) Subsidy under SGSY will be uniform at 30% of the project cost subject to a maximum of Rs. 7500/-. In respect of SC/STs this will be 50% and Rs. 10,000/-respectively. For group Swarozgaris the subsidy would be at 50% of the project cost subject to per capita subsidy of Rs. 10,000/- or Rs. 1.25 lakhs whichever is less. There will be no limit on subsidy for irrigation projects. The programme expects at least 50% of the Swarozgaris to be SC/STs, 40% to be women and 3% to be disabled.
- 14.31 The allocation and release of the scheme for the years 2007-08 and till the end of November 2008 are indicated below:

Table 14.5 Allocation, Release and Expenditure of SGSY

(Amount Rs in Lakhs)

Year	Opening balance	Allocation		Release		Total	Expend	% of		
		Centre	State	Total	Centre	State	Total	fund	iture	exp.
2007-08	82.24	3042.75	1004.25	4047.00	3022.70	1007.56	4030.26	4112.51	3932.07	96
2008-09 (Nov. 08)	230.55	3597.15	1199.05	4796.20	2015.43	599.53	2614.96	2845.51	2119.46	74
TOTAL	312.79	6639.90	2203.30	8843.20	4821.28	1607.09	6645.22	6958.02	6051.53	87

14.32 Total amount of subsidy and credit disbursed to SHGs and individual swarozgaris during 2007-08 and up to the month of November 2008 are as follows:

Table 14.6 Credit and Subsidy Disbursed

	Credit di	sbursed to (Rs	in Lakhs)	Subsidy disbursed to (Rs.in Lakhs)				
Year	SHGs	Ind.Swaroz- garis	Total	SHGs	Ind.Swaro z-garis	Total		
2007-08	4733.48	1802.93	6536.41	2192.34	658.98	2851.32		
2008-09 (Nov. 08)	3082.04	1059.84	4141.88	1269.16	346.31	1615.47		
Total	7815.52	2862.77	10678.29	3461.50	1005.29	4466.79		

14.33 During 2007-08, total numbers of SHGs which started economic activities are 1987 with a total coverage of 22955 SHGs. In the case of individual swarosgaries, total number of beneficiaries covered is 6764. Similarly, total number of SHGs which started economic activities up to the month of November 2008 during the current financial year is 78 with a total coverage of 13633 SHGs. In the case of individual swarozgaris, total number of beneficiaries covered is 3563.

Table 14.7 Achievement of SGSY during 2006-07 & 2007-2008 as on November 2007

Year Self Help Group (No of members covered)						No. of Individual Swarozgaris				
	Total	SC	ST	Women	Disabled	Total	SC	ST	Women	Disabled
2007-08	22955	8476	1099	17967	472	6764	5221	474	3102	796
2008-09 (Nov. 08)	13633	4730	635	10572	208	3563	2758	197	1805	319
TOTAL	36588	13206	1734	28539	680	10327	7979	671	4907	1115

2. Indira Awaas Yojana (IAY)

- 14.34 The objective of Indira Awas Yojana is to help construction of dwelling units by members of SC/ST, freed bonded labourers and also non-SC/ST, rural poor below poverty line by providing them with grant-in-aid @ Rs. 38,500/- per house. This is a Centrally Sponsored Scheme sharing cost between Centre and State in the ratio of 75:25.
- 14.35 The beneficiaries of the scheme are selected by Grama Sabhas, having at least two cents of land for house construction. They should not have dwelling units fit for occupation. The assistance is sanctioned to the female members of the family or in the joint name of husband and wife. House constructed under the scheme should have not less than 20 sq.mts of plinth area but no plans or design is prescribed.
- 14.36 Out of the total allocation for Indira Awas Yojana, up to 20% of the total funds can be utilized for up gradation of existing kutcha houses and towards subsidy for construction of houses with credit from Banks/Financial Institutions.
- 14.37 The Physical achievements during 2008-09 & up to the month of November 2008 are as follows:

Table 14.8 Physical Achievement under IAY

Year	N	lew ho	uses (No	s)	Upgradation (Nos)			
	SC	ST	Others	Total	SC	ST	Others	Total
2007-08	14429	1311	11102	26842	5265	496	3839	9600
2008-09 (Nov. 08)	8057	645	8201	16903	4161	307	3483	7951
TOTAL	22486	1956	19303	43745	9426	803	7322	17551

14.38 The allocation and release of the scheme for the years 2007-08 and up to the month of November 2008 are indicated below:

Table 14.9 Allocation, Release and Expenditure of IAY

(Rs.in Lakhs)

Year	Opening balance	1	Allocatio	n		Release Total Expend fund iture		I		
	S4141100	Centre	State	Total	Centre	State	Total	10110	100110	exp
2007-08	733.48	7718.85	2572.94	10291.79	5557.39	1852.47	7409.86	10899.09	10186.83	93
2008-09 (Nov. 08)	890.64	10805.52	3601.85	14407.73	6768.71	1800.96	8569.67	9460.31	6445.48	68
Total	1624.12	18524.37	6174.79	24699.52	12326.1	3653.43	15979.53	20359.4	16632.31	82

3. Sampoorna Gramin Rozgar Yojana (SGRY)

- 14.39 This Programme is a Centrally Sponsored Scheme with cost sharing basis between Centre and State in the ratio of 75:25. The Central Government also provides food grain costing equivalent to the cash component, free of cost, additionally.
- 14.40 The objective of the scheme is to provide additional wage employment in rural areas and also food security along with the creation of durable community, social and economic assets and infrastructure development in the areas. The works taken up would assist in drought proofing such as soil and moisture conservation works, watershed development, promotion of traditional water resources, afforestation and construction of village infrastructure and link roads, primary school buildings, dispensaries, veterinary hospitals and marketing infrastructure.
- 14.41 The benefit of the SGRY is made available for all the rural poor who are in need of wage employment and are willing to take up manual or unskilled work in and around his village and habitations. Preference is given to the poorest among the poor, SC&ST and parents of child labour withdrawn from hazardous occupation.
- 14.42 The allocation of funds and food grains to the district is based on two indicators, namely, the proportion of SC/ST population of the district and the inverse of agriculture production per agricultural worker. Equal weightage is accorded to these two indicators. Ministry of Rural Development makes the State and district-wise allocation at the Central Level. Under the Scheme 5 Kg. of Food grains is made available per man-day @ Rs. 8.90/- per Kg for rice and Rs 6.70 for wheat. The balance wage as per the notified minimum wages is paid in cash.
- 14.43 The allocation and release of funds for the year 2007-08 is are indicated below:

Table 14.10 Allocation, Release and Expenditure of SGRY

(Rs in Lakhs)

	Opening	Opening Allocation Rel		Release		Total	Expend	%		
Year	balance	Centre	State	Total	Centre	State	Total	fund	iture	of exp
2007- 08	4208.18	6706.98	2767.00	9473.98	5721.32	1905.90	7627.22	11834.40	9534.75	81

14.44 The physical achievements (Mandays generated) for the years 2007-08 is indicated below:

Table 14.11 Mandays Generated under SGRY

YEAR	SGRY (Lakh Mandays)						
ILAK	SC	ST	OTHERS	TOTAL			
2007-08	25.75 2.37 31.40						

14.45 The scheme is merged with NREGA from 1/4/08. (Financial achievement under SGSY, IAY, JGSY, EAS/SGRY – See Appendix 14.8)

Pradhan Mantri Gram Sadak Yojana (PMGSY)

- 14.46 The spirit and the objective of the pradhan Manthri Gram Sada Yojana (PMGSY) is to provide good all-weather road connectivity to the unconnected Habitations. It must be ensured that provision of New Connectivity (i.e., connecting unconnected Habitations) should be given precedence in keeping with the objectives of the Programme.
- 14.47 A Core Network is that minimal Network of roads (routes) that is essential to provide basic access to essential social economic services to all eligible habitations in the selected areas through at least single all-weather road connectivity. It should be ensured that each roadwork that is taken up under the PMGSY is part of the Core Network. The PMGSY shall cover only the rural areas. The PMGSY envisages only single road Connectivity to be provided.
- 14.48 Provision of connectivity to unconnected Habitation would be termed as New connectivity. Up gradation, when permitted would typically involve conversion from Gravel or Water Bound Macada (WBM) stage to the desired technical specification or widening of the roads, subject to traffic studies. Provision of Cross Drainage (CD) works alone would also be treated as Up gradation under PMGSY.
- 14.49 KSRRDA under the Rural Development Department is the nodal agency for the implementation of the Programme in the State. The Programme is under implementation in 55 Blocks spread over all the 14 districts. PMGSY is a 100% centrally sponsored scheme at present. Government of India has released Rs1884.50 lakhs since the inception of the scheme. The total fund available including interest is Rs.18934.06 lakhs. Out of this Rs.19699.52 lakhs has been spent up to the month of October 2008.

Table 14.12 Physical and Financial Status as on 31 th October 2007

								Rs. In Lakhs
Sl. No.		Phase-I (2000-01)	Phase-II (2001-02)	Phase-III (2003-04)	Phase-IV (2004-05)	Phase-V (2005-06)	Phse-VI (2006- 07)	Total
1	Project Cost	1990.00	5647.56	2156.30	5058.38	4655.69	29420.46	48928.39
2	Total Number of Roads	33	178	52	91	77	322	753
3	Roads Completed	29	173	39	44	12	0	297
4	Road Dropped	0	3	0	1	0	0	4
5	Not Started	0	0	4	1	24	78	107
6	In Progress	4	2	9	45	41	244	345
7	Total	33	178	52	91	77	322	753
Worl	k details	'					1	
1	Length of roads taken up (Km)	106.610	282.225	97.955	172.612	155.955	733.272	1548.629
2	Length of Roads Completed (in Km)	81.610	273.8	76.024	79.156	35.040	0	545.630
3	Length of Road in Progress (in Km)	25.000	1.895	16.666	82.806	64.135	546.602	737.104
4	Length of Road not Started	0	0	5.265	6.15	56.78	186.67	254.865
5	Length of Road Dropped (km)	0	6.53	0	4.50	0		11.03
Status of 1	Roads in Progress (I	Number)						
I	BT Completed		0	0	1	0	0	1
II	BT in Progress		0	2	0	0	0	2
III	Metalling completed		0	2	5	3	0	10
IV	Metaling in Progress		4	0	12	8	0	24
V	Formation & CD completed		3	3	18	15	0	39
VI	Formation & CD in progress	4	2	2	12	15	239	274
SUB TOT	AL	4	9	9	48	41	239	350
FINANCL	AL	<u>l</u>					(1	Rs. In Lakhs)
Funds rec	eived	1990.00	5630.00	2077.00	5276.00	2421.50	1448.00	18842.50
Interest			91.56	0.00	0.00	0.00		91.56
TOTAL		1990.00	5721.56	2077.00	5276.00	2421.50	1448.00	18934.06
Expenditu 31/10/2008		1658.81	5263.66	1669.76	3268.29	1361.40	6477.60	19699.52
	ge of Expenditure	83	92	80	62	56		104
BALANC	E	331.19	457.90	407.24	2007.71	1060.10	-5029.60	-765.46

Source: Commissionorate of Rural Development

National Rural Employment Guarantee Act- 2005

- 14.50 The National Rural Employment Guarantee Act, 2005 seeks to enhance the livelihood security of the households in rural areas of the country by providing at least one hundred days of guaranteed wage- employment to every house hold whose adult members volunteer to do unskilled manual work.
- 14.51 Every household whose adult members volunteer to do unskilled manual work would be entitled to get registered with the Grama Panchayat and get a job card. They may submit their names, age and the address of the household to the Grama Panchayat at the village level for issuance of a job card. It shall be the duty of the Grama Panchayat to register the household, after making such enquiry as it deems fit and issue a job card containing such details of adult members of the household affixing their photographs.
- 14.52 Every registered household would be entitled to at least 100 days guaranteed employment at the wage rate. The act provides that the wage rate specified from time to time under any such notification shall not be at a rate less than sixty rupees per day.
- 14.53 Every eligible applicant, subject to the household entitlement, is entitled to get work within 15 days for as many days as he/she applies. Applications for work must be for at least fourteen days of continuous work. A period of employment shall ordinarily be at least fourteen days continuously with not more than six days in a week.
- 14.54 If the eligible applicant is not provided employment within 15 days of receipt of applications or from the date from which the applicant seeks employment (in the advance applications), he or she shall be entitled to a daily unemployment allowance, in cash.
- 14.55 The central government will provide 90% of funds and State Governments will provide for 10% of the total funds.

Box 14.3 Women Component through NREGS

- i) As the work is organized by women's groups, the gender perspective gets built in automatically.
- ii) As women are comfortably working along with their neighbours, nearly 80% of the workers have been women.
- iii) For the first time equal wages are really paid and this has boosted the earnings of women.
- iv) As the wages are paid into Bank accounts the habit of thrift which was already inculcated through the Kudumbashree experiment has further been strengthened.
- v) As the Bank deposits are increasing, the intra-household status of the woman has also been improving commensurately as she controls substantial cash resources and withdrawal can be only on her decision.

Table 14.13
Details of Registration and Job Cards issued 2008-09 up to November 2008.

District		F	amily				Pers	sons	
District	SC	ST	Other	Total	SC	ST	Other	Total	Women
Phase I									
1.Palakkad	44125	13539	146948	204612	75061	23216	250848	349125	272317
2. Wayanad	7542	33005	84527	125074	13859	64720	149441	228020	107964
PhaseII									
1.Idukki	23299	11298	111416	146013	42231	28831	223525	294587	161348
2. Kasaragod	6533	5876	81228	93637	12379	12840	149643	174852	93175
Phase III									
1. Alappuzha	24758	893	175462	201113	60486	2032	416477	478995	377407
2. Ernakulam	20248	1439	1114239	135926	36634	2715	202339	241688	156893
3. Kollam	25816	955	26771	154848	41645	842	231313	272062	177752
4. Kannur	6012	5973	117278	129263	10919	12445	195533	218897	133548
5. Kottayam	12993	2133	85108	100294	23263	4248	145555	173066	108203
6. Malappuram	33082	2101	146563	181830	68185	4570	301564	374354	200905
7. Kozhikode	23791	1606	162658	188035	42390	3035	317308	362733	204758
8. Pathanamthitta	17009	1034	51363	69406	33472	1879	94003	129354	75974
9. Tthrissur	36630	1276	112717	150623	62440	2656	189753	254849	167565
10. Thiruvananthapuram	30703	3447	153534	187684	63837	7687	71524	386887	200260
Total	312541	84575	1671242	2068358	586801	171716	3180952	3939469	2438069

Source: Commissionorate of Rural Development

14.56 $\,$ The details of financial performance under NREGA during the year 2007-08 and 2008-09 up to November 2008 are indicated below.

Table 14.14 Financial Performance of NRGEGA as on 30.11.08

			Release of l received duri	ng current	Release curren	C			timation the		Cumulati	ve Expendit	ure		
		O.B.as on	,					Total	udget es ture(Till nonth)		On semi		Admini Expe		
SI No	District	1st April of the year	Central	State	Central	State	Misc. receipt	Availabilit y	Cumulative Labour Budget estimation of Total Expenditure(Till the reporting month)	On Wages	skilled and skilled wages	On Material	Recuring	Non Recuring	Total
			a	b	A	b			_	a	b	c	d	e	
1	2	3		4			5	6	7			8			9
1	Alappuzha	0.00	0.00	0.00	164.20	18.24	275.80	458.24		125.56	0.19	13.98	58.89	4.26	202.88
2	Eranakulam	0.00	0.00	0.00	201.71	22.41	803.12	1027.24		121.18	0.00	10.90	78.38	2.87	213.33
3	Idukki	573.04	0.00	0.00	605.00	67.22	0.00	1245.26		1069.11	29.15	62.99	46.77	0.06	1208.08
4	Kannur	0.00	0.00	0.00	171.46	19.05	176.52	367.03		222.38	3.51	11.02	77.85	0.77	315.53
5	Kasaragode	248.80	0.00	0.00	656.33	72.93	0.00	978.06		695.60	7.90	54.07	37.83	0.00	795.40
6	Kollam	0.00	0.00	0.00	233.80	25.98	0.00	259.78		88.42	1.91	5.21	43.10	4.46	143.10
7	Kottayam	0.00	0.00	0.00	151.39	16.82	0.00	168.21		49.72	2.70	2.95	53.65	1.60	110.62
8	Kozhikode	0.00	0.00	0.00	297.38	33.04	0.00	330.42		125.69	4.03	3.76	55.12	27.56	216.16
9	Malappuram	0.00	0.00	0.00	307.44	34.16	392.67	734.27		242.55	7.11	6.89	88.73	5.76	351.04
10	Palakkad	496.90	500.00	0.00	3272.98	274.78	10.21	4554.87		2612.82	76.73	241.97	137.8 6	12.53	3081.91
11	Pathanamthit ta	0.00	0.00	0.00	141.53	15.73	126.00	283.26		71.56	1.80	1.31	40.47	1.41	116.55
12	Thiruvanant hapuram	0.00	0.00	0.00	244.31	27.15	0.00	271.46		101.08	0.00	4.84	39.61	6.53	152.06
13	Thrissur	0.00	0.00	0.00	322.44	35.83	500.00	858.27		327.62	0.09	23.73	98.65	0.52	450.61
14	Wayanad	212.14	0.00	0.00	4118.27	457.59	15.79	4803.79		1546.87	47.06	151.26	43.44	1.46	1790.09
	Total	1530.88	500.00	0.00	10888.24	1120.93	2300.11	16340.16		7400.16	182.18	594.88	900.35	69.79	9147.36

Source: Commissionorate of Rural Development

14.57 **Wages and payments:** Not less than Rs. 60 per day per person (the minimum wage in Kerala is Rs.125). Minimum wages fixed for agricultural labourers by the State Governments will be paid as wages under the scheme till such times that the central Government, specifies wage rate which will not be less than Rs. 60 per day per person. Wages will be paid fully in cash/partly in cash and partly in kind. However minimum 25% wages shall be paid in cash. Wages are to be paid on weekly basis and in any case not later than 15 days.

Box 14.4

The State Government shall meet the cost of the following:

- ?? The cost of unemployment allowance payable under the scheme.
- ?? 1/4th of the mentioned cost of the scheme including payment of wages to skilled and semi skilled works subject to the provisions of Schedule II of the NREG Act.
- ?? Establish a fund called the State Employment Guarantee Fund.
- 14.58 The NREGA is a unique opportunity to activate and empower the Panchayat Raj institution including Grama Panchayat and Grama Sabhas and it will give the scope for meaningful employment generation resulting in reduction of poverty in rural areas. (Employment generation under NREGA..see Appendix 14.9,14.10)

Attappady Environment Conservation and Wasteland Development Project

- 14.59 The objectives of the project are "Ecological restoration of degraded wasteland in Attappady and development of replicable models of participatory eco-restoration, so as to prevent further degradation and promote sustainable method of livelihood to the local people (with special emphasis on tribal population) in harmony with resource base".
- 14.60 This is an eco-restoration project for reclamation of 507 Sq. Km degraded wasteland of Attappady and to provide livelihood to the local people particularly the Tribal population. The Japan Bank for International Co-operation (JBIC) is assisting this project. The total cost of this Project is Rs. 219 crore, of which is Rs. 177 crore the external assistance.
- 14.61 The project is being implemented in a phased manner through a huge network of grassroots level community organizations. Prominent among these are the Users Association (UA) formed in 93 inhabited micro watersheds of the Project area. Further, there are the Ooru Vikasana Samithies (OVS), Joint Forest Management Committees (JFMC) and Local Action Groups (LAG) to execute the identified activities.
- 14.62 The State Government has set up a society named "Attappady Hills Area Development Society" (AHADS) for the implementation of the project.

The scope of the Project is to carry out the following works.

- 1. Solid and Biomass Management
- 2. Water Resources Development
- 3. Infrastructure facilities such as Project Offices, Equipment, Vehicles and Access roads
- 4. Detailed Survey, Detailed designing Evaluation
- 5. International Consultancy Services
- 6. Ecological Compatible Income Generating Schemes

Box 14.5

Special Features of implementation of NREGA in Kerala

Kerala's approach was 12 – fold as stated below:

- (1) To mitigate agrarian crisis through eco-restoration initiatives
- (2) Lead role of PRIs
- (3) To ensure additional income of Rs.12, 500/- per year to any family seeking employment. Every person working under the Scheme shall be entitled to wages at the minimum wage rate fixed by the State Government for agricultural labourers under the Minimum Wages Act, 1948. In the State, the minimum wage fixed is Rs. 125/-
- (4) To eliminate middlemen through
 - ?? Wages for the workers paid through individual bank accounts.
 - ?? The Area Development Society provides a Volunteer who helps in organizing the work, ensures proper maintenance of muster rolls and provision of worksite facilities (She steps into the managerial space vacated by the Contractor)
 - ?? Estimates discussed up-front with the labour groups
 - ?? Estimates in local language exhibited at work sites.
- ?? ADS Volunteer is paid daily minimum wage
 - (5) Low priority to roads (only 10 %)
 - (6) Gender sensitive planning and implementation leading to empowerment of poor women through
 - ?? Equal wages (strategic gender need)
 - ?? Managerial roles of ADS volunteer. She supervises all workers including men (In other work sites men alone are employed as supervisors)
 - ?? Work site facilities directly benefit women (gender friendly work sites)
 - ?? Aya for 5 children below the age of 6 years
 - ?? Increased work participation
 - ?? Own S.B. account ownership of one's earnings
 - ?? There is positive change in the unequal gender related power equations in work sites.
 - ?? Checking of migration of women to cities and other States as maidservants in households, to work in unorganized sector
 - (7) Improve common Property Resources thereby helping poverty reduction
 - (8) Social security
 - (9) Strengthen livelihood resource base of the poor.
 - (10) Fully integrating NREGA with anti poverty programmes
 - (11) Convergence with decentralized planning
 - (12) Enlarging the scope of NREGA social security dimensions campaign against illicit liquor, thrift promotion etc.
- 14.63 The distinct but interlinked levels of Project Planning and Management have been adopted for the implementation of the Attappady Eco-restoration Project:
 - 1. Perspective Planning at the project level through AHADS
 - 2. At the watershed level through the Development Units (DUs)
 - 3. At the level of micro-Watershed through the User Associations (UAs)
 - 4. At the adivasi hamlets through Ooru Vikasana Samities
 - 5. Interventions for forest conservation and afforestation through JFMCs

14.64 During the 2008-09 up to November 2008, Government has released Rs.2000.00 lakhs also. Out of the total available fund of Rs.2477.70 lakhs including opening balance, an amount of Rs.1576.10 lakhs has been spent.

Table 14.15
Release and Expenditure of Attappady Environment Conservation and Wasteland
Development Project

- 7	Opening		Release		Total	Total	% of	
Year	balance	alance Centre State T		Total	Fund	Expdr.	Exp.	
2007-08	4933.00	2469.00	0.00	2469.00	7402.00	6208.00	84	
2008-09 (Nov. 2007)	477.70	0.00	2000.00	2000.00	2477.70	1576.10	64	
TOTAL	5410.7	2469	2000	4469	9879.7	7784.1	78	

Land Reforms

14.65 Distribution of surplus land is the important activity under Land Reforms. The distribution of surplus land to SC/ST and others as on October 2008 is shown in Appendix 14.11.

Urban Poverty

14.66 Urban Poverty is a multidimensional phenomenon. The urban poverty was not about only nutritional deficiency but deficiencies in the basic needs of housing, water, sanitation, medical care, education and opportunity for income generation. As per the National Commission on Urbanization, Poverty cannot be characterized adequately in terms of income, expenditure or consumption pattern alone. The focus should be a human upgradation for reduction of poverty. Thus what is required is a multi dimensional concept inclusive of the environment, access to services and social psychological supports.

14.67 In spite of the tremendous development Kerala could achieve in several areas like literacy and health care, poverty refuses to leave the state. More than fifteen lakhs kerala families of the state, alias 'gods own country' are still in the clutches of poverty. High population density of urban area of Kerala has contributed to urban poverty. This manifest in many forms, such as urban slums, unemployment, lack of social services, and increasing violence and crime. As per the National Sample Survey Organization (NSSO) from its 61st round survey (2004-05) estimate that in Kerala the poverty ratio was 20.6 % in urban areas. The magnitude of urban unemployment is also increasing due to the weak economy. In particular, due to stagnation in manufacturing industry in Kerala, sufficient employment opportunities are not available for the urban dwellers. National Sample Survey data show that urban unemployment in Kerala is the second highest in India, at 10% in 2000 (only after Goa). Also Kerala has the highest number of people who committed suicide most of them being young and educated but unemployed. Further, due to the rapid increase in land price and construction costs, a good number of the urban population in Kerala is forced to live in slums. The living conditions of slum dwellers are very pathetic. Drinking water and sanitary facilities are grossly inadequate. Only one-fourth of households in slums have electricity. The composition of the poor has been changing -while rural poverty is getting concentrated in the agricultural labour and artisan households urban poverty is in the casual labour households.

- 14.68 Rapid growth of urban population, expansion of existing towns and cities and low investment in urban development have created serious deficiencies in basic amenities especially in the urban areas. The shortages are serious for the urban poor due to inequality in the access to these amenities.
- 14.69 A well-coordinated approach is necessary to reduce urban poverty for which the following aspects have to be considered seriously.(i)Employment opportunities of a permanent nature need to be made available to the poor both by macro strategies aimed at labour intensive growth and micro strategies to enable the poor to attain the skills needed by the formal and semi formal sectors. (ii) Self-employment, product development, and marketing. (iii) With the support of urban local bodies and state Government, basic urban infrastructure related to housing, water supply, sanitation, electricity and roads is to be provided to a minimum standard. (iv) The access of the poor to quality health and education facilities needs to be ensured, which again calls for improving the service available through hospitals and schools. Finally, the most vulnerable groups need to be identified through a transparent index. A robust social protection system has to be set up for them, with a much higher level of support than at present. Many of these issues will be addressed through the proposed project in the urban sector.
- 14.70 **Poverty Index:** Every two years, a survey is conducted for assessing the urban poor by CDS using the poverty index following non-economic criteria with nine risk factors reflecting the poverty situations of families. The neighbourhood community verifies these factors with the identified families.

BOX No. 14.6

The nine risk factors of the poverty index in urban area

A family having

- ?? Less than 5 cents of land/no land
- ?? Dilapidated house/no house
- ?? No sanitary latrine
- ?? No access to safe drinking water within 150 meters
- ?? Women headed household
- ?? No regular employed person in the family
- ?? Socially disadvantaged groups SC/ST
- ?? Mentally challenged/disabled/chronically ill member in the family
- ?? Families without colour TV

Any family having 4 or more of these factors is classified as a family at risk.

Source: Kudumbashree, Thiruvananthapuram

14.71 **Kudumbashree**: The State Poverty Eradication Mission is the State Level Nodal Agency for the implementation of major centrally sponsored Urban Poverty Reduction Programmes viz. Swarna Jayanthi Shahari Rozgar Yojana (SJSRY), Integrated Housing and Slum Development Programme (IHSDP) and Basic Services to the Urban Poor (BSUP). The physical and social developments as well as direct assistance to employment generation are the schemes taken up under these programmes. Kudumbashree has organized Community Based Organizations (CBOs) of the poor in the state. Community Development Societies (CDS) act as delivery system for various Centrally Sponsored Urban Poverty Reduction Programmes

Urban Poverty Reduction Programmes

1. Swarna Jayanthi Shahari Rozgar Yojana (SJSRY)

14.72 Swarna Jayanthi Shahari Rozgar Yojana (SJSRY) is a Centrally Sponsored Scheme launched in December 1997. It is shared on 75:25 basis by both Central and State Governments. The objective of this integrated poverty alleviation programme is to provide gainful employment to the urban unemployed and under employed poor by setting up self employment ventures and taking up wage employment in public works. The programme is being implemented by the Urban Local Bodies through Community Based Organization (CBOs) of the poor. SJSRY has three sub components namely Urban Self Employment Programme(USEP), Urban Wage Employment Programme(UWEP) and Community Structure.

14.73 **Urban Self Employment Programme**: Under this component there are two employment generation programmes namely USEP and DWCUA. (i)Urban Self Employment Programame(USEP) assists individual urban poor for setting up gainful self employment ventures. The project cost is Rs. 50,000 per individual but if two or more eligible persons join together in a partnership, higher project cost is allowed, provided individual share does not exceed Rs. 50,000. Subsidy is provided at the rate of 15 % of the project cost subject to a maximum of Rs. 7500 per beneficiary. Beneficiary share is 5% of the project cost either in cash or in kind or both. Out of the total project cost, 80% is sanctioned as loan by financial institutions including Banks and Thrift and Credit Societies. A house to house survey for identification of genuine beneficiaries is being done. Women beneficiaries belonging to categories widows, divorcees, single woman, where women are the sole earners is to be ranked higher in priority. Not less than 30% of the beneficiaries should be women, 3% to be reserved for disabled and Scheduled Caste / Scheduled Tribe beneficiaries are given special attention in proportion of their strength in the local population. (ii) Development of women and children in urban Areas (DWCUA) assist the urban poor women for starting gainful employment through group activity. The scheme is extended to the poor women of urban areas who decide to set up self employment enterprise as a group. Minimum number of a group is fixed as 10. The project cost is Rs. 2.5 lakh or less. The DWCUA group is given a subsidy of Rs. 1.25 lakh or 50% of the project cost whichever is less. To ensure the contribution of members, 5% of the project cost is brought as their share, either in cash or in kind or as both and 45% of the project cost is as bank loan. SJSRY also has provision for skill development training for the upgrading of the poor.

14.74 **Urban Wage Employment Programme(UWEP)**: The basic objective of UWEP is to provide wage employment to those people below poverty line who are in need of such income, particularly during the lean seasons. This programme is implemented to create infrastructure facilities in the ULBs and thereby generate mandays of labour.

14.75 **Community Structure**: The very motto of Kudumbashree Mission is based on women empowerment through community based organizations. Community based organizations are the tools and devices to bring about the changes among women folk of the poor class. The programmes are being implemented by the Urban Local Bodies through Community Based Organizations (CBOs) of the poor. One woman from every identified poor family will be a member of a Neighbourhood Group(NHG). The NHGs will be federated into ward level Area Development Societies(ADSs) and ADSs will be federated into Community Development Societies(CDSs). Identification of beneficiaries, selection of projects for micro enterprises,

preparation of application, implementation, monitoring, social audit etc. are done through the Community Development Society (CDS) system of the respective Urban Local Bodies. The CDS system promotes thrift habit among the poor women and functioning as informal bank.

14.76 Kudumbashree has organized Community Based Organization (CBOs) of the poor in all the 53 municipalities and 5 Corporations in the State. There are 13626 Neighbourhood Groups (NHGs), 1208 Area Development Societies (ADSs) and 59 Community Development Societies (CDSs). The CBOs in the urban areas act also as Thrift and Credit Societies and facilitate savings and credit to the poor. In 2008, the CBOs in urban areas mobilized thrift fund to the tune of Rs. 8703.59 lakhs and disbursed loan worth Rs. 7265.40 lakhs. District wise details of NHGs, ADSs, CDSs and Thrift Fund mobilized are given in Appendix.14.12

14.77 Under the SJSRY, Kudumbashree have developed 25148 micro enterprises of which 2134 units are group enterprises (each group with minimum 10 women) and 23014 are individual enterprises. Most of the group enterprises are innovative and are owned and operated by the women from poor families. Details of micro enterprises and group enterprises are given in Appendices 14.13 and 14.14. The activities of group enterprises vary from solid waste management to the computer hardware assembling. The financial and physical achievements of SJSRY are shown in Table 14.16& Table 14.17

Table – 14.16 Financial achievement of SJSRY (2006-07 to 2008-09)

(Rs in Lakh)

Year	-	Fund Released		Expenditure	% of
	Central	State	Total		expenditure
2006-07	639.220	213.073	852.293	951.60	111.65
2007-08	629.74	209.91	839.66	742.03	88.37
2008-09	0	0	0	526.93*	-
Total	1268.96	422.983	1691.953	2220.56	131.24

Source: Kudumbashree, Thiruvananthapuram

Table 14.17
Physical achievements of SJSRY (2006-07 to 2008-09)

Year	Individual Enterprises Developed	Group Enterprises Developed	Persons Trained	Man days created under Wage Employment
2006-07	2010	241	4731	120800
2007-08	1493	189	5344	
2008-09(Up to Oct.2008)	529	180	1980	

Source: Kudumbashree, Thiruvananthapuram

^{*}Expenditure include ULBs own fund and SJSRY interest fund

2. Integrated Housing & Slum Development Programme (IHSDP)

14.78 Integrated Housing and slums Development Programme (IHSDP) is launched during 2006-07 aiming at the holistic development of slums in urban areas. The basic objective of the scheme is to strive for holistic slum development with a healthy and enabling urban environment by providing adequate shelter and basic infrastructure facilities to the slum dwellers of the identified urban areas. The programme was formulated by combining two erstwhile schemes viz. Valmiki Ambedkar Awas Yojana (VAMBAY) and National Slum Development Programme (NSDP). IHSDP is to be implemented in all towns and cities identified as per 2001 census except cities/towns covered under JNNURM. (Thiruvananthapuram and Kochi corporations)

14.79 The components for assistance under the scheme will include slum improvement/upgradation/relocation of projects including upgradation/ new construction of houses and infrastructural facilities, like water supply and sewerage. Cost of land for such projects will not be provided under the programme and has to be borne by the State Government. Housing should not be provided as free to the beneficiaries by the State Government. A minimum of 12% beneficiary contribution should be stipulated, which in the case of SC/ST/BC/OBC/PH and other weaker sections shall be 10%. Minimum floor area of dwelling unit is not less than 25 sq.mtrs. Ceiling cost for dwelling unit will be @ Rs.80000 per unit for cities other than those covered under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM).

14.80 The funding pattern of IHSDP is 80:20 shared by Central and State Governments. The State share (20%) would be equally shared by (10% each) the State government and the participating Urban Local Self Governments. Kudumbashree is the Nodal Agency for IHSDP. Central assistance released will go directly to the nodal agency as Additional Central Assistance. Release of central share to nodal agency will depend on availability of state share and submission of utilization certificates in accordance with the provisions of General Financial Rules. State share has to be deposited in a separate account to become eligible for the central grant. 50% of the central grant will be released to the State Nodal Agency after verification of the state share and on signing the tripartite Memorandum of Agreement.

14.81 Projects of 28 ULBs with total project cost of Rs.146.09 crores have already got approved by Government of India. An amount of Rs.44.36 crores has already been released to ULBs by GOI as central share of sanctioned projects. Details of projects approved by GOI during 2006-07, 2007-08 and 2008-09 are given in Appendix 14.15

3. Basic Services to the Urban Poor (BSUP)

14.82 Basic Services to the Urban Poor (BSUP) is a sub-component of Jawaharlal Nehru National Urban Renewal Mission(JNNURM) and implemented through Kudumbashree. The duration of mission is seven years beginning from 2005-06. In Kerala ,Thiruvananthapuram and Kochi Corporations alone come under the scheme. The objective of the scheme is to provide basic services to the urban poor viz. housing, solid waste management, water supply, improvement of slums, construction and improvements of drains/storm water drains, sewerage, drainage, street lighting, health care etc.

14.83 The financing pattern of BSUP for Thiruvananthapuram is 80:20 and that of Kochi is 50:50 by the Government of India and State Government. Also a minimum share of 10-12% is stipulated as beneficiary share for individual benefits such as housing.

14.84 During 2006-07, projects having total cost of Rs.42.32 crore are approved for Thiruvananthapuram and Rs.26.61 crore for Kochi Corporation. In 2007-08, projects having total cost of Rs. 125.88 crore are approved for Thiruvananthapuram and Rs.109.05 crore for Kochi Corporation. Details of projects sanctioned under BSUP for the two Corporations during 2006-07 and 2007-08 are given in Appendices 14.16 and 14.17.

SOCIAL SECURITY AND WELFARE

14.85 Through the Five Year Plans, Kerala State has witnessed remarkable achievements in social welfare activities through institutional care and pension schemes. The State's position on human and gender development based in terms of both Human Development Index (HDI) and Gender Development Index (GDI) brings this out clearly. The Human Development Index for Kerala ranks first among Indian States (0.500 in 1981, 0591 in 1991, and 0.638 in 2001. -see: National Human Development Report 2001).

14.86 However, while Kerala has been a pioneer in adopting social security and welfare measures for the economically and socially weaker sections of the population in particular women, in terms of Shelter Homes, Rehabilitation measures, Pensions, Women specific Organisations, Welfare Funds for unorganized sector workers and so forth, the need for better quality delivery of services is emerging as a major requisite. It is essential to upgrade institutions as also to make provision for hitherto relatively neglected areas of concern - the ageing population, the physically and mentally challenged persons and growing problems of adolescents.

Social Security and Welfare through Institutional Care and Protection

1487 Major welfare activities under institutional care and protection are undertaken by the following Government Departments, Commissions, Institutions, Corporations etc as given in Box: No.14.7

	Box: No. 14. 7				
	Major Government Departments and Agencies stands for social security measures				
Sl. No.	Major Government Departments/Agencies	Major Activities			
1	Social Welfare Department	Social Security and Welfare activities, social defence activities, Nutrition programmes			
2	Prisons Department	Welfare, protection, employment and economic upliftment of prisoners.			
3	Sainik Welfare Department	Welfare of Ex-servicemen and war-widows.			
4	State Commissionerate for Persons with Disabilities	Welfare and social security measures of disabled.			
5	Women's Commission	Welfare and social justice measures addressing atrocities against women, conduct of adalaths, legal workshops, jagratha samithies, etc.			
6	Kerala State Women Development Corporation	Welfare, skill development, economic development through income generating and employment generating schemes.			
7	National Institute of Speech and Hearing	Welfare, education, health activities of disabled in speech and hearing.			
8	State Institute for the Mentally Handicapped	Welfare, education, skill development etc of mentally challenged persons.			
9	Kerala State Handicapped Persons Welfare Corporation	Welfare, employment, income generating programmes of physically handicapped persons.			

Source: Information collected from different Depts, Commissions, institutions, Corporations etc.

14.88 Apart from the above, there are other major Government departments and agencies addressing the problems of deserving groups in terms of social security and welfare measures such as Scheduled Castes Development Department, Scheduled Tribes Development Department, Kudumbasree etc. They stand for the welfare, education, skill development, income generating activities of SCs, STs, and Poverty ridden groups respectively. Reviews on these activities are given in other respective chapters.

14.89 The major welfare institutions run by the Social Welfare Department offer the following major services as shown in Box: No.14.8

Box No.14.8				
Sl.No.	Name of Institutions Name of Institutions	Social Welfare Department and Services Offered Services Offered		
1	Mahilamandir	Care and protection of the abandoned women, widows and destitutes. Imparting vocational training to find a living, functioning as shelter homes under DV Act.		
2	After Care Home	Care, protection and rehabilitation to children released from Children's Homes, Balamandirs etc. Imparting vocational training to find a living.		
3	Rescue Home	Rehabilitation of women caught under immoral Traffic Prevention Act		
4	Children's Home	Care and protection to destitutes and children of leprosy patients.		
5	Old Age Home and Day Care Centre	Care, protection and rehabilitation of the abandoned men and women above the age of 55		
6	Home for Physically Handicapped (Aged)	Care and protection of aged and physically handicapped who have nobody to look after		
7	Asha Bhavan	Mentally cured patients abandoned by relatives are taken care of by providing food, medicine, clothing, etc. and rehabilitation/reunion with family whenever possible.		
8	Care Home for the Diasbled	Maintenance, education, rehabilitation, etc of the handicapped children in the age group of 4-16.		
9	Short Stay Home	Providing living amenities to women in distress arising out of family discord, and those fearing of being forced in to immoral activities.		
10	Home for Mentally Deficient Children	To provide special education, maintenance and rehabilitation of mentally challenged children between the age of 4-16.		
11	Pratheeksha Bhavan	Care, protection, maintenance of mentally challenged persons above the age of 16.		
12	Vocational Training Centres	To provide vocational training courses for the physically handicapped boys and girls between the age of 14-30 so as to rehabilitate them.		
13	Home for Physically Handicapped for Men and Women	Care and protections of physically handicapped men and women above the age of 16.		
14	Home for mentally challenged persons	Care and protection of mentally deficient women above the age of 16.		

Source: Social Welfare Department

14.90 There are 48 Welfare Institutions, 2 Vocational Training Centres and 30 Juvenile Justice Institutions functioning under the Social Welfare Department for the welfare and rehabilitation of women, infirm, destitutes, aged, orphans and disabled juvenile delinquents. The welfare institutions functioning at present are 12 Mahila Mandirs, 11 Old Age Homes, 4 Homes for Physically Handicapped (aged), 1 Home for Physically Handicapped (Men), 2 Homes for

Physically Handicapped (Women), 6 Asha Bhavans, 2 Care Homes for the Disabled Children, 2 Rescue Homes, 3 After Care Homes, 1 Short Stay Home, 1 Home for Mentally Deficient Children, 1 Childrens Home, 1 Pratheeksha Bhavan, and 1 Home for adult mentally retarded persons. Details are given in Table 14.18. The number of inmates in the Government welfare institutions is far below the sanctioned strength.

Table 14.18
Welfare Institutions, Sanctioned Strength and Inmates – 2008

Sl. No.	Institutions	Numbers	Inmates (Nos)	Sanctioned Strength (Nos)
1	2	3	4	5
1	Mahilamandir	12	224	300
2	After Care Home	3	102	250
3	Rescue Home	2	12	200
4	Children's Home	1	31	50
5	Old Age Home	11	454	1075
6	Homes for Physically Handicapped (aged)	4	99	150
7	Asha Bhavan	6	219	300
8	Care Home for the Disabled Children	2	21	50
9	Short Stay Home	1	4	25
10	Home for Mentally Deficient Children	1	31	50
11	Pratheeksha Bhavan	1	39	50
12	Home for Physically Handicapped men and	3	53	125
	women			
13	Home for adult mentally challengeed persons	1	10	25
	female			
14	Vocational Training Centre	2	100	100
	Total	50	1399	2750

Source: Social Welfare Department

14.91 As against the total sanctioned strength of 2750 inmates in the 50 institutions, the occupants are 1399 in 2008, ie, just above half of the strength. This needs to be examined. It could be that the sanctioned strength no longer exists in practice due to financial difficulties in maintaining large numbers. For improved delivery of services, it appears necessary to revamp these institutions. The sanctioned strength and district-wise beneficiaries in welfare institutions are given in Appendix 14.18.

Welfare of the Old Age People

14.92 The old age population (60+) in India is a fast growing phenomenon. The old age population in 1961 is 25.6 million while after 30 years i.e., in 1991 it is more than double which comes to 56.7 million. It is expected to increase to 113.26 million during the 25 years ending 2016. In percentage terms it is 5.8% in 1961 and 6.8% in 1991. Expected percentage of old age population by 2016 will come to 8.9%. Compared to other States the percentage of old age population in Kerala is higher; the percentage of old age population in 1961 is 5.83% and in 1991 it comes to 8.82% and in 2001 it is 9.79%. It is expected to grow during 2011 to 11.74%; in 2021 it would be 15.63% and in 2026 it will come to 20%. The rate of increase will be doubled with in

25 years. As per the 2001 census the sex ratio for old age population is higher than the average: 1106 females for 1000 males as against 1058 for general population.

14.93 In the old age homes entertainment activities, social gatherings, medical camps etc. are carried out to ameliorate old age issues like loneliness, insecurity, health problems, change in living environment, social exclusion etc. It is also to be noted that majority of old age people in Kerala are widows. In 1991, among the old age people in the range of 60-69, 53.8% are widows and among those above 70 years it comes to 69.20 %.(see "State Old Age Policy 2006").

14.94 During 2008, it is reported that there are 10 Old Age Homes and 1 Day Care Centre & Old Age Home with 454 inmates and a sanctioned strength of 1075 as against 397 inmates in 2007. (Table 14.19).

Table 14.19
Old Age Homes and Day care Centre for Aged during 2008

Sl.No	Institution	Institutions	Total Inmates (Nos)	Sanctioned Strength (Nos)
1	Old Age Home	10	432	1000
2	Day care Centre & Old Age Home	1	22	75
	Total	11	454	1075

Source: Social Welfare Department

Box No.14.9

Five Day Care Centers for the aged started along with the Old Age Homes at Kollam, Thrissur, Palakkad, Kannur and Kassargod by the Social Welfare Department during 2007-08

Source: Social Welfare Department

Welfare of the Disabled

14.95 National Sample Survey Organization in the year 2002 estimated that the number of persons with disabilities is 1.85 crore which constitutes 1.8% of the population of India.. About 10.63% of the disabled persons suffered from more than one type of disabilities. Among the different type of disabilities, the prevalence of locomotor disability was highest in the country followed by visual disability and hearing disability. About 84% of the mentally retarded and 82% of the persons having speech disability were born with disability. About 13% of the physically disabled were observed to be severely disabled as they could not take self-care even with aid/appliance. About 55% of the disabled in India were illiterate and only about 9% completed 'secondary and above' level of education. The results from Census 2001 are somewhat different, there are 2.19 crore persons with disabilities which constitute 2.13 per cent of population in India. In Kerala, as per 2001 Census there are 8.61 lakh disabled persons which form 2.7% of the total population; it is also observed that approximately 5 lakh children have one form of disability or other (SPAC, Kerala 2004).

14.96 For the welfare of the disabled, the Social Welfare Department provides social security to the disabled through institutional care and protection. A number of institutions are there which need revamping and convergence to enable improved delivery of services and facilities appears.

Box No.14.10

Prathyasha Bhavan - an institution for the mentally cured challenged Adult females in Thrissur district started functioning during the reporting year.

Source: Social Welfare Department

14.97 There are 7 institutions for the care of physically and mentally retarded persons in the state with facilities for 750 inmates; however there are only 472 inmates. Details are given in Table 14.20

Table 14.20 Institutions for Physically & Mentally Retarded Persons – 2008

Sl. No.	Institutions	Total Inmates (Nos)	Sanctioned Strength (Nos)
1	Home for Mentally Deficient children	31	50
2	Home for Physically Handicapped	53	125
3	Home for cured Mental patients (Asha Bhavan)	219	300
4	Care Home for Disabled Children	21	50
5	Home for Physically Handicapped (Ag	99	150
6	Pratheeksha Bhavan (Home for Mentally Retarded above 16 years)	39	50
7	Home for Mentally Retarded Person (female)	10	25
	Total	472	750

Source: Social Welfare Department

State Commissionerate for Persons with Disabilities

14.98 Persons with Disabilities Act, 1995 - a comprehensive law, has been enacted and enforced in February, 1996. The law deals with both prevention and promotion aspects of the rehabilitation such as education, employment and vocational training, creation of barrier free environment, provision of rehabilitation services for persons with disabilities, institutional services and supportive social security measures like unemployment allowances and grievance redressal machinery at the Central and State Level. The State Commissionerate in Kerala conducts awareness camps, mobile medical board as per PwD Act, redressal of the complaints of disabled persons, inspection of institutions for disabled, issuing certificate on disablement, seminars/meetings etc.

National Institute of Speech and Hearing (NISH)

14.99 The National Institute of Speech and Hearing established in 1997 aims at the education, training, treatment, welfare and rehabilitation of hearing impaired persons. Through the ten years since its inception NISH has developed to an institute of hope for the thousands of hearing

impaired persons in the state. Most of the infrastructure for the institute has been set up and a comprehensive approach consisting of early detection, early intervention and rehabilitation has been implemented using state of the art methods and methodologies. The ongoing activities of the Institute are (i) audiological evaluation of hearing loss, (ii) auditory training and speech therapy, (iii) Ear mould making and hearing aid repair, (iv) pre school and parent guidance centre, (v) diploma course in software systems course for hearing impaired students, (vi) computer aided teaching learning materials, (vii) externally funded research projects on rehabilitation,(viii) bachelor degree course in audiology and speech language pathology, (ix) master degree course in audiology and speech language pathology and (x) diploma course in teaching young hearing impaired children. The Institute has shifted to the new building at Akkulam in August 2007.

- 1. The audiology division has conducted 1430 audiological evaluations during the reporting year of which 701 are new cases.
- 2. The University of Kerala gave affiliation to the commencement of 3 degree courses.
- 3. The Ear Mould Lab made 710 ear moulds during the reporting period.

Kerala State Handicapped Persons Welfare Corporation

14.100 Kerala State Handicapped Person's Welfare Corporation is a Public Sector Undertaking which implements self employment programmes and distributes aids and appliances for disabled persons. Major aim of the corporation is the formulation, promotion and implementation of welfare schemes for the rehabilitation of the disabled. On self-employment scheme a subsidy of 40% of the project cost subject to a maximum of 2,500/- is given to the beneficiaries through various commercial banks throughout the state for income generating activities. During 2007-08, a considerable decrease is noticed in the number of applications received, sanctioned, and amount released by the Corporation. This may be because of the ceiling of a lower amount of maximum subsidy fixed by the Corporation. Table 14.21 gives details of self employment assistance provided to physically handicapped persons.

Table 14.21 Self Employment Assistance to Disabled Persons

Year	Applications Received (Nos)	Applications sanctioned and forwarded to Banks	Applications sanctioned by the Bank(Nos)	Amount released by the Corporation (Rs.in lakh)
11	2	3	4	5
2001-02	1348	1348	242	4.81
2002-03	1303	1303	281	5.63
2003-04	1256	1256	344	7.57
2004-05	1417	1417	314	7.73
2005-06	1503	1503	354	8.75
2006-07	1142	1142	370	9.21
2007-08	642	642	295	7.26

Source: Kerala State Handicapped Person's Welfare Corporation

14.101 The Corporation has been supplying free aids and appliances to disabled people with annual family income below Rs.60,000/- per year. Equipments like Tricycles, Wheel Chairs, Crutches, Calipers, Artificial Limbs, Hearing Aids, White Canes, Braille Slates, Colostomy Bags, etc. are the items being given to the beneficiaries. Every three years the disabled people have to be given new aids and appliances as per legal norms.

14.102 Details on aids and appliances distributed for the last few years by the Corporation is given in Table 14.22

Table 14.22
Aids and Appliances Distributed through
KSHPWC from 2000-01 to 2007-08

Year	No. of Aids and Appliances Distributed	Amount (Rs.in lakh)
2000-01	4,003	66.42
2001-02	1,071	16.10
2002-03	1,644	33.07
2003-04	1,166	27.29
2004-05	1,368	34.26
2005-06	996	28.00
2006-07	2,069	43.78
2007-08	561	19.27

Source: Kerala State Handicapped Person's Welfare Corporation

14.103 Besides this, distribution of motorized tricycle with a subsidy of Rs.5,000/- to disabled students and for the self-employed, cash award to the differentially abled student who rank first in SSLC examination in each district @ Rs.2500/-, coaching-cum-guidance for disabled people for competitive examinations, financial assistance to the disabled lottery agents, self help groups of handicapped persons, subsidy for installation of tea/ coffee vending machines to handicapped etc. are the schemes implemented by the Corporation.

14.104 The Corporation is also acting as the state channelising agency of the National Handicapped Finance and Development Corporation (NHFDC), through which the Corporation extends loan to the disabled persons below poverty line and having disability of 40% and above.

14.105 The Government has notified the KSHPWC as the nodal agency for the implementation of the programmes suggested in the Old Age Policy 2006. It is essential to intervene more specifically in geriatric care and protection through multi-dimensional programmes as well as policies. It is declared in the State's Old Age Policy 2006 that practical steps will be taken to address problems of the most needy groups such as (1) People above 80 years old (2) Women, in particular widows, unmarried women, women without children (3) Disabled and vulnerable (4) People without close relatives (5) People living alone in houses (6) People affected with serious and malignant diseases (7) Destitutes. To make life better for these old age people, practical steps and programmes are necessary.

Box No.14.11

Scheme for Assistance to Disabled Persons for Purchase/Fitting of AIDs and Appliances (Central Govt Scheme)

The objective of the Scheme is to assist needy and disabled persons in procuring durable, sophisticated and scientifically manufactured, standard aids and appliances that can promote their physical, social and psychological rehabilitation by reducing the impact of disability and enhancing their economic potential. The scheme is implemented through agencies like voluntary organisations, National Institutes under the Ministry, ALIMCO, Zila Panchayats, DRDAs, etc. The implementing agencies are provided grant-in-aid for purchase, fabrication and distribution of aids and appliances. The scheme also includes under its ambit medical/ surgical correction and intervention that may be essential prior to figment of aids and appliances.

Source: India 2008.

State Institute for the Mentally Handicapped

14.106 C.H. Mohammed Koya Memorial State Institute for the Mentally Handicapped at Pangappara, Thiruvananthapuram is an autonomous society under Education Department imparting special education, training and rehabilitation service to the mentally retarded in the State.

14.107 Diploma in Special Education (Mental Retardation) is a course recognized by the Rehabilitation Council of India and is conducted by the SIMH so as to generate trained personnel for dealing with mentally challenged children. The other schemes include parents training and counseling programme, guidance and counseling in rural areas, placement service for mentally retarded candidates, vocational training canters, assessment and early intervention centre, etc.

Social Security and Pension

14.108 Several pension schemes are being implemented by Government as a safety net for vulnerable sections of the society. There are more than 40 pension schemes of which 20 are financed by the State itself. These pension schemes are implemented directly by the Government Departments or through different Welfare Fund Boards. More than 37 lakh people are benefited through different pension schemes.

14.109 The National Old Age Pension Scheme is part of National Social Assistance Programme of Government of India and was implemented from 1995 for persons above 65 years of age. During 2008, 1,56,871 persons are benefited while in 2007, only 1,41,956 persons were benefited by this scheme. Under this scheme, Central share is Rs.200 and State share is Rs.50 (total Rs.250) per month per beneficiary. District wise beneficiaries on pension schemes implemented through Revenue Department are given in Appendix 14.19. The details on the rate of assistance of social security/pension schemes in the State including Welfare Fund Boards are given is Appendix 14.20.

Social Security Measures Exclusively for Women

14.110 Women constitute 51.42 % (2001 census) of the total population of the state. Several schemes for the social security of women are under implementation. Destitute /widow pension is a major scheme. The scheme benefits 325911 women and the monthly rate of pension is Rs.200 during 2008. Of the total number of beneficiaries, Thiruvananthapuram has the largest number with 45750 women and the lowest number is in Idukki District with 4837 beneficiaries. Unmarried women above 50 years are also paid a monthly pension @ Rs.200 and the scheme benefited 38015 women during the period under review. District-wise details are given in Appendix 14.19. Financial assistance is also given to poor widows for the marriage of their daughters. The rate of marriage assistance has been increased to Rs.10000 from Rs.5000 in 2008.

Box No.14.12

During the reporting year the Social Welfare Department has:

- ?? Launched a new web portal exclusively for women.
- ?? State Women policy- draft policy published.
- ?? One day homes started functioning in Ernakulam and Thiruvananthapuram districts.

Source: Social Welfare Department

Kerala Women's Commission

14.111 Kerala Women's Commission was established in 1996 as a statutory body constituted under Kerala Women's Commission Act 1990 (Act 17 of 1995) with the objective to improve the status of women in Kerala and to enquire into unfair practices against women. Conducting gender conscentisation seminars, adalaths, district level Jagratha Samithies, conducting schemes under gender awareness programmes, DNA tests, publishing of Sthree Shakthi newsletter, managing short stay home, petition redressal etc. are the major activities. The nature of complaints show that majority of them relate to harassment of women, harassment by husband, neighbors' nuisance and property related harassment. The number of complaints on various issues received by Kerala Women's Commission from January 2008 to September 2008 are given as Appendix 14.21. Activities for the years 2007-08 are given in detail in the chapter on Gender and Development.

Kerala State Women Development Corporation (KSWDC)

- 14.112 KSWDC which implements schemes for women entrepreneurs especially the marginalized women- was established in 1988 under the Companies Act 1956 with the objective of formulating, promoting and implementing women welfare and development schemes. KSWDC has been selected as State channelising agency for National Corporations such as NSFDC, NSTFDC, RMK, NBCFDC, NMDFC and NHFDC.
- 14.113 The Corporation initiates self employment loans, educational loan scheme, entrepreneurship development programmes, single women benefit scheme, working women's hostel, web based and other marketing support for women, STEP employment and training programme, gender awareness and/employment programmes, geriatric home nursing, etc. Activities for the years 2007-08 are given in detail in the chapter on Gender and Development.

Women Development Programmes

14.114 Major women development programmes are implemented through the Social Welfare Department. Vocational training centres, starting and maintenance of one day homes, economic support to women headed families, development of anganwadi centers as community resource centres for pregnant and lactating mothers, nutrition programme for adolescent girls, overall development of women and children etc. are provided through various schemes and programmes implemented by the department.

Box No.14.13

Women's Development Programmes of Government of India implemented in Kerala.

STEP: Support to Training and Employment Programmes for Women (STEP) was launched in 1987. It aims at making a significant impact on women in traditional sectors by upgrading skills and providing employment on project basis.

Swayamsidha: Swayamsidha is an integrated project for the development and empowerment of women based on the formation of Self Help Groups (SHG's).

Swadhar: This was launched in 2001-2002 for the benefit of women in difficult circumstances such as destitute widows, women prisoners released from jail, women survivors of natural disasters, trafficked women or victims of sexual crimes etc.

Short Stay Homes: This scheme was launched in the year 1969 and is now implemented through Central Social Welfare Board with the objective to protect and rehabilitate those women and girls who are facing economic and emotional problems due to family stress ,social ostracism, moral danger etc.

Family Counselling Centres: To provide preventive and rehabilitative services to women and children who are victims of atrocities and family mal-adjustments.

Condensed courses of Education of Women: This scheme implemented through the Central Social Welfare Board aims at facilitating social and economic empowerment of women and providing them with education and relevant skills.

Working Women's Hostel: Under this scheme assistance is provided to non-governmental organisations, co-operative bodies and other agencies engaged in the field of women's welfare, women education, women development corporations, local bodies state governments etc. for construction of buildings for working women's hostels.

National Policy on Empowerment of Women: Launched on 20th March 2001 to bring about overall development of women and to eliminate all forms of discrimination against women.

Grant-in-aid for Research, Publication and Monitoring: To promote research studies for development of innovative programmes etc..

Source: India2008

Welfare of Ex-Servicemen and War Widows

14.115 There are 1,53,318 Ex-servicemen and 303 war widows holding identity cards issued by Zila Sainik Welfare Offices up to 30th September 2008. An amount of Rs.600/- per month is provided as financial assistance to Second World War veterans who are in indigent circumstances benefiting 1841 persons up to 30-9-2008 during the reporting period. Re-employment opportunities of Ex-servicemen and employment to widows are limited to State service and Quasi Government Institutions. Hence new ventures and policies are required to absorb those seeking employment. The present numbers of Ex-srvicemen and widows in Kerala holding identity cards issued by Zilla Sainik Welfare Officers for the last nine years are given in Table 14.23

Table 14.23 Ex-Servicemen and War Widows in Kerala – 2000 to 2008

Year	Ex-Servicemen(nos)	War Widows (nos)
2000	129525	278
2001	134522	276
2002	138148	272
2003	142088	269
2004	145140	267
2005	146952	263
2006	147440	261
2007	149946	313
2008	153318	303

Source:Department of Sainik Welfare

14.116 Department of Sainik Welfare implements the welfare activities of Ex-Servicemen and War Widows mainly through funds from non-plan provision of state budget and interest accrued from two welfare funds viz (i)State Military Benevolent Fund & Flag Day Fund and (ii) Amalgamated Fund for Reconstruction and Rehabilitation of Ex-Servicemen.

14.117 Major activities implemented through the Sainik Welfare Department and its achievements during 2008 are shown in Table 14.24

Table 14.24
Major Welfare schemes/ achievements of Ex-Servicemen/War Widows during 2008

Sl.No.	Name of Scheme	Beneficiaries (Nos)	Amount spent during 2008 (Rs in lakh)
1	Financial assistance to Second World War Veterans who are in indigent circumstances @Rs. 600 p.m.	1841	94.06 (up to Sep 08)
2	Construction of houses for disabled Ex- Servicemen	8	2.30
3	Cash awards to recipients of Gallantry Decorations in the Defence Service and dependents of defence personnel	78	0.77
4	Financial help for children of Exservice men	101	1.48
5	Training to Ex-service men/widows	101	2.56 (up to Sep 08)

Source:Department of Sainik Welfare

Welfare of Prisoners

14.118 The Jail infrastructure in the state consists of 3 Central Prisons, 2 Open Prison, 1 Women prison, 3 District Jails, 5 Special Sub Jails, 28 Sub Jails, and one Borstal School. In 2008, there were 6757 prisoners out of which 185 were women while in 2007 there were 6784 prisoners of which 201 were women. The details of district wise jail prisoners during 2008 are furnished in Table: 14.25

Table 14.25
Jails in Kerala and District-wise Prisoners - 2008

Sl. No	District	Centra Jail	al	Distr Jail	rict	Sub Ja	ail	Oper Jail	1	Wor Jail	nen	Spec Sub		Grand Total	l
		Total	Female	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Trivandrum	1532	17	277	0	84	4	291	0	35	35	0	0	2219	56
2	Kollam	0	0	155	5	167	10	0	0	0	0	0	0	322	15
3	Pathanamthitta	0	0	0	0	144	6	0	0	0	0	0	0	144	6
4	Alappuzha	0	0	0	0	92	0	0	0	0	0	81	13	173	13
5	Kottayam	0	0	0	0	82	0	0	0	0	0	107	3	189	3
6	Idukki	0	0	0	0	93	0	0	0	0	0	0	0	93	0
7	Eranakulam	0	0	0	0	444	26	0	0	0	0	0	0	444	26
8	Thrissur	650	25	0	0	127	0	0	0	0	0	157	0	934	25
9	Palakkad	0	0	0	0	76	0	0	0	0	0	105	1	181	1
10	Malappuram	0	0	0	0	179	1	0	0	0	0	0	0	179	1
11	Kozhikode	0	0	383	11	49	2	0	0	0	0	0	0	432	13
12	Wayanad	0	0	0	0	63	1	0	0	0	0	0	0	63	1
13	Kannur	1081	22	0	0	64	0	0	0	0	0	70	0	1215	22
14	Kasargod	0	0	0	0	140	3	29	0	0	0	0	0	169	3
15	Total	3263	64	815	16	1804	53	320	0	35	35	520	17	6757	185

Source: Department of Prisons

14.119 The Prison department is implementing the scheme Modernisation of Prison Administration with 75% central assistance. The construction works were entrusted to the Kerala Police Housing and Construction Corporation Limited. The two major schemes implemented by the Prison department are Modernisation of Prisons and Welfare of Prisoners. Under the modernisation of prisons, the department has installed postal Franking Machines in prison head quarters and 3 central prisons, CCTV surveillance system and mobile phone hammers in Central Prison Kannur, provided ambulances, jeeps, motor cycles, fax machines, inverters and CFL Lamps to Jails and completed the phase I computerization of the Jail department during the review period. Under the Welfare of Prisoners scheme, a soap making unit was established in central prison Viyyur, a dairy farm was set up at central prison, Thriuvananthapuram, vocational trainings were imparted to the inmates of various prisons, and training in Bee keeping to inmates of Open Prison Nettukalthery. Social gatherings and entertainment programmes were conducted

in major jails and a state level seminar on 'correctional administration' was conducted during 2007-08.

Welfare under Juvenile Justice Juvenile Homes

14.120 In Kerala, in 2007, there were 8 Juvenile Homes, 14 Observation Homes and one Balasadanam (certified as juvenile home). More than 7000 children in the age group of 5 to 18 years are accommodated in these homes. In 2008, it is reported that there are 9 Juvenile Homes and 14 Observation Homes functioning in the state where more than 800 children are accommodated. The Government of India gives maintenance grants @ Rs. 250 per month per inmate and bedding grant @ Rs. 50 per annum per inmate and contingency grant @ Rs. 5 per month per inmate. During 2007-08, Rs.51.05 lakhs were allocated and Rs.38.85 lakh expended.

Box No.14.14

During the reporting year the Social Welfare Department has:

- ?? started 5 children Homes along with the existing observation homes at Pathanamthitta, Palakkad, Wayanad, Malappuram and Kannur during 2007-08 and
- ?? introduced the "Hole in the Wall" project in Thiruvananthapuram, Kozhikode (Boys), Kozhikode (Girls), and in Children Home.

Source: Social Welfare Department

Adoption

14.121 The state government have approved and declared the state policy, i.e., State Plan of Action for the Child in Kerala 2004 and reiterated its commitment to children. The major activities proposed are; (i)to establish baby cradle centres (Amma Thottils) in four district hospitals i.e., Kollam, Pathanamthitta, Idukki and Kottayam (2) strengthen/organize adoptive parents organization in all districts and organize district level and state level get-together conferences of adoptive parents, adoptive children and other stakeholders (iii) adoption awareness programme in each district by involving state departments such as Local Self Governments, Revenue, Police, Social Welfare, Health, NGOs and other participants (iv) minimum standards of services and procedures for adoption placement agencies and minimum standards of services for all functionaries will be developed with the help of expert academic institutions. A project named Sanathabalyam was launched during 2007-08 which aims at social integration of children in Juvenile Justice Homes/Orphanages through adoption, foster care sponsorship etc. Details on adoption of children as in-country and inter-country under Juvenile Justice Law from 2002-03 to 2007-08 are given in Table 14.26 shown below:

Table No: 14.26 Adoption of Children in Kerala – 2002-2008

Year	In-count	ry adoption		Inter-country adoption			
	Male	Female	Total	Male	Female	Total	
2002-03	125	136	261	12	19	31	
2003-04	134	152	286	10	10	20	
2004-05	115	104	219	12	13	25	
2005-06	119	147	266	15	16	31	
2006-07	114	132	246	14	17	31	
2007-08	183	10	184	9	13	22	

Source: Social Welfare Department

Social Security and Welfare to Unorganized Sectors

Welfare Fund Boards

14.122 In Kerala, there are 24 Welfare Fund Boards providing welfare assistance and income security and employment to workers in the unorganized sector. Details available for 224 Welfare Fund Boards show that the total numbers of members enrolled in these Boards is 6.27 lakhs. Female workers out numbered males in industries which primarily employ women like cashew, tailoring, coir, bamboo, beedi industries and anganwadi workers. In the Cashew Workers Welfare Fund Board, 95 % enrolled workers are female. Similarly in tailoring 92.1% workers are female. In Boards like Toddy Workers, Head Load Workers, Autorikshaw workers and Abkari Workers, above 99% of the workers are male. Details regarding estimated workers, enrolled workers and male-female workers are shown in Table 14.27

 $Table-14.27 \\ Workers in the sector and workers enrolled as members in the \\ Welfare Fund Boards-2008$

Sl.	Name of the	Total workers	Member	s enrolled in t (Nos)	he Board	Percentage of Members to total workers in the sector			
No	Board	in the sector (Nos)	Male	Female	Total	Male	Fema le	Total	
1	Kerala Coir Workers WFB	375000	64816	124801	189317	17.28	33.28	50.56	
2	Kerala Cashew Workers WFB	200000	7679	145908	153587	3.84	72.95	76.79	
3	Kerala Toddy Workers WFB	38638	38334	304	34638	99.21	0.79	100	
4	Kerala Building and Other Construction Workers WFB(2006)	1500000	NA	NA	1472910	NA	NA	98.19	
5	Kerala Tailoring Workers WFB	462224	36500	425724	462224	7.90	92.10	100	
6	Kerala Bamboo, Kattuvalli and Pandanus Leaf Workers WFB(2006)	200000	1565	17699	19264	0.78	8.85	9.63	
7	Kerala Agriculture WorkersWFB	2100000	NA	NA	1951072	NA	NA	92.91	
8	Kerala Head Load Workers WFB	300000	83721	389	84110	27.91	0.13	28.04	
9	Kerala Artisans and Skilled Workers WFB	231767	89113	142654	231767	38.45	61.55	100	
10	Kerala Hand Loom Workers WFB	100000	23979	26660	50639	23.98	26.66	50.54	

Kerala Beedi and Cigar Workers 120000 8600 32700 41300 7.17 27.25	34.42
WFD	34.42
12 Kerala Abkari Workers WFB 1667 1657 10 1667 99.40 0.60	100
Labour Welfare Fund Board(2006) NA NA NA NA 498939 NA NA NA	NA
Kerala State 14 Lottery NA	NA
15 Traders Welfare NA NA NA 65039 NA NA NA	NA
Kerala Motor Transport 201546 201490 56 201546 99.97 0.03	100
Kerala Anganwadi Workers & 64400 0 52299 52299 0 81.21 Helpers WF(2004)	81.21
Kerala	6.30
19 Kerala Khadi Workers WFB 11433 23 410 433 0.20 3.59	3.79
Kerala Fishermen's NA 205149 22666 227815 NA NA NA WFB(2006)	NA
Kerala Ration Dealers 13100 8309 3740 12049 63.43 28.55	91.98
22 Kerala Co- operative Employees Board (2004) NA NA NA NA 23475 NA NA	NA
23 Kerala Advocates Clerks 15000 4550 862 5412 30.33 5.75 WFCommittee	36.08
24 Kerala Dairy Farmers WFB 1400000 182784	13.06
Total 7637867 812589 1030343 6027151	

Source: Details received from different welfare fund boards.

14.123 The expenditure on administration and for welfare measures by each Welfare Fund Board is given as Table 14.28.

Table 14.28
Expenditure on Administration and Welfare Measures in Welfare
Fund Boards – 2008

(Rs. Lakhs)

							Lakhs)
Sl.	Name of the Board	Administrative Expenditure					
No		Expenditure		Welfare Me			1
		2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
1	2	3	4	5	6	7	8
1	Kerala Coir Workers WFB	81.74	124.61	1059.7	1410.67	1141.44	1535.28
2	Kerala Cashew Workers WFB	84.20	103.51	1018.90	1000.28	1103.11	1103.79
3	Kerala Toddy Workers WFB	506.23	969.09	6252.21	3686.15	6758.50	4655.24
4	Kerala Building and other construction WWFB	295.63	400.91	3900.03	4368.71	4195.66	4769.62
5	Kerala Tailoring Workers WFB	87.01	101.30	241.99	350.69	329	451.99
6	Kerala Bamboo, Kattuvalli and Pandanus Leaf WWFB	3.90	6.6	4.96	48.00	8.86	54.60
7	Kerala Agriculture WWFB	153.19	172.70	874.72	1134.72	1027.91	1307.42
8	Kerala Head Load Workers WFB	811.19	925.39	2654.64	3879.61	3465.83	4805
9	Kerala Artisans and Skilled W WFB	41.11	47.03	64.77	99.89	105.88	146.92
10	Kerala Hand Loom Workers WFB	27.07	26.33	115.74	161.85	142.81	188.18
11	Keala Beedi and Cigar WWFB	14.36	13.43	30.91	33.91	45.27	47.34
12	Kerala Abkari Workers WFB	49.27	55.71	76.92	139.93	126.19	195.64
13	Labour Welfare Fund Board	74.36	91.93	71.65	70.67	146.01	162.6
14	Kerala State Lottery WFB	NA	NA	NA	NA	NA	NA
15	Traders W.F.B.	11.25	7.75	45.85	114.7	57.1	122.45
16	Kerala Motor Transport Workers WB	NA	NA	3.24	0.50	3.24	0.50
17	Kerala Anganwadi Workers & Helpers WF	22.88	25.48	8.35	10.88	31.23	36.36
18	Kerala Autoickshaw Workers WFB	0.53	0.66	9.29	12.93	9.82	13.59
19	Kerala Khadi Workers WFB	26.38	32.78	31.58	35.39	57.96	68.17
20	Kerala Fishermen's WFB	196.70	233.50	708.66	2057.63	905.36	2291.13
21	Kerala Ration Dealers WFB	11.38	10.48	60.27	77.23	71.65	87.71
22	Kerala Co-operative	NA	NA	NA	NA	NA	NA

	Employees Board						
23	Kerala Advocates Clerks WFCommittee	7.30	7.76	35.25	42.38	42.55	50.14
24	Kerala Dairy Farmers WFB	759.85	12.33	488.7	576.92	1248.55	589.25
	Total	3260.12	3349.51	17738.87	19247.67	20998.99	22597.18

Source: Details received from different welfare fund boards.

Note WF - Welfare Fund, FB-Fund Board, WFB- Welfare fund Board, WWFB-Workers Welfare Fund Board

Welfare Measures of the Workers of Welfare Fund Board

14.124 General Welfare Measures implemented by the Workers Welfare Fund Boards are the following:

- 1. Pension benefits to the workers on their retirement or invalidity or family pension after their death.
- 2. Ex-gratia financial assistance to workers on prolonged illness/ permanent disability and death relief to the dependents for funeral and related functions.
- 3. Medical reimbursement for medical treatment of the workers or dependents.
- 4. Marriage assistance for daughter's marriage.
- 5. Educational assistance to members' children like scholarships, cash awards and lumpsum grants.
- 6. Long term housing loans at low interest rate.
- 7. Maternity benefits.
- 8. Funeral expenses.

14.125 The major welfare measures implemented by the Workers Welfare Fund Boards are given in Appendix.14.22.

Unemployment Assistance

14.126 Unemployment assistance scheme was introduced in the state in 1982 under non-plan and is being implemented through Local Self Governments. The present rate of assistance is Rs.120 per month. During 2008, there were 337032 beneficiaries under unemployment assistance and an amount of Rs5094.78 lakh was disbursed. The details of unemployment assistance from 2002 to 2006 is given in Table 14.29

Table 14.29 Beneficiaries of Unemployment Assistance and Expenditure (2002-2006)

Year	Beneficiaries (Nos)	Amount disbursed (Rs. In lakh)
2002	332287	2,516.40
2003	348027	1423.10
2004	387370	7398.43
2005	344698	10243.38
2006	339879	3667.71
2007	361930	5005.76
2008	337032	5094.78

Source: Directorate of Employment and Training

NUTRITION AND CHILD WELFARE

Integrated Child Development Services

14.127 The present status of ICDS functionaries based on category and post sanctioned are given below as Table 14.30

Table 14.30

Sl.No.	Category	Posts sanctioned
		(Nos)
1	C.D.P.O.	163
2	A.C.D.P.O.	86
3	Supervisor	1164
4	Anganwadi Worker	32267
5	Anganwadi Helper	32267

Source: Social Welfare Department.

14.128 Kerala has around 40.37 lakh children, that is, 13% of Kerala's population, who are below the age of 6 years. A large number of them live in economic and social environment which impedes the child's physical and mental development. These conditions include poverty, poor environmental sanitation, prone to disease, infection, inadequate access to primary health care, inappropriate child care and feeding practices. Government of India proclaimed a National Policy on Children in August 1974 declaring children as, "supremely important asset". The policy provided the required frame work for assigning priority to different needs of the child. The programme of the Integrated Child Development Services (ICDS) scheme was launched in 1975 seeking to provide an integrated package of services in a convergent manner for the holistic development of the child.

- 14.129 The scheme provides a package of services as indicated below to children below six years and pregnant women and nursing mothers;
 - 1. Supplementary nutrition
 - 2. Immunization
 - 3. Health check-up
 - 4. Referral services
 - 5. Pre-school education
 - 6. Nutrition and health education

Box. 14.15

During the reporting year the Social Welfare Department has introduced a preschool curriculum in anaganawadis.

Source: Social Welfare Department

14.130 The Integrated Child Development Services is a Centrally Sponsored Scheme wherein the State Government is responsible for programme implementation. The scheme is implemented all over Kerala through 163 projects (151 Rural, 11 Urban and 1 Tribal). There is one Anganwadi Centre for every 1000 population in rural and urban projects and one for every 700 population in Tribal area. There are 32267 sanctioned Anganwadi Centres of which all are functioning.

District-wise ICDS beneficiaries in Kerala are given in Appendix-14.23 and Project wise details of ICDS are given in Appendix 14.24.

Kishori Sakthi Yojana

14.131 This scheme is viewed as a holistic initiative for the development of adolescent girls which was launched in 2000-01 as part of the ICDS scheme. Kishori SakthiYojana is being implemented through Anganwadi Centres in both urban and rural areas. The main objective of the scheme is to improve the nutritional and health status of the girls in the age group of 11-18 years.

Box. No. 14.16 Child Development - Government of India Programs and Policies

Integrated Child Development Services (ICDS): Launched in 1975 to improve the nutritional and health status of children below six years, pregnant and lactating mothers adolescent girls, etc.

Rajiv Gandhi National Creche Scheme for the Children of Working Mothers: Launched with effect from January 2006. The scheme aims to provide Creche services to the children of age group 0-6 years of parents whose monthly income does not exceed Rs. 12000 per month.

Co-operation with UNICEF: DWCD is the nodal department for coordinating the implementation of the Master Plan of operations so as to empower families and communities with knowledge and skills to care and protect children etc.

Integrated Programme for Street Children: The Programme Provides for basic facilities and recreation facilities to street children and seeks to protect them against abuse and exploitation.

Childline Services: Childline having a dedicated number 1098, a 24 hour toll free telephone service available to all children in distress. At present childline is working in 73 cities.

Childline Foundation :Childline operations are co-ordinated, monitored and expended by Childline India foundation which is the umbrella organizations set up by Govt. of India.

Juvenile Justice (Care and Protection of Children) Act 2000 : The Juvenile Justice Act 2000 came into force from Ist April 2001 which lays down the setting up of Juvenile Justice Boards in every district.

A Programme for Juvenile Justice: Under the scheme GoI provides 50% assistance to State Governments and UT administrations for the establishment and maintenance of various levels of institutions for Juveniles in conflict with law and children in need of care and protection.

Integrated Child Protection Schemes: The scheme include setting up of child protection units in each state and district with financial assistance from GoI for ensuring the implementation of the Act and co-ordination of other child protection related activities in the States/Districts.

Scheme for Welfare of Working children in Need of Care and Protection: The Scheme commenced in January 2005 with the objective to provide non-formal education, Vocational training to working children to facilitate their entry/re-entry into mainstream education.

Scheme of Assistance to Homes (Shishu Grah) for children to promote in-country adoption: This is a scheme for increasing and promoting adoption with in the country.

Prevention of female foeticide and child marriage: For the prevention of female foeticide, the Pre Conception and Pre Natal Diagnostic Techinics (Prohibition of Sex Selection) Act 1994 and for the prevention of child marriage prohibition Act 2006 were passed.

Assistance of voluntary organizations for providing Social Defense Services: Assistance is given to voluntary organizations working in the field of child and women welfare.

Children's Day: India observes Children's Day on 14 November every year.

Convention on the Rights of the Child: India acceded to the UN Convention on the Rights of the Child on 11 December 1992 to reiterate its commitment for the cause of children. A National Coordinating Group has been constituted by the DWCD to monitor the implementation of the Convention on the Rights of the Child (CRC).

National Plan of Action for Children: The National Policy for Children adopted on 22nd August 1974 lays down that the State shall provided adequate services towards children both before and after birth and during the growing stages for their full physical, mental and social development. The National Charter for Children is a policy document adopted by the Government highlighting the roles and responsibilities of the Government and the community towards the children and the duties of children towards their families, society and the country..

National Child Award for Exceptional Achievement: Instituted in 1996 to give recognition to the children of 4 to 15 age group with exceptional abilities.

National Award for Child Welfare: Instituted in 1979 to honor five institutions and three individuals for their outstanding performance in the field of child welfare.

Rajiv Gandhi Manav Seva Award: Instituted in 1994 to honor an individual who makes outstanding contribution towards service for children.

Source: India 2008

Box No.14.17

- ?? Under the Social Welfare Department, a new Children's Home for girls started functioning in Ernakulam district during the reporting year.
- ?? Thiruvananthapuram district declared as the first child beggary free district in 2008.

Source: Social Welfare Department

Supplementary Nutrition Programme

14.132 Supplementary Nutrition Programme is implemented with the objective of providing nutrition to children below 3 years, pre-school children, pregnant women, nursing mothers and adolescent girls. Consequent to the delegation of powers to the local bodies and decentralized planning procedure of the State Government, the supervision and control of anganavadi centres and the responsibility for effecting the Supplementary Nutrition Programme were transferred fully to the Local Self Government Institutions concerned. In addition to the contribution made by concerned LSGIs the 50% central assistance received for this programme has to be handed over to the LSGIs through the CDPOs to incur expenditure on the Supplementary Nutrition Programme. During 2007-08 an amount of Rs.46.16 crore was expended under this scheme.

WELFARE OF SCHEDULED CASTES, SCHEDULED TRIBES AND OTHER BACKWARD CLASSES

SOCIAL JUSTICE

14.133 The backwardness and the poor living conditions of the SC/ST population in the country is a major concern of the Governments in general and the policy makers in particular. The SC/ST population constitutes more than 24 percent of the population in India. A glance at the census figures of 2001 reveals some interesting features of SC/ST population of Kerala and the nation as a whole. As compared to the percentage of SC/ST to the total population of India it is less in Kerala. The percentages of SC &ST population to the total population of India are 16.23 & 8.15 respectively. But in Kerala these are 9.81 and 1.14 only. The decadal growth rates, child population and poverty figures are far less in the State than in the country. Similarly it is very encouraging to note the literacy rates of SC/ST population. These are comparatively very high in Kerala than the national figures. Some of the major indicators are given in Table 14.31.

Table 14.31 Status of SC/ST (as per census 2001)

	Status of SC/ST (as per census 2001)					
Sl.	Item	S	C	ST		
No		Kerala	India	Kerala	India	
1	Population (in lakh)	31.24	1666	3.64	836	
2	Percentage to total Population	9.81	16.23	1.14	8.15	
3	Decadal Growth Rate (%)	8.14	20.55	13.75	23.30	
4	Child Population to the total population	11.65	17.42	13.7	18.43	
5	Sex Ratio	1048	936	1027	978	
6	Literacy rate – General	82.66	54.32	64.35	47.08	
7	Literacy Rate-Female	77.56	41.31	58.11	34.75	
8	Poverty(as per 55th Round)	14.6	36.2	24.2	45.8	
9	Percentage of Population in Slum Areas	7.50	17.40	0.20	2.40	

Source: Census 2001

14.134 The settlement pattern in Kerala is very different from other States and a major portion of the Schedule Caste population live in scattered households with other people and a small portion live in concentrated colonies, of which very limited number are isolated. The highest distribution of Scheduled Castes is in Palakkad District (13.85 %) followed by Thiruvananthapuram(11.87 %), Thrissur (11.34 %) and Kollam (10.34). Nearly half of SC population of the state is distributed in the above four districts. The Scheduled Tribes in Kerala are not only geographically concentrated, but are overwhelmingly rural. Highest concentration of Scheduled Tribes is seen in Wayanad district (37.36 %) followed by Idukki (14 %) and Palakkad (10.89 %) and these three districts together account for over 60 per cent of STs of the state. The costal district of Alappuzha has the lowest percentage (.15%). Details are given in Table 14.32 District wise Scheduled Caste/Scheduled Tribe population details are given in Appendix. 14.25

Table 14.32 District-wise distribution of SC/ST Population in Kerala

Sl.	District	Percentage of	Distribution	Percentage to T	otal Population
No	District	SC	ST	SC	ST
1	2	3	4	5	6
1	Kasargod	2.88	8.33	7.49	2.52
2	Kannur	3.17	5.48	4.11	0.83
3	Wayanad	1.07	37.36	4.27	17.43
4	Kozhikkode	6.43	1.63	6.98	0.21
5	Malappuram	9.14	3.36	7.87	0.34
6	Palakkad	13.85	10.89	16.53	1.52
7	Thrissur	11.34	1.33	11.91	0.16
8	Ernakulam	8.44	2.76	8.48	0.32
9	Idukki	5.1	14	14.11	4.51
10	Kottayam	4.81	5.04	7.69	0.94
11	Alappuzha	6.37	0.86	9.45	0.15
12	Pathanamthitta	5.19	1.8	13.13	0.53
13	Kollam	10.34	1.43	12.49	0.20
14	Thiruvananthapuram	11.87	5.74	11.47	0.65
	Total	100	100	9.81	1.14

Source: Census 2001

Education and Enrolment

14.135 Education, being the key instrument not only for social empowerment but also provides the essential base for all development pursuits, should be thoughtfully promoted with needed strength and expansion for the benefit of SCs&STs.As part of this, steps are being taken to ensure provision of quality education so as to equip and enable them to enhance their employment prospects with competitive ability and thus address the problems of their marginalization and deprivation in the employment market.

14.136 The proportion of Scheduled Caste and Scheduled Tribe students in Lower Primary and Upper Primary Schools during 2008-09 are relatively higher than their population percentage as seen in Table 14.33. In High School section the percentage of Scheduled Tribe students is a little less than their population percentage. It can be seen that while drop out ratio beyond class VIII is relatively considerable in the case of Scheduled Caste, the same is overwhelmingly serious for Scheduled Tribes. The standard wise strength of SC/ST students at school level are given in Appendix 14.26

Table 14.33
Enrolment of Scheduled Caste/Scheduled Tribe
Students at School level as on 01.10.2008

Section	Total	SC	% to Total	ST	% to Total
1	2	3	4	5	6
L.P	1665993	187508	11.26	33781	2.03
U.P	1452540	161243	11.10	24449	1.68
H.S	1427293	144034	10.09	15882	1.11
Total	4545826	492785	10.84	74112	1.63

Source: Directorate of Public Instruction

14.137 Details of SC/ST Students in the Arts and Science Colleges during 2007-08 (Up to October) are given in Appendix 14.27 . It shows that number of girls students is about twice the number of boys in cases of SC and it is one and half times in the case of STs.

Performance in SSLC and Higher Secondary Examination

14.138 The percentage of pass in the SSLC examination is a good indicator of social and educational development among different social groups. In the regular SSLC examination of 2008 out of the 41392 students belonging to Scheduled Castes appeared 34511 have passed out. The corresponding figures for Scheduled Tribes are 4836 and 3988 respectively. The percentage of passed students from SC is 83.37 and that of ST is 82.46 which are below the overall state percentage of 92.08.

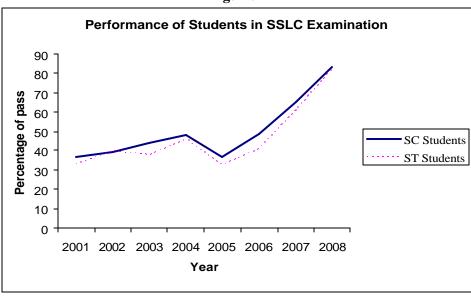
14.139 A comparative statement showing the performance of students in SSLC examination from 2001 onwards is given in Table 14.34, which reveals that ST students are far behind others though there is improvement in their performance.

Table 14.34
Performance of Students in SSLC Examination
(Percentage of Pass)

Year	Total Students	Sch.Caste Students	Sch.Tribe Students
1	2	3	4
2001	56.22	36.74	32.85
2002	60.62	39.32	39.69
2003	64.85	43.75	37.72
2004	70.06	48.14	45.95
2005	58.61	37.09	32.55
2006	69.33	48.58	41.18
2007	82.23	65.17	60.67
2008	92.08	83.37	82.46

Source: Commissioner for Govt. Examinations

Fig.14.1



14.140 Table 14.35 shows the performance of students in Higher Secondary Examination 2007-08.

Table 14.35
Performance of Students in Higher Secondary Examination (2007-08)

Cate	gory	Number of Students Appeared	Number of Students Passed	Percentage
led	Boys	14019	6113	43.61
Scheduled Castes	Girls	15146	9165	60.51
	Total	29165	15278	52.38
Scheduled Tribes	Boys	1525	646	42.36
hedı Tril	Girls	1867	1020	54.63
	Total	3392	1666	49.12
Others (excluding SC/ST)	Boys	137537	95374	69.34
Others xcludin SC/ST	Girls	156251	125201	80.13
S (ex	Total	293788	220575	75.08

Source: Directorate of Higher Secondary Education

14.141 From the above table it is seen that the percentage of passed students from SC is 52.38% and that of ST is 49.12% against overall percentage of 72.78%. Also in all the categories number of students and pass rate of girls is higher than the boys.

Occupational Pattern

14.142 The Table 14.36 shows that while just 25.87 per cent of total population were main workers as per 2001 Census, the corresponding figures for SC and ST population are 29.75 and 30.17 respectively indicating that a moderately higher proportion of the disadvantaged groups are workers. The ratio of female workers belonging to SCs and STs is almost double than that of other population. It is significant to note that the decline of workers among total population was marginal during the decade 2001 compared to 1991, it is substantial in case of SCs and the same is alarming for STs during the period. The decline in the proportion of main workers, both male and female, is not a welcome change as it is indicative of growing unemployment and deprivation among the population.

Table 14.36
Distribution of Main Workers 1991-2001 (per cent)

Sl.	Category	Total		Scheduled Castes		Scheduled Tribes	
No.	G V	1991	2001	1991	2001	1991	2001
1	Main Workers	28.53	25.87	36.82	29.75	40.28	30.17
2	Male Main Workers	44.82	41.77	47.22	41.54	51.11	40.66
3	Female Main Workers	12.81	10.85	26.72	18.51	29.42	19.90
4	Percentage of Cultivators to Main Workers	12.24	7.12	3.10	1.61	16.66	13.67
5	Percentage of Agricultural Labourers to Main Workers	25.54	12.40	53.79	29.48	55.47	41.12
6	Percentage of Main Workers engaged in Household Industry	2.58	3.35	2.44	2.60	0.47	2.57
7	Percentage of Main Workers engaged in Other Services	15.17	77.13	10.70	66.31	5.28	42.65
8	Marginal Workers	2.90	6.43	4.38	10.63	5.76	16.18
9	Work Participation Rate	31.43	32.30	41.21	40.38	46.04	46.35

Source: Scheduled Tribe Atlas of India

14.143 An analysis of the Table 14.36 indicates excessive dependence of STs on agriculture (54.79 %) for their livelihood as against just 19.52 per cent for the total population and for SCs the corresponding figure is 31.09 per cent. Other services is the source of income for 77.13 per cent of the total population, while the sector offers livelihood for two third of the SC population. The above analysis of the occupational pattern shows that the SC population is closely following the other population with regard to the change in occupational structure that has been taking place in the Kerala economy while the ST population is far behind in this respect.

14.144 Total representation of SC/ST employees in Government services as on 1.1.07 was 11.38% (SC-9.86% & ST-1.51%). Details regarding this is given in Appendix 14.28. It shows that the number of SC employees in Gazetted posts and last grade are more than their population percentage where as in non-gazetted posts it is only 9.50%. As regards to STs, Government employees in gazetted posts is less than their population percentage and in the remaining two categories it is more than their population percentage.

Poverty among SC/STs

14.145 Kerala has registered a remarkable improvement in poverty reduction over the years among all the social sections, including Scheduled Caste and Scheduled Tribes. Poverty level among the Scheduled Castes was reduced to 14.6 per cent in 1999-2000 from 62.3 per cent in 1983. The share of BPL population among Scheduled Tribes declined to 24.2 per cent in 1999 – 2000 from 37.3 per cent in 1993-94. Details are given in Table 14.37.

Table 14.37 Percentage of population below poverty line (Rural in 38th, 50th and 55th NSSO Rounds)

Sl		India			Kerala		
No.	NSSO Rounds	Total	SC	ST	State Total	SC	ST
1	2	3	4	5	6	7	8
1	38 th Round(1983)	45.6	58.1	63.8	39.1	62.3	NA
2	50 th Round (1993-94)	37.1	48.1	52.2	25.5	36.3	37.3
3	55 th Round (1999-2000)	27.1	36.2	45.8	9.4	14.6	24.2

Source: NSSO

14.146 The incidence of poverty among Scheduled Castes and Scheduled Tribes in Kerala is only half that of the all India level. The decline in the incidence of poverty in the state may be broadly attributed to the land reform measures and the large number of anti-poverty programmes undertaken by both the Central and State Governments. Also the growth of the economy which in turn raised the level of income contributed to poverty eradication.

14.147 Even though 9.81% of the total population in Kerala is Scheduled Castes, 19 per cent belongs to BPL. It shows that the incidence of poverty among the Scheduled Caste people is about double than that of the population of the state. Scheduled Tribes constitute 3 per cent of the total BPL population while their proportion to total population is only 1.14 per cent. It implies that the incidence of poverty among the Scheduled Tribes is about three times than that of the total population of the state. Details are given in Table 14.38.

Table 14.38
Category-wise percentage of families Below Poverty Line

Sl. No	Category	Share of BPL	Percentage of Total Population
1	2	3	4
1	Scheduled Castes	19	9.81
2	Scheduled Tribes	3	1.14
3	Others	78	89.05

Generalised Deprivation

14.148 To assess disparity among districts in terms of the incidence of poverty, a more desirable approach would be to examine the incidence of deprivation instead of household consumer expenditure. The index of deprivation as reported in Human Development Report 2005 (Kerala) is based on deprivation in four basic necessities for well being such as housing quality, access to drinking water, good sanitation and electricity lighting. The Table 14.39 given below shows the district wise index of deprivation and rank for Kerala in 2001.

14.149 The incidence of deprivation among SCs and STs is 45.5 and 57.9 respectively while that for total population is only 29.5. Kasargod, Trivandrum, Palakkad, and Wayanad districts have deprivation indices of above 50 percent regarding SC population. In 10 districts, the deprivation indices is above 50 in respect of ST population and the same is highest in the three ST population concentrated districts of Wayanad, Idukki and Palakkad.

Table 14.39 Generalised Deprivation

Sl.No	District	SC	Rank	ST	Rank	All	Rank
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	54.4	13	60.1	10	39.5	11
2	Kollam	47.8	8	50.7	5	30.4	8
3	Pathanamthitta	50.3	10	54.6	7	31.1	9
4	Alappuzha	45.9	6	40.1	3	29.6	6
5	Kottayam	42.1	4	43.1	4	25.1	3
6	Idukki	40.8	2	65.3	13	42.7	13
7	Ernakulam	29.3	1	37.2	1	15.5	1
8	Thrissur	42.0	3	37.5	2	24.7	2
9	Palakkad	52.9	12	65.3	12	40.4	12
10	Malappuram	46.2	7	56.8	8	28.6	5
11	Kozhikkode	48.8	9	50.9	6	28.3	4
12	Wayanad	51.5	11	66.0	14	46.3	14
13	Kannur	43.8	5	57.7	9	29.7	7
14	Kasargod	62.7	14	61.3	11	37.6	10
	Total	45.5		57.9		29.5	

Source: Human Development Report 2005

14.150 Among the Scheduled Castes, Vedan, Nayadi, Kalladi and chakkilian are the most economically, socially and educationally backward castes. Majority among these are landless and living in built in huts in 'Purambock' and are in starving conditions. Special emphasis is needed for the development of these communities and providing land and homes.

Development Programmes for Scheduled Caste and Scheduled Tribes

14.151 Kerala Government earmarks funds for SCP and TSP from State Plan outlay in proportion of Scheduled Castes and Scheduled Tribes population to the total population of the State. Nearly two third of the Special Component Plan budget and one half of Tribal Sub Plan budget are earmarked to Local Self Government Institutions only. The balance amount is set apart to Scheduled Caste/Scheduled Tribe Development Departments and other Development Departments. The total plan provision set apart for the development of Scheduled Caste and Scheduled Tribes during 2008-09 was Rs 755.95 crore and Rs 154.10 crore respectively. Year wise Outlay provided for SC/ST sectors from 2002-03 onwards is given in Table 14.40.

Table 14.40 SCP/TSP-Year wise Outlay

(Rs. Crore)

Year	SCP	TSP
2002-03	398.26	90.75
2003-04	390.76	87.62
2004-05	419.37	94.88
2005-06	501.72	106.35
2006-07	605.00	121.00
2007-08	681.80	139.00

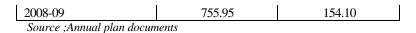
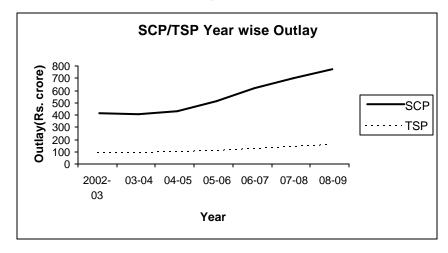


Fig. 14.2



14.152 A two pronged strategy is followed for development of Scheduled Castes and Scheduled Tribes in the state. Infrastructure facilities like roads, electricity and water supply are provided in habitats having more than 50 per cent SC/ST families. For implementing minor irrigation work, more than 50 per cent of the area should be owned by Scheduled Castes, Scheduled Tribes. Whereas, for projects benefiting individuals and families, 100 per cent of the beneficiaries should belong to SCs, STs.

Special Component Plan and Tribal Sub Plan through Local Governments

14.153 During the year 2008-09 a total of Rs 487.63 crore was given to Local Governments as plan grant under Special Component Plan and Rs. 73.20 crore as Tribal Sub Plan. Budget provision of SCP/TSP through LSGIs during 2008-09 is given in Table 14.41

Table 14.41
Budget provision and Expenditure of SCP/TSP through
Local Self Government Institutions – 2008-09

(Rs. lakh)

SI.	Local Self	Ви	,		
No	Government Institutions	General	Special Componen t Plan	Tribal Sub Plan	Total
1	2	3	4	5	6
1	Grama Panchayat	65836.98	25878.5	3618.48	95333.98
2	Block Panchayat	14108.01	8626.18	1447.31	24181.5
3	District Panchayat	14108.01	8626.18	2171.02	24905.21
4	Municipality	10733.30	3032.25	83.19	13848.74
5	Corporation	8530.70	2599.87		11130.57
	Total	113320.00	48763.00	7324.00	169405.00

14.155 Percentage distribution of Plan grant to Local Governments during 2008-09 is represented in Fig. 14.3 and 14.4.

Fig. 14.3

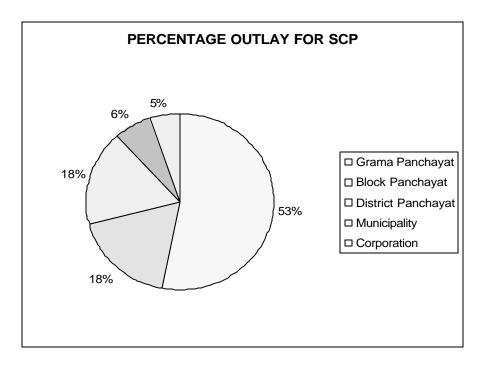
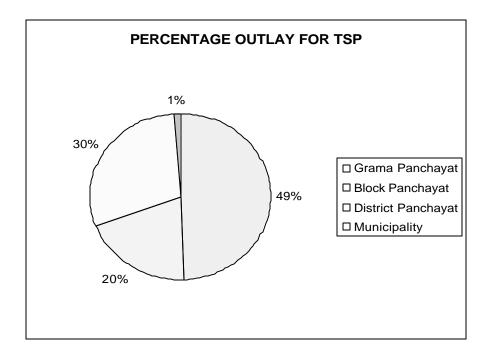


Fig. 14.4



14.156 Physical achievements of Local Self Government Institutions for 2002-03 to 2006-07 is given in Appendix 14.29 &14.30.

Programmes of Schedule d Caste Development Department

14.157 State schemes and Centrally Sponsored Schemes as well as the projects taken up under Corpus Fund are the programmes implemented by the Scheduled Caste Development Department for the welfare of Scheduled Castes. During 2008-09 the total State Plan provision set apart for the development of Scheduled Castes is Rs. 755.95 crore. This is 9.81% of the total state plan outlay. Out of this Rs. 179.32 Crore is earmarked as state share for the development programmes of the SC Development Department including Rs. 18.18 crore for RD Schemes. An amount of Rs. 443.30 crore is provided as grant in aid to local bodies. For the 50% and 100% CSS Schemes Central Share includes Rs.8.52 crore and Rs.108.05 crore respectively. In addition to this Rs.15.00 crore is included as Special Central Assistance to SCP.

14.158 The schemes implemented by the Scheduled Caste Development Department cover a wide area comprising education, health, housing and so many other schemes which promote the economic and social welfare of scheduled castes and other backward classes.

Educational Schemes

14.159 The department is implementing various educational schemes such as prematric studies, post matric studies, running/construction of Model Residential schools, assistance to students studying in self financing colleges etc. During 2007-08, Prematric concessions given to 4.53 lakh students and post matric concession given to more than 2.49 lakhs students. In addition to this 1385 medical and 16287 engineering students have been supported with educational concessions during 2007-08. The details of lumpsum grant, stipend, scholarship and pocket money given to students during 2007-08 and 2008-09 (as on 31-12-2000) are given in Appendices 14.33&14.34 respectively.

14.160 The department is running 7 Model Residential Schools. Out of this one school is running in rented building and the rest in own buildings. During 2007-08, all the 205 students appeared in the SSLC examination passed. Details are given in Appendix 14.35. Moreover there is an Ayyankali Memmorial sports school functioning for promoting sports talents of SC students. Students are admitted from Class V and provide accommodation and other facilities upto Class X. The admission of the number of students is limited to 30.

14.161 Apart from this, the department is running 91 prematric hostels and 16 post matric hostels. Of this 32 prematric hostels, and 16 post matric hostels are running in rented building.

Housing Scheme

14.162 The department is giving financial assistance @ 75000 for constructing a house. During 2007-08, Rs. 5340.34 lakh was expended for housing under Corpus fund. Out of the 15099 houses sanctioned during 2007-08, 7270 were completed as on 31-12-2008. For the completion of the 15099 spillover houses, Rs.30 crore is set apart from the Corpus fund 2008-09. During 2008-09, Rs. 10 crore is set apart from the housing scheme and Rs. 27.50 crore from the corpus fund for constructing 5000 new houses. District wise details of houses sanctioned and constructed by SC Development Department during 2007-08 and 2008-09 (up to 31-12-2008) are given in Appendix14.36.

14.163 Apart from this, the department has given Rs. 17.50 crore each to Kerala State Nirmithi Kendra and Kerala State Housing Board during 2006-07 for constructing houses for the SC people. The district wise details of houses constructed by KSHB and KESNIK are given in Appendices 14.37 and 14.38.

14.164 Also an amount of Rs.5 lakh is provided during 2008-09 for land to landless scheme.

Health Scheme

14.165 During 2007-08 an amount of Rs. 399.13 lakh is expended towards the assistance to seriously ill scheme. For 2008-09 an amount of Rs. 500 lakh is set apart for the scheme and Rs. 370 lakh expended as on 31.12.2008.

Development programmes for the Vulnerable communities among SCs

14.166 The objectives of this scheme is rehabilitation of landless and homeless SCs belonging to vulnerable communities. During 2007-08 an amount of Rs. 66.45 lakh is expended benefiting 9 families. For this scheme during 2008-09 the budget provision is Rs.10.32 Crore including Rs. 9.32 crore as One Time ACA from GOI.

Self employment Scheme

14.167 Assistance is given to Self Employment Projects for promoting new ventures among SCs in the ratio of 1:2 as subsidy and loan for taking up productive, service, market oriented projects subject to the condition of Government stipulation. An amount of Rs. 181.67 lakh is expended during 2007-08. During 2008-09 (up to 31-12-2008), 224 persons were benefited under this scheme and the expenditure was Rs. 102.17 lakhs. District wise details are given in Appendix 14.39.

Assistance for the Marriage of SC girls

14.168 An amount of Rs. 112.70 lakh is expended during 2007-08 as marriage assistances of SC girls. Also Rs. 100 lakh is provided for the scheme during 2008-09 and expenditure up to 31-12-08 was Rs. 58.30 lakh benefited to 1319 persons.

SCA to SCP

14.169 Government of India's release during 2007-08 amount Rs. 456.88 lakhs against the budget provision of Rs. 15 crore. An amount of Rs. 15.00 crore is proposed in the BE 2008-09.

Welfare of OBC

14.170 An amount of Rs. 12.57 crore was expended for the welfare of Other Backward Classes during 2007-08. Major education schemes included prematric and postmatric scholarships to OBC/OEC/SEBC students. During 2008-09 an amount of Rs. 16 crore is earmarked for the welfare of OBC's. An amount of Rs. 1.25 crore is the 50% CSS to the scheme.

14.171 Details of financial and physical achievements of schemes implemented by the department from 2007-08 and 2008-09 (up to 31.12.08) for SCs and OBCs are given in Appendices 14.31 and 14.32 respectively.

Programmes of Scheduled Tribe Development Department

14.172 An amount of Rs. 50.82 crore was earmarked during 2007-08 for the development programmes of the ST Development Department. Out of this 47.09 crore was expended. The total State Plan provision set apart for the development of Scheduled Tribes during 2008-09 is Rs. 154.10 crore. This is 2% of the total state plan outlay. Out of this Rs. 61.90 Crore is earmarked as state share for the development programmes of the ST Development Department including Rs. 3.60 crore for RD Schemes. An amount of Rs. 73.24 crore is provided as grant in aid to local bodies. For the 50% and 100% CSS Schemes Central Share is Rs.6.36 crore and Rs.9.93 crore respectively. In addition to this Rs.3.50 crore is included as Special Central Assistance to TSP. Details of Financial and Physical achievements of schemes implemented by the department from 2007-08 and 2008-09 (up to 31.12.08) are given in Appendices 14.40 and 14.41 respectively.

14.173 The main objective of the development plan is to promote the socio-economic conditions of the Scheduled Tribes and to free them from exploitation. To achieve this objective, top priority is given for the educational development of the Scheduled Tribes and about 50% of total Budget provision (both plan and Non-plan) is set apart for the education sector. There are nearly 80000 prematric and 10000 post matric tribal students in the State. Details of the amount spent during the period 2002-03 to 2008-09 for educational concessions is given in Table 14.43.

Table 14.43
Details of Educational Concessions distributed by ST Department

Year	No. of students (Pre-matric & post matric)	Plan[post matric] (Rs. lakh)	Non Plan(prematric & post matric) (Rs. lakh)
2002-03	62766	100.00	331.00
2003-04	69809	96.31	492.28
2004-05	78382	199.77	545.13
2005-06	82935	399.97	781.45
2006-07	82935	257.22	704.38
2007-08	84849	526.80	845.95
2008-09 (As on 31.12.08)	81765	382.33	762.60

Source: Directorate of ST Development

14.174 Educational concessions, scholarships and other kinds of assistance are provided to tribal students from pre-primary level to post graduate level. Details showing the number of ST students benefited and amount spent during 2007-2008 and 2008-09 (up to 31.12.2008) are given in Appendix 14.42(A) & 14.42(B) respectively.

14.175 A study made by the ST Development Department reveals that nearly 10% of the tribal habitats are very remote and lack even primary school facility within a radius of 2 km. In fact the position has improved to some extent during the last two five year plan periods . However the school facilities in primitive tribal areas are still poor, 71.95% of the PTG's are lacking L.P school facilities with in 1 km area.

14.176 Major portion of the Non-plan outlay of ST Development Department is for educational development activities including scholarship, boarding and lodging charges, incentive to parents

- etc. During 2007-08, Rs. 2046.77 lakh was budgeted and Rs. 1951.91 lakh expended. The plan provision of ST Development Department for educational programmes during 2007-08 was Rs. 3359.85 lakh and expenditure Rs. 2922.32 lakh. [Both revenue and capital].
- 14.177 With a view to provide Residential Education to tribal students in remote area, the ST development Department is running 110 pre-matric hostels and 3 post matric hostels in the State for providing boarding, lodging and tuition facilities to ST students. The ST students admitted in the hostels subsidized by the Government and managed by voluntary organizations are also eligible for same rate of assistance. There are 32 single teacher schools for providing preprimary education to tribal students living in very remote and inaccessible areas. Of these 27 are in Idukki District.
- 14.178 For providing pre-primary education to the tribal students 13 kindergartens and 22 Bala wadies are functioning under local self government and the ST department respectively. The nutritional requirements of the children are taken care of to a great extend in these institutions. The Department also runs 12 training centres for imparting job oriented technical training. At present 5% of the total seats in educational institutions are reserved for ST students.
- 14.179 In order to provide quality education to ST students, 18 Model Residential Schools are functioning under this department viz., 15 Ashram Schools in Tribal Sub Plan areas and 2 Ekalavya Model Residential Schools and one special Model Residential[CBSE] school (100% Assistance under Art. 275[1]). The Model Residential schools could achieve impressive results in the SSLC examination 2008. Also under the Ayyankali Memorial scheme, selected students from STD. IV and VIII are provided with continuous special tuition and counselling. For imparting primary education to Primitive Tribe children living in remote tribal settlements, 24 centres are functioning under the scheme "Peripatetic Education Centres of PTG's".
- 14.180 The Department give tuition fee of ST students who get admitted to professional course in Self Financing colleges under Government Quota. During 2007-08 the Department gave Entrance Examination coaching to 120 students and made goods results.
- 14.181 The Plan and Non Plan outlay & expenditure during 2002-03 to 2008-09 in respect of educational sector are furnished in Table 14.44.

Table 14.44

Details of Educational schemes(Revenue component only)

(Rs. lakh)

Year	Plan			Non-Plan
	Outlay	Expenditure	Outlay	Expenditure
2002-03	1106.60	931.97	863.95	900.61
2003-04	953.60	725.83	914.24	837.88
2004-05	1223.50	1068.23	1234.15	1197.63
2005-06	1242.14	1062.10	1574.67	1541.27
2006-07	1918.98	1735.33	1606.20	1523.30
2007-08	1878.85	1753.17	2046.94	1952.13
2008-09 (As on 31.12.08)	2144.12	1271.43	2814.06	1601.59

Source: Directorate of ST Development.

Housing

14.182 During the Tenth plan period the department provided assistance for the construction of more than 5000 houses. But housing is still a problem among the tribals in the state, because a good number of houses constructed 8 to 10 years back is in dilapidated condition and also demand for new houses is increasing. In the eleventh plan, it is proposed to construct houses to all houseless families in a time bound manner. At present the requirement of new houses is more than 25000. The ST Development Department, TRDM, Rural Development Department [IAY Scheme] and the Local Bodies are the major agencies involved in the tribal housing area in the State. During 2006-07, 1111 Number of houses was sanctioned exclusively to the Primitive Tribal families@ Rs. 90000/- under the Additional Central Assistance of Rs. 10 crore and 700 houses completed as on 31-12-2008. During 2007-08 Rs. 200 lakh under general housing and Rs. 100 lakh under TSP Corpus fund were sanctioned for the construction of 300 new houses. The number of houses completed including spillover during 2007-08 was 615. During 2008-09 Rs.4 crore was sanctioned for undertaking construction of new houses and for the completion of spillover houses.

14.183 The outlay and expenditure of the housing schemes under plan and non plan by the Department during the period 2002-03 to 2008-09 are given in Table 14.45.

Table 14.45
Details of Housing Programmes undertaken by ST Development Department
(Rs. Lakh)

Year	Plan		Non plan	
	Outlay	Expenditure	Outlay	Expenditure
2002-03	311.68	308.01	22.35	22.11
2003-04	211.68	188.11	10.25	7.67
2004-05	-	-	-	-
2005-06	100.00	99.16	-	-
2006-07	1227.19	1194.36		
2007-08	300.00	296.98	-	-
2008-09(As on 31.12.2008)	400	167.59		

Source: Directorate of Scheduled Tribe Development

14.184 District wise details of houses constructed by the ST Development Department for 2006-07 onwards is given in Appendix 14.43.

Health

14.185 Various measures are taken for providing timely medical attention to STs. The health services Department run 63 PHCs in the tribal areas. Besides the ST Development Department has 4 Midwifery centres, 17 Ayurveda Dispensaries, 3 Allopathy Dispensary/O.P. Clinics, 1 Ayurveda Hospital, 2 Mobile Medical units and 1 Allopathy Hospital at Mananthavady. During

2007 the Nalloornad and Attappady hospitals under the ST Development Department were transferred to the DHS and now functioning well. Apart from the PHCs and Ayurveda Dispensaries, Homoeo Dispensaries are also functioning in tribal areas under TSP of the respective Department. The Health Department conducts Medical Camps in tribal areas to diagnose diseases. Serious diseases detected are referred to district hospitals and financial assistance given for treatment. Studies by the Health Department as well as AIIMS,New Delhi show that nearly 15 % of the tribal families in Wayanad and Palakkad Districts have traits of the genetical problem "Sickle Cell Anaemia". In order to tackle the problem, Kozhikode Medical Colle ge has set up a Sickle Cell Anaemia unit with Electrophoresis machine.

14.186 During 2008-09 an amount of Rs. 256.70 lakh was expended by the ST Development Department for Health programmes under plan and Non Plan. In order to provide better facilities an amount of Rs. 306.70 lakh is setapart for health programmes during 2008-09. During 2007-08 a new scheme "Complete Health Care Programme for the Tribals" has been implemented by the department utilising the ACA of Rs.10 Crores received from Government of India and so far 4757 peoples benefited.

14.187 There are a few remote settlements in Idukki, Palakkad, Thrissur, Wayanad and Malappuram where such health care facilities are still lacking. Outlay and expenditure for plan and non plan health programme for the period 2002-03 and 2008-09 are given in the table 14.46.

Table 14.46 Details of Health Programmes

(Rs. Lakh)

(2127 24111)				
Year	Plan		Non	ı-plan
	Outlay	Expenditure	Outlay	Expenditure
2002-03	120.00	120.00	76.11	56.95
2003-04	229.56	119.42	68.81	66.02
2004-05	137.50	183.09	85.46	75.42
2005-06	120.00	106.90	91.33	85.50
2006-07	280.00	129.86	130.73	100.98
2007-08	1217.00	1201.62	148.76	115.98
2008-09(As on 31.12.2008)	170.00	116.11	136.70	80.29

Source: Directorate of ST Development

Resettlement of Landless Tribes

14.188 A special scheme for providing land to the landless and houses to the houseless is being implemented in the state. As part of the resettlement of landless, Tribal Development Mission has been formed to undertake rehabilitation activities based on a Master Plan. They have identified 22052 landless tribal families and 32131 families with less than one acre of land. The highest number of landless tribes are found in Wayanad District (60.32 %) followed by Palakkad (24.44%). So far a total of 8568.72 acres of land have been distributed to them benefiting 6413 landless tribal families. District wise details are given in Appendix 14.44. A Committee with Chief Secretary as Chairperson has been formed to identify more land for resettlement.

14.189 The Aralam Farm with an extent of 7612 acres, has been purchased by the State Government at a cost of Rs. 42.09 crore. Half the extend of the farm will be retained as farm itself and the remaining portion (about 3779 acres) has been distributed to 2557 families during the year 2006 & 2007. In addition to this Government of India has been approached for diversion of 12196 hectare of forest land for assignment to the landless families.

14.190 The resettlement activities involves the following items viz. (i) preliminary work such as identification of land, survey and demarcation of the plots, completion of procedures for selection of beneficiaries in a transparent manner prior to the resettlement; (ii) the actual resettlement by providing land and facilities such as housing, drinking water, sanitation, health care, education etc; (iii) the development of the plots into self sufficient agricultural farms, through crop husbandry, animal husbandry, soil conservation activities, irrigation facilities, etc; and (iv) providing other essential infrastructure development.

14.191 Major projects such as Sugandhagiri Cardmom project, Priyadarshini Tea Estate, Pookot Dairy project, Attappady Farming Co-operative society (ACFS), Vattachira Tribal Collective Farm etc were started to promote socio-economic conditions of ST and to free them from exploitation. These five projects could rehabilitate 1089 ST families in 3295 hectares of land. These families have been given housing and other amenities and employment in the farms of the project. As a policy decision of the State Government to issue land to landless tribal families, the sugandhigiri Cardamom project, Pookot Dairy project and Vattachira Tribal Collective Farm were distributed to the Tribal families within the project area. Now two Group Farms were functioning viz ACFS and Priyadarshini Tea Estates (Mananthavady) and the grant-in-aid to these two farms were given out of the Budget provision under "Support to Group Farms".

14.192 District-wise details of distribution of surplus land furnished by survey and land records department as on 31.10.2008 is given in Appendix 14.45.

Corpus Fund

14.193 An amount of Rs. 648.39 lakh out of the Corpus Fund of Rs. 664.95 lakh was expended during 2007-08 for undertaking various development activities. The components of the Corpus fund includes self employments, skill development, water supply and sanitation, communication facilities, foot bridges, technology transfer, improvement of education and health. An amount of Rs. 813.15 crore is set apart during 2008-09 also. Statement showing the outlay and expenditure under Corpus fund from 2002-03 to 2008-09 is given in Table 14.47 and the details of schemes taken during 2008-09 in Appendix 14.46.

Table 14.47
Outlay and Expenditure under Corpus Fund from 2002-03 onwards
(Rs. lakh)

Year	Outlay	Expenditure
2002-03	813.26	1019.36
2003-04	1485.02	1001.96
2004-05	1879.76*	1187.50
2005-06	635.45	631.84
2006-07	671.38	649.09
2007-08	664.95	648.39
2008-09 [as on 31.12.2008]	813.15	363.41

*607 lakh re-appropriated to other schemes

Source: Directorate of ST Development

Other Schemes

14.194 During 2004-05, Minsitry of Tribal Affairs, GOI have introduced a new scheme viz"Insurance scheme for PTG's" under Janashree Bima Yojana Scheme of LIC of India and sanctioned Rs. 22.50 lakh to the State Government from 2004-05 to 2006-07. This amount was utilized by the State Government for the Insurance coverage of 4500 PTG families for 5 years viz. Kadar in Palakkad and Thrissur Districts, Kattunaikans in Malappuram , Kozhikode, Wayanad Districts and Kurumbas in Palakkad District.

14.195 The Department have also started 3 Care Homes for Tribal Destitutes, 2 in Wayanad Districts (Sugandagiri and Mananthawady) and one in Palakkad District(Attappady) during 2004-05. Each centre is providing facilities for accommodating 25 inmates. Now the funds for the functioning of these Care homes has been set apart from the scheme "Special Programme for Primitive Tribal Groups, Adiya & Paniya".

14.196 The departments has engaged 76 Tribal youths as Apprentice Clerks in the Tribal offices. Also the departments has engaged 15 councellors in the Prematric Hostels and Model Residential/Ashram Schools to conduct counseling programmes as part of providing quality education to the tribal students.

Implementation of the Scheduled Tribes and other traditional Forest Dwellers[Recognition of Forest Rights] Act 2006.

14.197 The Scheduled Tribes and other traditional Forest Dwellers [Recognition of Forest Rights]. Act 2006 enacted by the Government of India is under implementation in the State. The various committees envisaged under the Act have been constituted. 504 Forest Rights Committees have been elected and applications received from the tribal families recognition of their rights are being scrutinized. Around 33000 tribal families are anticipated to be benefited under the Act. The Government of India has already released a sum of Rs. 27.61 lakh under Art. 275[1] of the Constitution as one-time grant to cover the expenditure related to the implementation of the Act.

SCA to TSP

14.198 Expenditure details of SCA to TSP from 2002-03 onwards is given in Table 14.48

Table 14.48
Statement showing the Outlay and Expenditure under SCA to TSP during 2002-03 to 2008-09

(Rs. in lakh)

Year	Outlay	Expenditure	Physical Achievement (families)
2002-03	275.00	348.45	5499
2003-04	350.00	355.36	6098
2004-05	350.00	379.30	4667
2005-06	246.00	244.45	2764
2006-07	350.00	241.20	1444
2007-08	350.00	330.90	3143
2008-09(As on 31-12-2008)	350.00	217.58	945

Source: Scheduled Tribe Development Department

Co-operation

14.199 The SC/ST cooperatives were formed aiming the overall improvement of the socio-economic conditions of SC and ST. Out of 863 primary cooperative societies (SC-756, ST-107) 516 SC Cooperatives and 63 ST Cooperatives are functioning. Through these societies loans are being issued and other activities are done. Minor forest produce procurement, sales other activities like Ayurdhara and Petrol pump are being undertaken by the Kerala State Federation of SC/ST Development Cooperative Limited.

KIRTADS

14.200 The Institute conducts research and intensive study on Scheduled Caste and Scheduled Tribe population of the state. During the year under review the Research wing conducts the following studies and reports submitted for further action.

- ?? Ethnographic as well as socio-cultural studies of various communities, especially on the Scheduled Communities of the state.
- ?? Screening Committee Cases- A total of 652 cases have been forwarded to the commissioner for Entrance Examinations during 2007-08(up to 31.10.08)
- ?? Scrutiny Committee Cases.- 30 individual caste determination cases completed and report submitted to scrutiny committee.
- ?? Studies conduct for the Kerala State Commission for Backward Classes.- One study report submitted during the current financial year.
- ?? Other studies requested by Scheduled Tribe Development Department, Scheduled Caste Development Department, Revenue Divisional Officer, Tahsildars and District Collectors. 207 such studies have already been completed during the period 2007-08.
- 14.201 Development Studies Wing Submitted the following reports during the year 2007-08.
 - 1. Developing a Model participatory management programme for the Forest Dwelling Scheduled Tribes FDST's engaged in Non Wood Forest Products collection(NWFP's) in Kerala
 - 2. Evaluation report on the Samrudhi Kendras of Kerala.
 - 3. Utilization of Reservation for Scheduled Tribes in Government jobs(State and Central) including PSU's and Higher Educational Institutions(Academic/professional/Technical imparting courses like B.A., BSc., Professional & Technical Courses.
 - 4. Studies on the Ethnology of the Kurumba of Attappady.
- 14.202 Training wing conducted intensive coaching to 30 tribal students in traditional and modern archery. Coaching were also given in drawing, painting and Sculpture to the identified skilled artists from ST youths. During this period four Nadankalamela were organized. Training was also given to ST elected representatives. Special coacing was given to the students to appear for Medical/Engineering Entrance Examination and this year all the seats for the Medical/paramedical/ Engineering reserved for ST is filled by them.

Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes

14.203 The Corporation, with its Registered office at Thrissur, functions through 12 Regional Offices covering all the districts, is implementing various schemes to enable the SC/ST people to become self-reliant in all respects. The sources of finance for implementing various schemes are Corporation's own share capital and assistance from other national refinancing agencies like NSFDC, NSTFDC, NSKFDC and HUDCO. The Corporation is now concentrating more on self employment schemes to enable the target people to engage in some creative and most viable income generating activities and earn their livelihood and thereby improve their socio-economic status in the society.

14.204 The major schemes implemented by the Corporation include agricultural land purchase, micro-credit finance, mini-venture loans, small enterprise loans, housing, educational loan, marriage assistance etc. During 2007-08, a total of 1589 families were assisted under various schemes incurring an expenditure of Rs 741.34 lakh. Under the Land Purchase Schemes there were 90 beneficiaries, the Micro credit finance schemes benefited 334 families, marriage assistance loan to 376 persons given and beneficiary oriented schemes to 254 persons implemented in this period.

14.205 The scheme wise details of physical and financial achievement of the Corporation are given in Appendix 14.47.

Kerala State Backward Classes Development Corporation

14.206 The Corporation aims at the socio-economic upliftment of the backward classes and minorities in the state. The major objectives of the Corporation are:

- 1. To promote the comprehensive development of the Other Backward Classes and Minorities of Kerala by rendering assistance by way of loans and advance for establishing small income generating enterprises in various sectors.
- 2. To promote schemes, establish institutions for the socio, economic and educational upliftment of the target group.
- 3. To assist Other Backward Classes and Minorities for the upgradation of technical and entrepreneurial skills.

14.207 The Corporation mobilizes funds from the National Backward Classes Finance & Development Corporation (NBCFDC) and National Minorities Development & Finance Corporation (NMDFC) in addition to State Government support. The source-wise expenditure and the physical achievements of the Corporation during 2006-07, 2007-08 and 2008-09 are given in the Appendix 14.48.

Kerala State Development Corporation for Christian Converts from Scheduled Castes and the recommended Communities

14.208 The main objective of this Corporation is to promote social, educational, cultural and economic upliftment and other living conditions of the converted Christians from Scheduled Castes and other recommended communities. The main schemes under implementation by the Corporation are agricultural land purchase, foreign employment, housing, cash incentive to students, marriage loan, agriculture and allied sector assistance, small business, educational

loan etc. The Corporation implements these schemes with the financial assistance received from state government and the loan assistance from NBCFDC. Details of year wise disbursement of State Government assisted loan schemes for the last 10 years are given in Table 14.49.

Table 14.49
KSDC for Christian converts from Scheduled Castes and the recommended Communities- Year wise disbursement of State Government assisted loan schemes

Year wise	Physical	Financial (Rs. in lakh)
1998-99	121	.44
1999-00	422	28.40
2000-01	578	116.15
2001-02	410	23.58
2002-03	147	58.54
2003-04	783	192.40
2004-05	320	147.06
2005-06	977	89.29
2006-07	872	83.02
2007-08	1298	77.92

Source: KSDC for Christian converts from SC and the recommended Communities

14.209 Scheme wise details are given in Appendix 14.49.

INFORMATION AND PUBLICITY

14.210 The Information and Public Relations Department disseminate State's public relation activities and information services with the objective of materializing various information services concerned with Government and its various Departments/Agencies. It maintains a significant relationship between the Government and the public as well. The department functions mainly through thirteen wings besides the District Information Offices and Kerala Information Centre in New Delhi. The major wings of I&PRD includes Press Releases of Government, Scrutiny of media, Research and Reference, Advertisement & Marketing, Circulation & Distribution, Field Publicity & Exhibition, English Publication, Malayalam Publication, Web & New Media, Audio Video Communications (electronic news gathering & distribution, audio video production & documentation), Planning & Development, Culture Development and Photo division.

14.211 Functions of major sectors on dissemination are given below in Box No.14.18.

	Box No.14.18			
		Relation Services - Major sectors and services Main Services		
Sl. No.	Major Sectors			
1	Press Release Wing	Feeds the print and electronic media by its daily press releases. Video news clips are also being released to the TV news media covering press meets and state level programmes.		
2	Editorial Wing	To bring out handouts for publicizing government policies and programmes, and social awareness campaigns. Two magazines (Janapadham and Kerala Calling), two news letters (Kerala Interface and Vikasana Samanwayam) and other publications.		
3	Planning and Development Wing	Maintenance of Government web portal, e-governance mechanism to Sutharya Keralam, production of video films.		
4	Field Publicity and Exhibition Wing	Conducting special campaigns and exhibitions within and outside the state, national, state and district levels.		
5	Advertisement Wing	Serves as professional advertisement agency for government and its various departments. Produces and markets audio/video spots for electronic media.		
6	Research and Reference Wing	Provides information to the public on governmental and other general matters. Registration of books/periodicals as per the Press and Registration of Books Act.		
7	Scrutiny Wing	Watches reactions on Government policies and activities and provides feed back. Online facility to analyse media reporting.		

Major activities of the Department

- 1. Publicising the policies and programmes of the Government.
- 2. Giving wide publicity of the developmental and welfare programmes undertaken by the Government through print-visual-audio media.
- 3. Publishing of two monthly publication, Viz Kerala Calling in English and Janapatham in Malayalam and two monthly newsletters viz,Vikasana Samanwayam in Malayalam and Kerala Interface in English.
- 4. Content creation and maintenance of Kerala Government Official web portal www.kerala.gov.in and other websites like www.prd.kerala.gov.in, www.rti.kerala.gov.in and the websites of Ministers. Publishing of brochures on social and developmental subjects.
- 5. Feeding the Government with the public opinion on the functioning of the Government.
- 6. Publishing of books on subjects related with culture, education, traditional art forms etc.
- 7. Functioning as information offices and news dissemination centres in all districts of the state.
- 8. Functioning as professional agency for Government advertisements etc.

Reviews on major activities undertaken during the reporting year are given below:

Sutharya Keralam

14.212 This prestigious programme was initiated by the Government of Kerala during 2005-06 in the structure of a phone-in-programme called "Sutharya Keralam" through Doordarshan and All India Radio. Presently, it is being recast in a new fashion. It seems to be one of the major programmes aimed at sorting out public grievances. Rs.6.35 lakh had been already expended till 30.09.2008 to implement this scheme during 2008-09. Outlay and expenditure from 2005-06 to 2008-09 for this programme is shown below as Table 14.50

Table 14.50 Outlay and Expenditure on Sutharya Keralam from 2005-06 to 2008-09

Sl.No.	Year	Budgeted Outlay(Rs.lakh)	Expenditure(Rs.lakh)
1	2005-06		
2	2006-07	55.00	9.77
3	2007-08	20.00	19.02
4	2008-09	95	6.35 (upto 30.09.2008)

Source:Information and Public Relations Department

Government on People's Response

14.213 The Scrutiny wing of the I&PRD watches reactions on Government policies and activities and provides feed back to the Government on people's responses and reactions reflected in the newspapers and electronic media. Online facility to analyse the media reporting has acclaimed appreciation. Since the electronic media has started 24 hours news channels in Malayalam, scrutiny wing started recording news and news based programmes for analysis. The Economic Digest published monthly, comprising of the economic, financial and developmental news items published by the English news dailies, is a widely accepted publication among the top brass of the Government.

Press Release

14.214 During 2008, the department has released 8502 press releases including special features through the print and electronic media. Video news clips were released to the T.V. media covering press meets and state level programmes in the reporting year. Table 14.51 shows the details of press releases undertaken during 2008.

Table 14.51
Details on Press Release activities during 2008

Sl.No,	Items	Total (Nos)
1	Press Notes including special press notes	8502
2	Press conferences of Governor, Chief Minister and Ministers	166
3	Reporting of Public Programmes	1178
4	Special Press Conference was conducted in connection with the 2nd anniversary of the Ministry	20
5	Special Press note issued in connection with the 2nd anniversary of the Ministry explaining activities/achievements & new projects of various departments	48

Source:Information and Public Relations Department

14.215 The press releasing wing has given accreditation to 48 new journalists and action was taken to issue journalist pension, eminent journalist pension & journalist in distress pension benifitting 556 persons.

Editorial and Publication

14.216 The editorial wing brought out four publications besides the monthly Kerala Calling. The two magazines, Janapadham and Kerala Calling, published in Malayalam and English respectively have touched a level of professional elegance in both content and presentation. Four publications were brought out in Malayalam language besides the news letters Kerala Interface and Vikasana Samanwayam.

Table 14.52

Details on Publications during 2008 through I&PRD

Sl.No.	Publications	Total (Nos)
(1)	(2)	(3)
1	Kerala Calling: monthly	12
2	'Kerala Calling' special issue in May	1
3	English folder on 2nd anniversary of Govt.	5000
4	'Heritage of Kerala',book	1
5	Folklore of Kerala, book (to be published by Nov.)	1
6	Intellectual Property Rights Policy: book (to be published by Nov)	1
7	Interface News letter, monthly	12
8	"Karmam Sakshi" – booklet	1
9	'Vyavasaya vikasanathinu Arangorungi' - booklet	1
10	"Haritha Keralam Unarunnu" – booklet	1
11	'Bhashayum Bharana Bhashayum' – booklet	1

Source:Information and Public Relations Department

Field Publicity and Exhibition

14.217 The field publicity and exhibition wing organises special campaigns within and outside the State. Exhibitions at national, state and district levels are arranged. Exhibitions in the rural areas are also conducted. Issue based campaigns are arranged in different parts of the state on Gandhi Jayanthi day on the subject of communal harmony. Seminars were conducted on various topics including Right to Information and Malayalam day celebrations. It took part in the IITF in Delhi and was honoured with silver medal in the reporting year. In the Republic day parade this wing presented an instant float which got wide appreciation. Fifteen programmes were organised in connection with the anniversary of the Ministry. Gandhi Jayanthi celebrations were organised in 14 centers.

14.218 The advertisement wing functions as a professional ad agency for the Government departments. It produces and markets audio-video spots for electronic media. The department negotiated with different print and electronic media and curtailed down the ad tariff to one third of the actual ad rate. This has saved a good amount of money to the state as a whole. 27 display ads had been released to the print media on different government programmes. 1493 tenders and notifications of different departments had been published in the print media as window advertisement to save ad cost.

14.219 The major activities under field publicity and exhibitions are given below as:

Table – 14.53
Details on Field Publicity and Exhibitions during 2008

Sl.No.	Activities	No. of functions during 2008
1	Anniversary of the Ministry	15
2	Gandhi Jayanthi Celebrations	15
3	Reading Week Celebrations	15
4	Film shows and cultural programmes	14
5	Official language Week Celebrations	14

Source:Information and Public Relations Department

Cultural Activities

14.220 The cultural wing of the department has organised seven film festivals independently and three in association with Kerala State Chalachitra Academy and other film societies. The wing has provided films from the archive to the various film societies across the state. As part of the inter state cultural exchange programme a cultural team was sent to Himachal Pradesh for cultural performance and Kerala hosted cultural show of Himachal Pradesh in January 2008. The popular National Theatre Festival was organised after a gap of 11 years and the World Thatre Day was celebrated on March 27. The wing was proud enough to be part of awareness programmes initiated by the department in 14 districts for monsoon related health programme and second anniversary of the present Ministry. A Folklore festival was organised in Kollam in March 2008.

Maintenance of Government Website

14.221 Planning and development wing is in charge of maintenance of Government web portal with the site of 27000 odd pages. Both www.kerala.gov.in and www.prdkerala.gov.in which are rated as best sites in India has an average monthly hit of 3.8 million. This wing is also doing production of video films and 8 video film has been under different stages of production in the reporting year. Of these, 7 films are on the makers of modern Kerala series. E-Governance mechanism for grievance redressal namely "Sutharya Keralam" has also been evolved.

CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY (C-DIT)

14.222 Centre for Development of Imaging Technology is an organization established in 1988 by the Government of Kerala for advancement of research, development and training in imaging technology with an implied role in socially relevant science and development communication. Over the past 20 years of its existence C-DIT has taken up many prestigious projects of the Government of Kerala and Government of India and completed them successfully. Information and public relations department functions as the administrative department of C-DIT.

14.223 Currently C-DIT works as 15 financially independent and functionally focused teams with overlapping memberships. The services rendered by the teams during 2008 in brief are given below in Table 14.54

Table 14. 54
Major services rendered by Centre for Development of Imaging
Technology during 2008

CI No	Name of Teams	Technology during 2008
Sl.No	Name of Teams	Major services
1	E-Governance	 System Administration Support FRIENDS Janasevana Kendram Registration Department AMC project System Administration support to Akshaya e-pay project Oushadhi ERP Consultancy Other Projects (Khadi Board and pending of Akshaya & RDAMC for 2006-07 supply) Ground Water conservation
2	Optical Image Processing Team	 Tax label for KSBC High Security Certificate for various Universities and other institutions in Kerala and outside the state Stock Image Hologram for NCPT Festival card with hologram KSCA Security Hologram stickers for Asianet High Security Hologram for MACTA Hall Ticket Printing for Kannur University
3	Communication Training Team	Conducting various courses in the areas of media technology such as P.G Diploma in Science and Development Communication, Multimedia, Animation, diploma courses in Web Development, Digital Media Production, Visual Communication, E-Learning and Certificate Course in Non-Linear Editing and Digital Still Photography
4	Research & Development	Coordinating various research activities of C-DIT
5	Computational Linguistic Team	 Local Language promotional products (Periyar suit) Ente Malayalam Website (2nd Phase) Local Language promotional products (Phase II)
6	Educational Informatics Team	Digitisation of Kerala University library Digitisation of Kumaranasan National Library, Thonnakka
7	Cybersri	 Cybersree Training for SC/ST Students Training for B.Ed, M.Ed candidates
8	Technology Extension Team	Conducting 24 IT related courses through 300 C-DIT Educational Partners through out Kerala. The team is also engaged in conducting corporate training programmes through its CEPs such as training in office automation to minority youths in the districts of Kannur, Kozhikode, Wayanad, Malappuram, Palakkad and providing IT training to M.Ed/B.Ed SC/ST students in Kerala
9	Open Source Technology Team	Migration of the BPL databse to RSBY and CHIS format Technical Support & Development of existing MIS in FOSS Computerisation of the examination wing of Kannur University Data analyzing software (State Juvenile Justice Advisory Board)
10	Software Engineering Team	PHL Suite Computerisation of Public Health Laboratory

		 Information & Guidance centres for the SC Department IT Enabled Planning Section in the Directorate of SCDD VACB Suite - A Computerised system for the Vigilances & Anticorruption Bureau offices in Kerala E-pusthakam 1.0 Modernisation of KSA (Digital
		Library and Information system for KSA) 6. Libsoft Computerisation of KSLC
		 7. E-Adharam – Digitisation of property documents 8. SSA Soft Automating the various activities of Sarva Siksha Abhiyan
		Online digital Library @ KIRTADS Online digital Library @ KIRTADS Online digital Library @ KIRTADS
		12. VVC Online Ver 1.0
		13. E-grants
		14. DIS for Archives Department
		15. Akshaya16. Digital Version of the Index registers of the State
		Archives Department
		The team hosting around 300 websites of government and
		other agencies in Kerala. In addition to developing,
		maintaining and hosting of routine web sites, the team
		engaged in 1. Web journal on accomplishment of one year by LDF Govt.
		2. Portal for publishing exam results
11	Web Service Team	3. Website on golden jubilee of Kerala's first govt.
11		4. Kerala govt. portal
		5. e-Gazette
		6. email for all government officials7. Web portal for all ministers in Kerala
		8. Content service provider for Kerala for providing
		information for Government of India official
		web site
		1. PROFILES for I & PRD
12	Video Documentation	2. Malayalam Computation for KSITM3. Two year achievements documentary for KSITM
12	Team	4. Red Ribbon Express for KSACS
		5. Hariyali for Kurich grama Panchayath
		Advertisement films for KSFE
		2. Advertisement film for Lotteries Department
12	Advertisement and Film	3. Campaign Materials for Lotteries Department
13	Team	Anti rabies spot for Animal Husbandry Department Edit suit hire for FIB
		6. Edit suit hire for Doordarsan
		7. Edusat for IT@School project
14	Sutharya Keralam &	1. Sutharya Keralam for I & PRD
	News Clippings	2. News Clippings for I & PRD
		Question Ban project for Akshaya Film appreciation CD-ROM for Chalachitra Academy
1.5	New Media and	Multimediia Museum for Arya Vaidya Sala, Kottakal
15	Animation Team	4. CD-ROM for GAL
		5. Resource CD-ROMs for School Phase I
		6. Resource CD-ROMs for School Phase II

Source: C-DIT

- 14.224 C-DIT has implemented a large number of schemes and projects in the areas of imaging technology, e- governance, information technology holograph production and security printing, computing linguistics, educational informatics, software development, open and free software propagation and digitization of print media during the financial year 2007-08.C-DIT had targeted to implement projects worth of Rs.26 crores during the financial year 2007-08 which is thrice the amount of the previous year. Out of this targeted work the institution could be able to get project sanction for Rs.23 crore from various agencies. The total receipt during this period was Rs.19.00 crore (including grant-in--aid from state Govt) Some of the important schemes and thrust programmes implemented by C-DIT during the last financial year are:
- 1) Installed Digital Image Printing System in all 38 Sub-Registrar offices in Kerala for the Department of Registration, which will facilitate the common people to get the print of registration document within munutes.
- 2) Chief Minister's interaction programme with general public as a grievence redressal forum in the name of Sutharya Keralam was re introduced with a new perspective and vision.
- 3) In addition to the maintenance of nearly 300 web sites of governmental and nongovernmental organizations C-DIT has redesigned and modified the site of the Chief Minister.
- 4) The institution attained notable achievements in the field of security label printing.
- 5) A large number of projects in the field of library digitalization were implemented which include the library digitization of Kerala Sahithya Academy, KIRTARDS etc.
- 6) Akshaya E Pay Scheme was introduced in eight districts for Kerala State IT Mission.
- 7) A finishing school project for SC/ST students with educational background in engineering and computer science is being implemented successfully in the name of Cyber Sree with the assistance of SC/ST department.

Table 14.55 Outlay and Expenditure from 2005-06 to 2008-09

Sl.No.	Year	Budgeted Outlay	Expenditure *
		(Rs. Lakhs)	(Rs. Lakhs)
1	2005-06	140.00	978.49
2	2006-07	125.00	798.75
3	2007-08	86.00	1278.50
4	2008-09	160.00	628.38

^{*}The expenditure over and above budgeted outlay is managed from various project works implemented by C-DIT from various clients.

CHAPTER 15 PRICES & FOOD SECURITY

PRICES

Consumer Price Index (CPI)

Consumer Price Index is designed to measure the changes over time in the general level of retail prices of goods and services consumed by a reference population. It is an indicator of inflationary trend. Consumer Price Index is an appropriate measuring rod to determine the impact of price rise on the cost of living of the common man. At present four CPIs covering different segments of population ie; Industrial Workers (IW), Urban Non-Manual Employees (UNME), Agricultural and Rural Labourers (AL/RL) are released at national level.

During 2008 (upto August) the Consumer Price Index of agricultural and industrial workers in Kerala went up by 12 points (base 1998-99=100), compared to the corresponding period of 2006 ie; the index rose from 136 points in August 2007 to 148 points in August 2008 (Table 15.1). The increase in 2007 was 4 points compared to 2006 which shows that inflation in terms of Consumer Price Index was higher in the State during 2008 compared to the previous year.

Table 15.1
Annual Average Consumer Price Indices of Agricultural and Industrial Workers in Selected Centres of Kerala - 2004 to 2008

(Base:1998-99=100)

Sl.		Year							% Variation over previous			
No.	Centres			1	year							
140.		2004	2005	2006	2007*	2007	2008*	2005	2006	2007	2008*	
1	Thiruvananthapura	126	132	138	143	143	155	4.8	4.5	3.6	8.4	
	m											
2	Kollam	126	130	138	141	142	156	3.2	6.2	2.9	10.6	
3	Punalur	116	121	130	134	135	148	4.3	7.4	3.8	10.4	
4	Pathanamthitta	121	125	133	141	140	156	3.3	6.4	5.3	10.6	
5	Alappuzha	120	124	132	137	136	149	3.3	6.5	3.0	8.8	
6	Kottayam	121	124	131	136	136	148	2.5	5.6	3.8	8.8	
7	Mundakkayam	118	121	127	133	132	146	2.5	5.0	3.9	9.8	
8	Munnar	118	121	125	129	128	141	2.5	3.3	2.4	9.3	
9	Ernakulam	121	126	133	137	137	147	4.1	5.6	3.0	7.3	
10	Chalakkudy	119	124	129	134	133	149	4.2	4.0	3.1	11.2	
11	Thrissur	120	123	130	137	136	146	2.5	5.7	4.6	6.6	
12	Palakkad	122	125	132	137	138	152	2.5	5.6	4.5	10.9	
13	Malappuram	120	126	130	137	137	149	5.0	3.2	5.4	8.8	
14	Kozhikode	117	123	129	133	132	145	5.1	4.9	2.3	9.0	
15	Meppady	124	121	128	132	131	144	-2.4	5.8	2.3	9.1	
16	Kannur	126	126	130	132	132	143	0	3.2	1.5	8.3	
17	Kasaragod	121	130	133	136	135	145	7.4	2.3	1.5	6.6	
	State Average	121	125	131	136	135	148	3.2	5.0	3.3	9.1	

Source:- Directorate of Economics & Statistics

* upto August

- When the indices during 2008 (upto August) of seventeen Centres were subjected to review, Kollam and Pathanamthitta recorded the highest index (156) followed by Thiruvananthapuram (155) and Palakkad (152). The lowest index of 141 was recorded at Munnar preceded by Kannur (143). The Indices of 8 Centres fall below the State average of 148 and that Punalur and Kottayam Centres stood with the same index of State average. The variation of indices of 2008 over previous year for various centres ranged from 6.6 percent to 11.2 percent. Percentage variation during 2008 (upto August) over previous year was highest in Chalakkudy (11.2%) followed by Palakkad (10.9%). The lowest variation was recorded at both Kasaragod and Thrissur (6.6%) preceded by Ernakulam (7.3%).
- The month-wise movements of Consumer Price Indices are shown in Appendix 15.1. The movement of indices during 2008 is within the range of 135 to 162. The lowest Consumer Price Index of 135 was registered in Munnar in the beginning of 2008 and reached 146 at the end of August 2008. Both Thiruvananthapuram and Pathanamthitta recorded the highest index of 162 during August 2008.

Retail Prices

The average Retail Prices of essential commodities at the end of December from 2005 15.5 to 2008 (end of September) and its percentage variation over the previous years are given in Table 15.2. On analysing the prices of 18 essential commodities in 2008 (end of September), it was observed that the prices of Rice (O.M. Matta), Greengram, Blackgram and Dhall under Cereal group increased by 23.9, 26.8, 11.5 and 19.1 percent respectively over the corresponding period of previous year. Under other food items the prices of milk, egg and sugar showed an upward trend with an increase of 18.8, 12.2 and 38.7 per cent respectively. The prices of coconut oil and groundnut oil increased from Rs.53.43 and Rs.80.20 per kg. at the end of September 2007 to Rs.67.04 and Rs.89.43 per litre respectively at the end of September 2008. The price of coconut without husk also increased by 34.4 percent. A huge increase occurred in the price of coriander at the end of September 2008 ie; increased by 97.9 per cent over the corresponding period of the previous year. The prices of chillies and onion (small) also increased by 13.8 and 14.6 per cent respectively. Under Tubers the price of tapioca increased by 14.6 percent while that of potato declined by 5.5 per cent. The prices of banana also moved upwards by 39.5 per cent compared to the corresponding period of 2007.

Table 15.2 Month-end Average Retail Prices of Essential Commodities in Kerala 2005 to 2008.

Sl. No	Commodities	Unit	Pr	ices at	% variation over previous year					
			2005	2006	(Rs)		2008*	2006	2007	2008*
A	Cereals									
1	Rice (Red) OM	Kg	13.50	14.03	15.46	17.67	19.16	3.9	25.9	23.9
	Matta									
2	Greengram	Kg	32.60	42.16	37.86	35.55	48.02	29.3	-15.7	26.8
3	Blackgram	Kg	34.60	55.38	45.34	43.91	50.54	60.1	-20.7	11.5
4	Redgram	Kg	21.60	29.6	32.68	34.04	32.09	37.0	15.0	-1.8
5	Dhall	Kg	33.00	34.61	42.13	46.02	50.16	4.9	33.0	19.1
В	Other Food Items									
6	Milk (Milma)	Lr	14.60	14.93	16.00	17.00	19.00	2.3	13.9	18.8
7	Egg (Hen's Nadan)	Dozen	29.60	30.07	34.72	36.96	38.95	1.6	22.9	12.2

8	Sugar (OM)	Kg	18.70	19.72	14.61	14.69	20.27	5.5	-25.5	38.7
C	Oil and Oil seeds									
9	Coconut Oil	Kg	63.80	56.27	53.43	57.88	67.04 (Lr.)	-11.8	2.9	-
10	Groundnut Oil	Kg	68.60	70.05	80.20	84.53	89.43 (Lr.)	2.1	20.7	-
11	Refined Oil	Kg	84.70	78.36	76.67	81.39	82.46 (Lr.)	-7.5	3.9	-
12	Coconut (without	100	625.8	557.13	521.7	550.63	701.40	-11.0	-1.2	34.4
	Husk)	Nos			0					
D	Spices &									
	Condiments									
	Coriander	Kg	30.4	38.65	55.96	55.04	110.77	27.1	42.4	97.9
14	Chillies (dry)	Kg	36.90	63.20	62.61	56.89	71.25	71.3	-10.0	13.8
15	Onion (small)	Kg	13.80	16.31	16.18	29.27	18.54	18.2	79.5	14.6
\mathbf{E}	Tubers									
16	Tapioca	Kg	6.20	6.73	7.46	7.51	8.55	8.5	11.6	14.6
17	Potato	Kg	12.70	13.43	15.03	16.09	14.20	5.7	19.8	-5.5
F	Fruits & Vegetables									
18	Banana	Kg	13.50	15.78	19.64	17.00	27.40	16.9	7.7	39.5

Source: Directorate of Economics & Statistics

15.6 The month-wise average retail prices of essential commodities is given in Appendix 15.2. The analysis during 2008 shows that the average retails prices of almost all the essential commodities showed an upward trend. The exception to this rule were redgram, potato, bitter gourd and snake gourd.

Consumption Expenditure

- 15.7 Monthly Per Capita Consumer Expenditure (MPCE) for a household is the total consumer expenditure over all items divided by its size and expressed on a per month (30 days) basis. A person's MPCE is that of the household to which he or she belongs. The report of 62nd round of Sample Survey on "Household Consumer Expenditure in India, 2005-06" carried out by National Sample Survey Organization (NSSO) relates to the period from July 2005 to June 2006.
- According to the latest NSS Report No. 523 (62nd Round) of 'Household consumer expenditure in India, 2005-06', the all India average MPCE for rural sector is Rs.624.5. As per this report the average MPCE for rural sector in Kerala is Rs.1055.6. A state-wise comparison shows that Kerala had the highest MPCE of Rs.1055.6 followed by Punjab Rs.1009.8. In Bihar, Chattisgah, Jharkhand, Karnataka, Madyapradesh, Orisa, Thripura, Utter Pradesh and West Bengal the average MPCE is below the national average, the lowest being in Chattisgarh (Rs.429). The per 1000 number of persons in the higher expenditure class in rural sector (1155 and above) is the highest in Punjab (297) followed by Kerala (287). The per 1000 number of persons in the lowest expenditure class in rural sector (0-235) is highest in Orissa (109) followed by Chattisgarh (89) and Bihar (54), which in Kerala is 5 persons. The all India average of this section is 20. (Appendix 15.3).
- The all India average MPCE for urban sector according to the NSS Report No. 523 of Household Consumer Expenditure in India 2005-06 is Rs.1170.6. According to the report, the average MPCE for urban sector of Kerala is Rs.1565.59. A state-wise analysis reveals that Himachal Pradesh had the highest MPCE of Rs.1686.04 followed by Kerala (Rs.1565.59), Delhi

^{*} End of September.

(Rs.1557.91) and Punjab (Rs.1520.08). The average MPCE of urban sector is the lowest in Bihar (Rs.683.60) preceded by Manipur (Rs.803.30), Orissa (Rs.900.20), Uttar Pradesh (Rs.907.87) and Madhya Pradesh (Rs.982.41). Among the states, the per 1000 number of persons in the highest expenditure class in urban sector (Rs.2540 and more) is the highest in Kerala (144) followed by both Himachal Pradesh and Punjab (133), Delhi (117) and Assam (101). It is zero in Manipur and 12 in Bihar. The concentration of persons to the lowest expenditure class in urban sector (0-335) is highest in Bihar (124) followed by Orissa (64) and Haryana (51). It is zero in Assam, Delhi, Jammu and Kashmir, Manipur, Mizoram, Tripura and North-Estern States, while in Kerala it is 10. The all India average of this class is 30. (Appendix 15.4).

Table 15.3

Trends in Average Consumer Expenditure per person for a period of 30 days in various NSS Rounds

			Rural			Urban	
Year & l	Round of NSS	Kerala	India	% variation over all - India	Kerala	India	% variation over all - India
	1	2	3	4	5	6	7
1970)-71 (25 th)	36.12	35.31	2.3	47.63	52.85	(-)9.9
1972	2-73 (26 th)	42.19	44.17	(-)4.4	58.27	63.33	(-)8
1977	7-78 (32 nd)	74.76	68.89	8.5	84.10	96.15	(-)12.5
1983	3-84 (38 th)	145.44	112.31	29.5	179.81	165.80	8.4
1987	7-88 (43 rd)	211.47	158.10	33.8	266.81	249.93	6.8
1990)-91 (46 th)	261.85	202.12	29.5	369.36	317.75	16.2
1993	3-94 (50 th)	390.40	281.60	38.6	493.50	457.70	7.8
1999	9-00 (55 th)	765.71	486.00	57.5	932.00	855.00	9.0
2000)-01 (56 th)	841.31	494.91	70.0	1203.65	914.58	31.6
2002	2-03 (58 th)	881.00	530.74	66.0	1266.64	1011.94	25.2
	January to mber (59 th)	981.00	554.0	77.0	1300.0	1022.00	27.2
January - June	Schedule Type - I	990.22	564.70	75.3	1371.51	1060.16	29.4
2004 60 th round	Schedule Type- II	1058.64	616.57	71.7	1403.89	1149.52	22.1
2004	l-05 (61st)	1013.15	558.78	81.3	1290.89	1052.36	22.7
2005	-06 (62nd)	1055.61	624.53	69.0	1565.59	1170.60	33.7

Source: N.S.S.O

Box 15.1 Level of Consumption in 2005-06

- ?? In 2005-06, nearly 19% of the Indian rural population belonged to households with monthly per capita consumer expenditure (MPCE) less than Rs.365, that is, spending less than Rs.12 per person per day on consumption, at 2005-06 prices.
- ?? In urban India, where expenditure levels were higher, 22% of the population belonged to households with monthly per capita expenditure less than Rs.580 (about Rs.19 per person per day).

Source: NSSO 62nd round.

5.10 The average consumer expenditure per person for a period of 30 days in various NSS rounds is given in Table 15.3. The average consumer expenditure in Kerala and all India were very close during the early 70's. However from the late 70's the average consumer expenditure of Kerala gradually surpassed the all India level both in urban and rural sectors. Rate of change in the rural sector was more pronounced than in the urban sector. The percentage variation of consumer expenditure in Kerala over all India in the urban sector stood at 8.4 percent in 1983-84, while it was 29.5 per cent in the rural sector. This rising trend continued in all the following Rounds and reached a peak level of 81.3 per cent in the rural sector during 2004-05 (61st Round) and 33.7 per cent in urban sector during 2005-06 (62nd Round).

Table 15.4
Trends in percentage distribution of Food and Non-food Expenditure classification in various NSS Rounds

Year &			Ru	ral		Urban				
Roun		K	Cerala	In	dia	K	Cerala		India	
NS	S	Food	Nonfood	Food	Nonfood	Food	Nonfood	Food	Nonfood	
1		2	3	4	5	6	7	8	9	
1970-71	(25 th)	70.21	29.79	73.58	26.42	63.34	36.66	64.41	35.59	
1972-73	3(26 th)	70.42	29.58	72.81	27.19	64.85	35.15	64.49	35.51	
1977-78	(32 nd)	60.75	39.25	64.35	36.65	60.61	39.39	59.98	40.02	
1983-84	(38 th)	61.56	38.44	65.56	34.44	58.24	41.76	58.69	41.31	
1987-88	(43 rd)	59.92	40.08	63.77	36.23	57.08	42.92	55.92	44.08	
1990-91	(46 th)	63.29	36.71	65.97	34.03	49.66	50.34	55.63	44.37	
1993-94	(50 th)	60.45	39.55	63.21	36.79	53.90	46.10	54.62	45.38	
1999-00	(55 th)	53.70	46.30	59.47	40.53	49.03	50.97	48.07	51.93	
2000-01	(56 th)	49.63	50.37	56.29	43.71	43.22	56.78	43.80	56.20	
2002-03	(58 th)	50.23	49.77	55.07	44.93	40.25	59.75	42.47	57.53	
2003 (Jan December		44.92	55.08	53.88	46.12	38.36	61.64	41.98	58.02	
January - June 2004	Sch. (Type I)	46.54	53.46	53.94	46.06	40.76	59.24	41.64	58.36	
60 th round	Sch. (TypeII)	50.23	49.77	57.96	42.04	40.92	59.08	46.00	54.00	
2004-05	(61st)	44.97	55.03	55.05	44.95	39.97	60.03	42.51	57.49	
2005-06	(62nd)	43.95	56.05	53.34	46.66	37.38	62.62	39.96	60.04	

Source: N.S.S.O.

- 15.11 An analysis of the percentage distribution of food and non-food items in various NSS rounds reveals that the share of food items to the total expenditure shows a declining trend in the past several Rounds. The share of expenditure on food items exceeded non-food items in the rural sector of Kerala till 55th Round. After that in all other Rounds excepting the 58th Round, non-food items has shown a higher share. At All India level, share of expenditure on food items exceeded non-food items in all Rounds in the rural sector. In the urban sector of Kerala, the share of non-food items exceeded food items much earlier than in the rural sector ie; from 46th Round. At the All India level, from the 55th round onwards the expenditure of non-food items exceeded that on food items. Table 15.4 presents the percentage distribution of expenditure on food and non-food items in various NSS Rounds.
- 15.12 As per the latest NSS Round (62nd Round) the expenditure on food items in the rural sector of Kerala was 43.95 per cent as against the All India figure of 53.34 per cent. In the rural sector, the expenditure on non food items stood at 56.05 per cent in Kerala and 46.66 per cent in India. This shows that the rural Kerala spends more on non food items than on food items. In the urban sector, the expenditure on food items in Kerala was 37.38 per cent and on non food items 62.62 per cent against the All India expenditure of 39.96 per cent and 60.04 per cent respectively. Both Kerala and India spends more on non-food items than on food items in the urban sector.

Box 15.2 Pattern of Consumption in 2005-06

- ?? Out of every rupee spent in 2005-06 by the average rural Indian on consumption, 53 paise was spent on food. Of this, 17 paise was spent on cereals and cereal substitutes, 8 paise on milk and milk products, 6 paise on vegetables, 5 paise on sugar, salt and spices, and 4 paise on beverages, refreshments and processed food and purchased meals.
- ?? Out of every rupee spent in 2005-06 by the average urban Indian on consumption, 40 paise was spent on food. Of this, 9 paise was spent on cereals and cereal substitutes, 7 paise on milk and milk products, 6 paise on beverages, refreshments and processed food, and 4 paise on vegetables.

Source: NSSO 62nd round.

Wholesale Price Index

15.13 The Wholesale Price Index (WPI) is the most popular measure of inflation in the country. The Wholesale Price Index of agricultural commodities in Kerala in 2008 (upto May) went up by 541 points compared to the corresponding period of 2007 registering an increase of 17.8 per cent (Table 15.5). The highest price hike was recorded for Molasses (32.6%) followed by rice (27.2%) and condiments and spices (15.9%). The price of food crops increased by 20.4 per cent while for non-food crops 12.9 per cent. The least price hike was recorded for fruits and vegetables (5.8%).

Table 15.5
Wholesale Price Index of Agricultural Commodities in Kerala - 2005-08.

Base: 1952-53=100

O1								% Variation over					
Sl.		Weigh				% Va	ariation	over					
No	Crops	t t			Year			previous year					
		·	2005	2006	2007	2007*	2008*	2006	2007	2008*			
A	Food Crops	635	2802	2960	3190	3121	3759	5.6	7.8	20.4			
a)	Rice	636	2614	2748	2915	2847	3622	5.1	6.1	27.2			
b)	Condiments & Spices	163	2748	2954	3209	3032	3514	7.5	8.9	15.9			
c)	Fruits & Vegetables	169	3522	3763	4381	4398	4655	6.8	16.4	5.8			
d)	Molasses	32	3005	2792	2293	2279	3022	-7.1	-17.9	32.6			
В	Non-food Crops	365	3036	2893	2879	2893	3265	-4.7	-0.5	12.9			
a)	Oil & Oil Seeds	695	3617	3273	3201	3209	3655	-9.5	-2.2	13.9			
b)	Plantation Crops	302	1693	2015	2133	2164	2317	19.0	5.9	7.1			
C	All Crops	1000	2887	2932	3077	3038	3579	1.6	5.0	17.8			

Source: Directorate of Economics & Statistics.

15.14 The month-wise wholesale price index of agricultural commodities in Kerala is given in Appendix 15.5. While analyzing the prices of commodities it can be seen that price of rice showed a continuous increase from July 2007. The price of condiments and spices also increased considerably during the period under review. Regarding other items, fluctuations are discernable for certain months. All items showed an increasing trend during 2008.

Parity Index

- 15.15 Parity index is a relative measure as to the gains or loss to farmers as a consequence of the price fluctuations in the economy. It is constructed to assess how the states consumer price situation affects the farming community. It depends on the prices paid and received by farmers. The index is a function of cost of farm cultivation, domestic expenditure and market rate of farm products.
- 15.16 The prices paid by farmers increased considerably year after year. Where as the prices received by them for their products are found to be less than what they pay (Table 15.6). In 2008 (upto February) the index of prices received by farmers over the corresponding period of the previous year increased by 184 points and the prices paid by farmers increased by 297 points significs that the price situation is unfavourable to the farming community. The farm cultivation cost increased by 584 points during 2008 compared to the previous year. The ratio of prices received and prices paid by farmers were well below 100 over the last several years reflecting the continuance of adverse terms of trade to the farming community.

^{*} upto May

Table 15.6 Index of Parity-Prices Received and Prices paid by Farmers from 1998-2008.

Base: 1952-53=100

Year	Prices received by farmers (Rs)	Growth Rate	Farm Cultivation Cost (Rs)	Growth Rate	Domestic Expenditure (Rs)	Growth Rate	Prices Paid by Farmers (Rs)	Growth rate	Parity index Col.2 to 8
1	2	3	4	5	6	7	8	9	10
1998	2447	-1.57	4895	7.09	2107	6.47	3212	6.82	76
1999	2907	18.80	5556	13.50	2246	6.60	3532	9.96	82
2000	2492	-14.28	6173	11.11	2384	6.14	3836	8.61	66
2001	1927	-22.67	6584	6.66	2489	4.40	4048	5.53	48
2002	1999	3.74	6684	1.52	2542	2.13	4122	1.83	49
2003	2454	22.76	7056	5.57	2615	2.87	4295	4.20	57
2004	2651	8.03	7360	4.31	2705	3.44	4459	3.82	59
2005	2440	-7.96	7703	4.66	2795	3.3	4640	4.1	53
2006	2474	1.39	8309	7.87	2947	5.44	4947	6.62	50
2007(P)	2737		8873		3046		5199		53
2007	2746	11.0	9135	9.9	3061	3.9	5288	6.9	52
2008(P)	2921	6.7	9457	6.6	3190	4.7	5496	5.7	53

Source: Directorate of Economics & Statistics

P-Provisional and up to February 2008.

Wages

15.17 The average daily wage rates of skilled and unskilled workers in agricultural sector from 1997-98 to 2007-08 are given in Tables 15.7 & 15.8. The daily wage rates of carpenter in the Agricultural sector increased by Rs.20.42 (9.02 percent) in 2007-08 over 2006-07 while that of Mason increased by Rs.20.25 (8.94 percent).

Table 15.7
Average Daily-wage Rates of Skilled Workers in the Agricultural Sector (Rs)

Year	Average Dail	ly Wage Rates	% Change Over Previous Year					
1 ear	Carpenter	Mason	Carpenter	Mason				
1996-97	128.54	127.81	19.91	20.62				
1997-98	145.94	144.04	13.54	12.70				
1998-99	155.42	154.80	6.50	7.47				
1999-00	165.35	164.70	6.39	6.40				
2000-01	176.15	173.85	6.53	5.56				
2001-02	182.42	180.06	3.56	3.57				
2002-03	190.07	186.30	4.20	3.5				
2003-04	192.00	188.00	1.02	0.9				
2004-05	199.23	194.08	3.82	3.2				
2005-06	207.88	206.25	4.34	6.27				
2006-07	226.33	226.50	8.88	9.82				
2007-08*	246.75	246.75	9.02	8.94				

Source: Directorate of Economics & Statistics

^{*} Upto February 2008.

15.18 In 2007-08, the daily wage rates of male unskilled workers in Agricultural Sector showed an increase of Rs.12.20 (6.82 percent) over 2006-07. At the same time for the female workers it was Rs.9.38 (7.57 percent).

Table 15.8 Average Daily-Wage Rates of Unskilled Workers in the Agricultural Sector

(Rs)

	Aver	age Daily Wage Rate	es of Paddy F	ield Workers
Year	Male	% Growth over previous year	Female	% Growth over previous year
1995-96	77.17	-	51.17	=
1996-97	92.18	19.5	60.52	18
1997-98	103.72	12.5	69.35	14.6
1998-99	111.76	7.8	71.42	3
1999-00	118.90	6.4	78.80	10
2000-01	123.15	3.6	82.38	4.5
2001-02	127.21	3	88.75	7.7
2002-03	144.90	13.9	99.73	12.4
2003-04	148.72	2.6	101.64	1.9
2004-05	165.58	11	115.75	13.9
2005-06	166.39	0.49	108.19	(-) 6.53
2006-07	179.01	7.58	123.96	14.58
2007-08*	191.21	6.82	133.34	7.57

Source: Directorate of Economics & Statistics

* Upto February 2008.

FOOD SECURITY

Public Distribution System (PDS)

- 15.19 The existing Public Distribution System in the State came in to existence with effect from 1-7-1966 with the implementation of Kerala Rationing Order 1966. The relevance and importance of Public Distribution System in the State, where there is more than 75% deficit in food grains, has got specific significance. In Kerala the coverage of ration population is nearly hundred per cent.
- 15.20 The prime objective of Public Distribution System is to ensure the availability of certain essential commodities for consumption at subsidized price fixed by the government to the people particularly the poor. It also helps to ensure availability of essential commodities in the market at reasonable prices as well as to prevent unfair trade practices like hoarding undue profiteering and black marketing.
- 15.21 The Public Distribution System in the State caters to the needs of 70,32,702 ration cardholders (as on 31.10.2008) by making available rationed articles at subsidized price through a network of 337 authorised wholesale dealers and 14229 authorised retail dealers. Table 15.9 discribes the position of P.D.S in Kerala from 2003-04 to 2007-08.

Table 15.9 Public Distribution System in Kerala – A profile (2003-04-2007-08)

(Nos.)

Sl.	Items	Unit	2003-04	2004-05	2005-06	2006-07	2007-08
No			2000 01	200100	2000 00	7 6986017 14101 20 34 302 509 0 13702 6 56050	200.00
1	2	3	4	5	2005-06 2006 6 7 67777075 6986 14187 141 21 2 35 3 298 30 595 50 13600 137 62586 560	7	8
1	a) Ration cards for families	No.	6446957	6611298	6777075	6986017	7025638
	b) Ration Permits for institutions	No.	15878	15215	14187	14101	13330
2	FCI Sub Depots	No.	22	22 22 21		20	20
3	Wholesale Shops a) Co-operative Sector	NO.	38	37	35	34	36
	b) Others	No.	269	288	298	302	302
4	Ration shops a) Co-operative Sector	No.	697	634	595	509	472
	b)Others		13441	13513	13600	13702	13776
5	Sugar (Allotted)	MT	36759	55690	62586	56050	57236
6	Kerosene (Allotted)	KL	288156	284998	277960	277966	277988

Source: Directorate of Civil Supplies

Public Distribution System in Kerala- Salient features.

15.22 Kerala has a long history of public distribution system, dating back to the beginning of Second World War. Universal and Statutory rationing was introduced on 17-1966 with the implementation of Kerala Rationing Order 1966. The Targeted Public Distribution System in the State has been implemented with effect from 1.6.1997 as decided by Government of India. Accordingly families under Above Poverty Line (APL) and Below Poverty Line (BPL) categories have been identified and distinctive ration cards under each category have been issued and food grains are distributed to the families at different prices.

15.23 Out of the 70,32,702 card holders in the State, 49,52,006 families are under Above Poverty Line (APL) 14,90,106 families are under Below Poverty Line (BPL) and 5,90,590 families are under Anthyodaya Annayojana Scheme (AAY) scheme. Food grains are allotted by the Government of India for distribution to Above Poverty Line (APL) and AAY cardholders at the rate of 35 Kg and for Below Poverty Line (BPL) cardholders at the rate of 25 Kg per month. District-wise distribution of rice and wheat to BPL and APL families during 2008 is given in Appendix 15.6 Retail prices of commodities issued through ration shops during October 2008 are shown in Table 15.10.

Table 15.10 Retail Price of Commodities issued through Ration Shops - 2008

Sl.No.	Items	Price as on April 2007 (Rs. per Kg)
1	Rice – APL	8.90
	BPL	3.00
2	AAY	3.00
3	Annapoorna rice	Free of cost
4	Wheat – APL	6.70
	BPL	3.00
5	Sugar - BPL	13.50
6	Kerosene/Litre	9.30 to 9.70

Source: Directorate of Civil Supplies

Central Allotment of Sugar and Kerosene

15.24 Central allotment of Sugar is restricted to BPL cardholders alone from February 2001 onwards. Thus central allotment sharply declined from 147517 MT in 2001 to 57236 MT in 2007-08. The central allocation of kerosene to the state also reduced year after year. Allotment of Kerosene to state was 346308 Kilo Litres in 2001-02 and it came down to 277988 Kilo Litres in 2007-08. Fig.15.1 and Fig.15.2 shows the trend in allocation of sugar and kerosene from central pool from 2001-02 to 2007-08. Monthly distribution of sugar and kerosene from 2004-08 is given in Appendix 15.7.

Fig.15.1 Central Allotment of Sugar (MT) 64537 70000 62586 57236 60000 55690 56050 50000 40000 43792 30000 36759 20000 10000 2001-02 2002-03 2003-04 2004-05 2005-06 2006-07 2007-08 Year

Source: Directorate of Civil Supplies.

Central Allotment of Kerosene(Lakh KL)

355000
340000
325000
310000
295000
280000
288156
277966

2003-04

2004-05

Year

2005-06

2006-07

2007-08

Fig. 15.2

Source: Civil Supplies Department.

2001-02

2002-03

Special Schemes

250000

i. Antyodaya Anna Yojana Scheme (AAY)

15.25 This scheme which was implemented in Kerala since Feb. 2001 provides 35 kgs of food grains per month @ Rs. 3 per Kg to the poorest of the poor families. Even though the Central Government have fixed the target of beneficiaries in the state initially at 2,38,200, as part of tribal welfare measures, all the eligible tribal families have been included under the scheme. During 2003 as per GO. (RT) No,.2853/01/LSGD dt. 13.9.01. The Government of India has decided to enhance the number of beneficiaries to 357400. As part of further expansion of the scheme the target further enhanced to 595800 (114400 during 2nd phase and 124000 during 3rd phase expansion). The Government of India is allotting 20855 MT of rice per month at the cost of Rs. 3/Kg and the State Government is meeting the expenses towards transportation and handling charges due to the dealers.

ii. Annapoorna Scheme (ANP)

15.26 Under this scheme 10 Kg of rice is distributed per month to destitute individuals of and above the age of 65 years free of cost. The Government of India has fixed the target as 44980 individuals, being 20% of persons who are eligible for national old age pension but not getting the pension. The scheme has been implemented in the state with effect from 14.02.2001. From 2002-03 onwards the scheme has been transferred to the state. The amount incurred over and above for the year 2000-01 is provided by the Govt. of India as Additional Central Assistance. The district wise distribution of food grains under AAY and ANP schemes during 2007-08 is given in Table 15.11.

Table 15.11
District wise Distribution of Food grains under AAY and ANP Schemes 2007-08 (MT)

Sl. No.	Name of District	P	AAY Scheme	}		ANP Scheme	
		Lifting	% of off take against allotment	Off- take	Lifting	% of off take against allotment	Off- take
1	2	3	4	5	6	7	8
1	TVM	28257	96.14	27168	485	83.1	403
2	Kollam	22546	95.59	21552	352	75.18	265
3	PTA	11002	97.38	10714	364	73.39	267
4	Alappuzha	19264	95.43	18384	220	78.93	174
5	Kottayam	15238	96.71	14737	336	80.51	271
6	Idukki	12259	98.25	12044	184	87.84	162
7	Ernakulam	16992	95.74	16268	488	77.5	378
8	Thrissur	24881	97.99	24381	252	80.97	204
9	Palakkad	20054	96.63	19378	440	79.38	349
10	Malappuram	22950	98.41	22584	508	79.39	403
11	Kozhikode	17990	96.39	17341	424	73.73	313
12	Wayanad	14754	99.52	14683	525	73.09	384
13	Kannur	15211	96.88	14737	398	76.77	306
14	Kasargod	8862	95.07	8425	424	66.51	282
	TOTAL	250260	96.86	242396	5400	77.02	4159

Source: Directorate of Civil Supplies.

iii Sampoorna Gramin Rozgar Yojana (SGRY)

15.27 The Prime Minister in his Independence Day Speech, on 15.5.2001 announced the introduction of a Universal Food for Work Programme to be called "Sampoorna Gramin Rozgar Yojana" in all the States/UTs for organizing various employment generation programmes. Under the Scheme, 50 lakh tones of foodgrains is to be allotted to the States/UTa free of cost by Ministry of Rural Development. Ministry of Rural Development reimburse the cost of foodgrains at economic cost prevailing at the time to Food Corporation of India (FCI). The Ministry of Rural Development, which is the nodal Central Ministry for the Programme Launched the scheme on 25.9.2001. The Ministry of Rural Development has been authorized, to communicate to FCI directly the allocations made to vanous State Governments under the scheme.

Allocation/offtake of food grains under the scheme during 2001-02 to 2007-08 is given in Table 15.12.

Table 15.12

Allocation/Offtake of Rice and Wheat under SGRY from 2001-02 TO 2007-08

(Figures in lakh tones)

						1001111 (01108)
Year	R	ice	Wł	neat	Total	Total
	Allocation	Offtake	Allocation	Offtake	allocation	offtake
1	2	3	4	5	6	7
2001-02	23.64	11.69	11.14	5.64	34.78	17.33
2002-03	28.01	21.15	13.90	18.87	41.99	40.02
2003-04	73.55	63.49	39.35	42.73	112.9	106.22
2004-05	32.64	30.27	16.99	19.73	49.63	50.00
2005-06	24.81	24.21	12.58	15.71	37.39	39.92
2006-07	12.04	11.66	4.89	4.77	16.93	16.43
2007-08	4.61	3.96	4.86	1.37	9.47	5.33

Source: Ministry of Consumer Affairs

Mid-day Meal Programme

15.28 The Mid-day Meal Programme aimed at providing nutritional support to primary school-going children class I to V, was introduced in 1995 by the Ministry of Human Resources Development. Under this scheme, every child is entitled for 3 kg wheat or rice per month for 10 months a year where food grains are distributed in raw form and at the rate of about 100 gms per child per day where cooked meal is being served with a minimum content of 300 calories and 8-12 gms of protein each day of school for 200 days.

15.29 The Supply of Commodities to schools for Noon – Meal scheme in Kerala is entrusted to SUPPLY CO. The required quantity of rice has been taken from FCI and the pulses from their own stock. The cost of food grains is met by Education Department. During 2007-08 the Corporation supplied 235546 Qtls of rice and 117108 Qtls of pulses to 11480 schools and about 26.83 lakh children got the benefit of the scheme. Details of mid –day Meal Programme in the state during the last five years are given in the Table 15.13

Table 15.13 Mid – day Meal Programme – 2003-04 to 2007-08

Sl.No.	Year	Schools (Nos.)	Children benefited	Supply of food grains (Quintal)			
		(1403.)	(Lakhs)	Rice	Pulses		
1	2	3	4	5	6		
1	2003-04	11480	26.46	243700	98241		
2	2004-05	11480	26.97	205582	96507		
3	2005-06	11480	27.45	219683	105503		
4	2006-07	11480	26.83	227994	1102857		
5	2007-08	11480	26.83	235546	117108		

Source: Civil Supplies Corporation

Issue of ration cards to families without house number.

15.30 With the objective of bringing all the families under TPDS and to ensure food security, it has been decided to issue ration cards to all families residing without house number on the

strength of residential certificates issued by the concerned member of local bodies. Accordingly, ration cards are issued to eligible families. The process of renewal of ration card is going on.

Kerala State Civil Supplies Corporation

15.31 The Kerala State Civil Supplies Corporation was set up in the state in 1974 with the mission of "food security for Kerala." and acts as a second line of PDS in the State by distributing essential commodities at reduced prices through a network of 2874 outlets spread all over the State.

Details of Outlets under the SUPPLY CO. from 2003-04 to 2007-08 is given in Table 15.14

Table 15.14 Outlets under Civil Supplies Corporation - 2003-04 to 2007-08

Sl.No	Name of Outlets	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	4	5	6	7	8
1	Maveli Store	834	866	869	874	865
2	Labham /Sabari Super Market	102	158	208	225	253
3	Supply co Super Market	10	10	10	11	9
4	Medical Stores	38	43	49	53	72
5	Petrol Bunk	10	10	10	11	11
6	LPG Outlet	4	4	3	3	3
7	ARD Sabari Stores	Nil	Nil	1240	1636	1659
8	Peoples Bazar	Nil	Nil	Nil	Nil	2
	Total	998	1091	1154	2813	2874

Source: Civil Supplies Corporation

The main activities of the Corporation are:

- ?? Distribution of essential items like rice, sugar, pulses & spices to consumers at the prices fixed by the Govt. Prices of essential items distributed by Supplyco is in an average 30% less than the open market rates.
- ?? Retailing of FMCG items at price less than the open market price. The customers will get a price benefit of 3%-7% less than the open market price.
- ?? Retailing of medicine by opening medical stores. The discount allowed to the customers for medicine is 10%-25%.
- ?? Act as nodal agency for the paddy procurement scheme of the Government and distribution of custom milled rice to the Ration retail dealers for issuing it to the cardholders. (A quantity of 251271 MT has been procured for the year 2007-08). MSP (Maximum Support Price) of Paddy Procured was increased to Rs.8.50 during September 2006 and Rs.9/- during September 2007 and Rs.10/- during February 2008. This is the maximum price issued for paddy procurement in national level.
- ?? Arranging process of wheat and distribution of fortified Atta through the Ration shops for the Government.

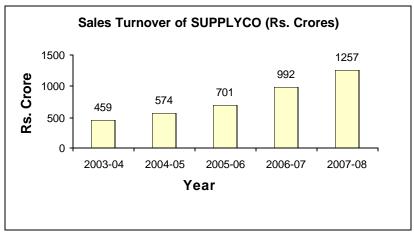
- ?? Supplyco is also a dealer of petroleum products like kerosene, Petrol, diesel and LPG.
- ?? Retailing of own branded products named "Sabari". Curry powders, coconut oil, tea, coffee and spices are marketed under this brand name with agmark quality.
- ?? Bulk sale of items to institutions.
- ?? Issue of essential items, sabari branded products and other FMCG items to the ARD sabari stores,Xtra shoppes (the retail chains opened in the petrol bunks), and Theera maithry super markets opened by the TEAP.
- ?? Act as nodal agency to implement the programme of the Government of India to start microbiology lab and food processing unit.
- ?? Conducting special markets for price control especially in festival seasons.
- ?? Direct procurement of pulses from other states like Rajasthan, Gujarath, Karnataka etc.
- 15.32 During 2007-08 Supplyco introduced a strategy of AQPBL ie, Availability (of all essential commodities), Quality (As per specification), Prices (lowest in the market), Behavior (polite) and Location (reachable to everyone) have ensured tremendous public confidence. The sales turn over of the Corporation increased to 1257 crore during 2007-08 from Rs. 992 crores in the previous year. Progress in turn over from 2003-04 to 2007-08 is depicted in Fig.15.3

The main achievements of Supplyco during 2007-08 is highlighted in the Box 15.3

Box 15.3 Main Achievements of Supplyco During 2007-08

- ?? For the first time in the history, Supplyco earned an operational profit of around Rs. 7.95 crores
- ?? Increase in sales turn over.
- ?? Opened 34 Maveli/Super Markets, 18 Medical stores and 5 Regional whole sale medical divisions .
- ?? Distributed free Onam kits to BPL cardholders and scheduled Tribes of Wayanad District and distributed five lakh free kits containing essential items to the fever affected persons.
- ?? Introduced a scientific inventory, financial and purchase management system and segmental accounting for the first time in the history of the Corporation.
- ?? Introduced a system of replacing goods if a customer has any complaint in respect of quality of items purchased.
- ?? Ensured availability of all items in outlets through better indenting and inventory management.
- ?? Converted supermarkets with sales above 25 lakhs per month to People's Bazaars to enable the customers to fetch their life's essentials under one roof.
- ?? When open market price of rice increased during November 2007 Supplyco started distribution of boiled rice @ 14 per Kg and Raw rice @ Rs.13.50 per Kg. The scheme is till continuing.

Fig. 15.3



Source: SUPPLYCO

Table 15.15
Profit & loss account of Supplyco
During the year 2003-04 to 2007-08

(Rs. Crores)

Particulars	2003-04	2004-05	2005-06	2006-07	2007-08
INCOME Sales/ Government Grant for Market Intervention	488.9	604.6	701.06	992.43	1256.90
Other Income	10.9	12.9	6.95	7.82	11.22
Increase/(Decrease) in Stock-in-trade	-4.3	11.9	2.7	12.85	5.25
Total	495.5	629.4	710.71	1013.1	1273.37
EXPENDITURE Materials Consumed	16.4	22.3	94.67	145.89	225.60
Purchase of Trading Goods	428.8	540.5	560.72	774.07	901.15
Manufacturing & Other Expenses	54.4	66.5	90.83	107.72	131.80
Interest & Bank Charges	68.8	72.5	1.77	2.14	3.5
Depreciation	1.2	1.5	2.12	3.12	3.36
Total	569.9	703.3	750.11	1032.94	1265.41

Source: SUPPLYCO.

15.33 Table 15.15 Reveals the profit and loss account of the corporation from 2003-04 to 2007-08. While the income accrued from various sources increased from Rs. 495.5 crores in 2003-04 to Rs. 1273.37 crores in 2007-08, the expenditure also increased from Rs. 569.9 crores to Rs. 1265.41 crores. For the first time since its inception, the Corporation earned a profit of Rs. 7.96 crores during 2007-08.

Chapter 16

EXPORT AND IMPORT

World Trade

- 16.1 World trade growth slid to 5.5% last year from 8.5% in 2006 and may grow even more slowly in 2008 at about 4.5% as sharp economic deceleration in key developed countries is only partly offset by continuing strong growth in emerging economies, according to World Trade Organization. The financial market turbulence, which has considerably reduced economic growth projections for some major developed markets, has clouded the prospects for world trade in 2008.
- 16.2 The present economic growth forecast for these markets is 1.1%. For developing countries, growth is forecast at above 5%. Together these could result in world output growth of 2.6% and a global trade expansion of about 4.5% in real terms, that is, discounting inflation.
- 16.3 Developing economies and the Commonwealth of Independent States (CIS) region however, maintained or strengthened their expansion of output, contributing more than 40% of world output growth in 2007. Developing countries' share of world merchandise trade (exports plus imports) reached a new record level of 34% in 2007. These two groups of countries are expected to record faster growth in imports than exports; together they are expected to contribute more than one half of global import growth in 2008.
- 16.4 The sharp rise of commodity prices particularly fuels and metals greatly improved the financial situation of most developing regions and boosted imports. But, higher energy and food prices translated into inflationary pressures worldwide.
- 16.5 The decline of the US dollar in relation to the euro and other European currencies inflated the dollar values of international trade transactions. The dollar value of world merchandise exports rose by 15% to \$13.6 trillion, and that of commercial services by 18% to \$3.3 trillion in 2007

16.6	In	real	terms		with	adjust	ment	for	price	and	exchar	ige r	ate	changes		real
mercha	ndis	se exp	ports w	ere ı	up by	5.5%	in 20	007	compa	red to	8.5%	in 20	006	given in	Appe	ndix
16.1																

Real merchandise trade and output developments in 2007

16.7 The slowdown in economic activity in developed countries was the major factor in the reduced expansion of global trade in 2007. Real merchandise export growth is provisionally estimated at 5.5% in 2007, nearly 3 percentage points less than in 2006 but still

close to the average rate of trade expansion over the last decade (1997-2007). The expansion of real trade exceeded global output growth by 2 percentage points (Figure 16.1).

Fig. 16.1

Growth in the volume of world merchandise trade and GDP, 1997-2007 Annual % change

Source: WTO Secretariat

16.8 South and Central America and the Commonwealth of Independent States (CIS) increased their real merchandise imports by about 20%, more than three times the global average in 2007. South and Central American exports were up by 5% and those of the CIS by 6% (Table 16.1 and Fig 16.2).

Figure 16.2

Real merchandise trade growth by region, 2007 Annual %

change

* Includes the Caribbean. Source: WTO Secretariat

Table 16.1

GDP and merchandise trade by region, 2005-07

Annual % change at constant prices

	(GDP		E	xports		In	nports	
	2005	2006	2007	2005	2006	2007	2005	2006	2007
World	3.3	3.7	3.4	6.5	8.5	5.5	6.5	8.0	5.5
North America	3.1	3.0	2.3	6.0	8.5	5.5	6.5	6.0	2.5
United States	3.1	2.9	2.2	7.0	10.5	7.0	5.5	5.5	1.0
South and Central America									
a	5.6	6.0	6.3	8.0	4.0	5.0	14.0	15.0	20.0
Europe	1.9	2.9	2.8	4.0	7.5	3.5	4.5	7.5	3.5
European Union (27)	1.8	3.0	2.7	4.5	7.5	3.0	4.0	7.0	3.0
Commonwealth of									
Independent States (CIS)	6.7	7.5	8.4	3.5	6.0	6.0	18.0	21.5	18.0
Africa and Middle East	5.6	5.5	5.5	4.5	1.5	0.5	14.5	6.5	12.5
Asia	4.2	4.7	4.7	11.0	13.0	11.5	8.0	8.5	8.5
China	10.4	11.1	11.4	25.0	22.0	19.5	11.5	16.5	13.5
Japan b	1.9	2.4	2.1	5.0	10.0	9.0	2.5	2.5	1.0
India	9.0	9.7	9.1	21.5	11.0	10.5	28.5	9.5	13.0
Newly industrialized									
economies (4) c	4.9	5.5	5.6	8.0	12.5	8.5	5.0	8.5	7.0

a Includes the Caribbean. **b** Trade volume data are derived from customs values deflated by standard unit values and an adjusted price index for electronic goods.**c** Hong Kong, China; Republic of Korea; Singapore and Chinese Taipei.

Source: WTO Secretariat.

India's Foreign Trade

16.9 Exports during December, 2008 were valued at US \$ 12690 million which was 1.1 per cent lower than the level of US \$ 12825 million during December, 2007. In rupee terms, exports touched Rs. 61715 crore, which was 22 per cent higher than the value of exports during December, 2007. Cumulative value of exports for the period April- December, 2008 was US\$ 131990 million (Rs.585594 crore) as against US\$ 112737 million (Rs. 454997) registering a growth of 17.1 per cent in Dollar terms and 28.7 per cent in Rupee terms over the same period last year.

16.10 Imports during December, 2008 were valued at US \$ 20256 million representing an increase of 8.8 per cent over the level of imports valued at US \$ 18610 million in December, 2007. In Rupee terms, imports increased by 34.2 per cent. Cumulative value of imports for the period April- December, 2008 was US\$ 225809 million (Rs. 1003947 crore) as against US\$ 171718 million (Rs. 693445 crore) registering a growth of 31.5 per cent in Dollar terms and 44.8 per cent in Rupee terms over the same period last year.

16.11 Oil imports during December, 2008 were valued at US \$ 4712 million which was 30.9 per cent lower than oil imports valued at US \$ 6824 million in the corresponding period last year. Oil imports during April- December, 2008 were valued at US\$ 78827 million which was 44.8 per cent higher than the oil imports of US\$ 54421 million in the corresponding period last year. Non-oil imports during December, 2008 were estimated at US\$ 15544 million which was 31.9 per cent higher than non-oil imports of US\$ 11786 million in December, 2007. Non-oil imports during April- December, 2008 were valued at US\$ 146982 million which was 25.3 per cent higher than the level of such imports valued at US\$ 117297 million in April- December, 2007.

16.12 The trade deficit for April- December, 2008 was estimated at US \$ 93819 million which was higher than the deficit at US \$ 58981 million during April- December, 2007.

Table 16.2

(Rs. Crores)

Table 16.2								
INDIAS EXPORTS	S AND IMPORST	S 2007-08						
	DECEMBER	APRIL-DECEMBER						
EXPORTS (including re-exports)								
2007-2008	50580	454997						
2008-2009	61715	585594						
%Growth 2008-2009/ 2007-2008	22.0	28.7						
IMPORTS								
2007-2008	73395	693445						
2008-2009	98515	1003947						
%Growth 2008-2009/ 2007-2008	34.2	44.8						
TRADE BALANCE								
2007-2008	-22815	-238448						
2008-2009	-36800	-418353						
*Figures for 2007-08 are the latest reprovisional.	evised whereas figur	res for 2008-09 are						

Source: Ministry of Commerce and Industry

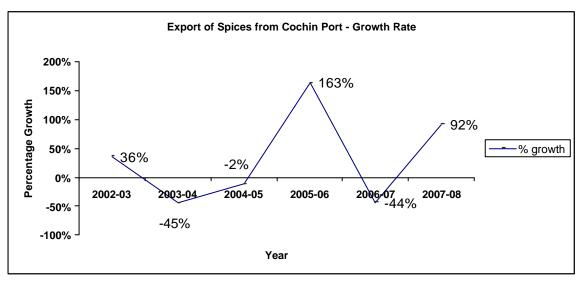
Export – Import Trade of Kerala through Cochin Port

16.13 A lion's share of Kerala's trade is being conducted through the port of Cochin. It is expected that the volume of export will be strengthened on completion of Vallarpadam container terminal and Vizhinjam Port. Important export items from Kerala are pepper, cashew, coir and coir products, tea, marine products and spice oils and oleoresins. Software export is also gaining momentum in recent years.

Commodity Composition of Exports though Cochin Port

16.14 Total value of foreign export through Kochi port increased from Rs. 10336.78 crores in 2006-07 to Rs. 11322.69 crores in 2007-08 and the quantity of export from 3474196 MT to 3183628 MT registering 8.36% decrease compared to 2006-07. It shows that the increase in value of export is not in relation to the increase in quantity. This is accounted by volatility if world commodity market particularly foreign exchange markets. All the items exported through Cochin Port except tea registered an increase in quantity. The quantity of tea export sharply declined to 76279 MT from 88610 MT showing 13.9% decrease compared to previous year. The highest upward trend was seen in Cashew kernals export with a growth rate of 37.86% in quantity. The export of tea shows a negative growth in export during 2007-08 but positive trends during 2006-07. Details of commodity wise export though Kochi Port is furnished in Appendix – 16.4. Growth rate of spices export through Cochin port from 2002-03 to 2007-08 is shown in Fig. 16.3

Fig. 16.3



Source: Cochin Port trust

Commodity composition of Kerala's Imports through Kochi Port

16.15 During 2007-08 total import registered through Cochin Port was 12264069 MT which shows an increase of 4.1% compared to previous year. The import of fertilizers and raw materials shows a decreasing trend of 34.37% in 2007-08 compared to 2006-07. News print import shows a growth rate of 26.18% in 2007-08 compared to 81.08% decrease in 2006-07. Export of iron steel and machinery decreased to 290918 tonnes during 2007-08 from 339674 in 2006-07. Commodity wise imports through Kochin port is given in Appendix. 16.5

Cargo handled by Kochi Port

16.16 The total export of Cargo (both coastal & foreign), from Kochi Port was 34.91 lakhs MT during 2007-08 showing an increase of 0.5% compared to previous year. The foreign export from Kochi Port during 2007-08 was 19.99 lakh MT. The trend in total import shows 4.1% increase in 2007-08 compared to 2006-07. While coastal import increased from 28.72 lakh MT during 2006-07, to 36.6 lakh MT in 2007-08, foreign import decreased from 89.11 lakh MT to 86.04 lakh MT registering a decrease of 3.44%. Details given in table 16.3

Table - 16.3 Cargo Handled at Cochin Port during 2002-03 to 2006-07

(In Lakh MT)

			Export			Import				
Traffic	2003-	2004-	2005-	2006-	2007-	2003-	2004-	2005-	2006-	2007-
	04	05	06	07	08	04	05	06	07	08
1	2	3	4	5	6	7	8	9	10	11
Coastal	8.97	11.16	11.35	15.69	14.92	28.44	26.26	29.61	28.72	36.6
Foreign	16.59	20.27	17.86	19.05	19.99	81.73	83.24	80.06	89.11	86.04
Total	25.56	31.43	29.21	34.74	34.91	110.17	109.5	109.67	117.83	122.64

Source: Cochin Port Trust

Export of Marine Products - National Scenario

16.17 Export of marine products during 2007-08 was 541701 MT valued Rs. 7620.92 crore equivalent to US \$ 1899.09 million registering a growth of 2.49% in \$ earnings, but a fall of 11.58% in quantity and 8.88% in rupee earnings compared to the previous year. The export trend of marine products from India is shown in Table 16.4

Table -16.4
Export Trend of Marine Products From India
(Qty: in tons, Value: Rs.Crore, \$: US \$ Million)

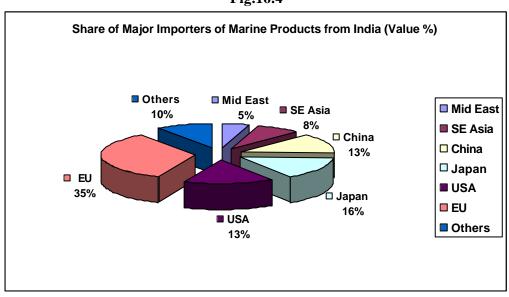
Details	2003-04	2004-05	2005-06	2006-07	2007-08	Growth in 2007-08 from 2006-07
1	2	3	4	5	6	7
Quantity (Tons)	412017	461329	512164	612641	541701	-70940 (-11.58%)
Rupees (crore)	6091.95	6646.69	7245.30	8363.53	7620.92	-742.61 (-8.88%)
US \$(million)	1330.76	1478.48	1644.21	1852.93	1899.09	46.16 (2.49%)

Source: MPEDA

16.18 Major items of export are frozen shrimp, frozen fish, frozen cuttle fish, frozen squid etc. Frozen shrimp continued to be the major item of marine products export sharing over 25% in quantity and 52% in value during 2007-08 though weak performance compared to previous three years. Details of item wise export of marine products from India for the last 5 years are given in Appendix 16.6

16.19 European Union is the largest group market for marine products from India with a share of 34.96% in the total marine export earnings followed by Japan (16.11%), USA (13.34%) and China (13.25%) Major importers of marine products from India and their share in value during 2007-08 are furnished in the diagram 16.4

Fig.16.4



Source: MPEDA

16.20 Export of marine products from India to all-important markets except Middle East recorded a decrease during 2007-08. Japan is the single largest market for Indian marine

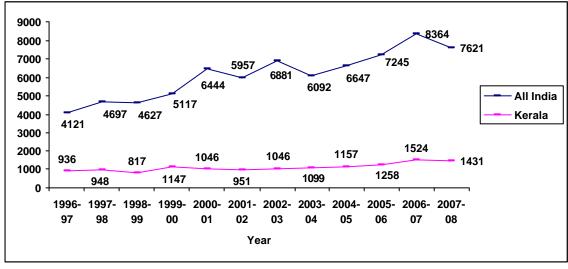
products in quantity (12.44%) and value (14.80%) during 2007-08. Details of market-wise export of marine products from India for the last 5 years are given in Appendix 16.7.

16.21 Regarding port-wise export of marine products, Kochi is at the top interms of value, accounting 18.16% of the total exports. In quantity terms, Pipavav is at the top position with a share of 27.64% during 2007-08.

Export of Marine Products from Kerala

16.22 During 2007-08 the export of marine products from Kerala were to the tune of 100318 tonnes valued Rs. 1430.94 crore which accounted for a share of 18.52% in quantity and 18.78% in value of marine products export from India. The export details of marine products from Kerala compared to all India in quantity and value for the last five years are given in Table 16.5 The export trend compared to all India in value is diagrammatically represented in Fig.16.5

Fig 16.5 Export trend of Marine products – Kerala & India (Rs. Crore) – 1996-97 TO 2007-08



Source: MPDEA

Table 16.5
Export trend of Marine products – India & Kerala 2003-04 to 2007-08

	INDIA		KER	ALA	KERALA's share%		
Year	Quantity	Value	Quantity	~ "		Value	
	(Tonnes)	(Rs.Lakh)	(Tonnes)	(Rs. Lakh	Quantity	value	
2003-04	412017	609195	76627	109913	18.6	18.04	
2004-05	461329	664669	87337	115742	18.93	17.41	
2005-06	512164	724530	97311	125765	19	17.36	
2006-07	612642	836353	108616	152412	17.74	19.00	
2007-08	541701	762092	100318	143091	18.52	18.78	

Source: MPDEA

16.23 A decline was observed in quantity and value of marine products exported from Kerala during 2007-08 compared to previous year. Frozen shrimp was the main item exported followed by frozen cuttle fish, squid, frozen fish etc. Details of item-wise export of marine products from Kerala during 2006-07 & 2007-08 are given in Table 16.6

Table -16.6 Item wise Exporsts of Marine Products from Kerala during 2006-07 and 2007-08

			2006-200	7		2007-2008	8
Sl.No	Item	Qty	Val.Rs Crores)	US\$ (Million)	Qty. (Tons)	Val.Rs. (Crores)	US\$ (Million)
1	2	3	4	5	6	7	8
1	Frozen Shrimp	29413	629.69	142.68	26566	547.50	136.15
2	Frozen fish	28036	155.76	34.38	30946	196.49	48.91
3	Frozen Cuttle Fish	21294	362.22	79.67	20484	376.36	93.71
4	Frozen Squid	16508	220.61	48.59	11486	159.54	39.8
5	Dried Items	116	4.70	1.05	73	3.14	0.79
6	Live Items	177	11.52	2.55	185	15.93	7.3.99
7	Chilled Items	2112	35.94	8.00	1682	31.70	7.92
8	Others	10960	103.64	23.00	8897	100.29	2499
	Total	108617	1524.11	339.91	100318	1430.94	356.26

Source: MPEDA

16.24 European Union accounted for the major share of exports from Kerala by purchasing 56.56% (value) marine products export from Kerala. As a single market Japan was the largest buyer from Kerala (10.85%) closely followed by USA (9.32%) Table 16.7 shows the marketwise export of marine products from Kerala.

Table – 16.7 Export of Marine Products from Kerala to Major Markets-2006-07 and 2007-08

GL NI			2006-2007	7		2007-08	
Sl.N o	Country	Qty (Tons)	Val.Rs (Crores)	US\$ (Million)	Qty. (Tons)	Val (Rs. crore)	US\$ (Million)
1	2	3	4	5	6	7	8
1	European Union	54503	862.07	190.57	52911	809.35	201.35
		50.60 0	1.70.01	22.002	50.50	155.01	20.50
2	Japan	7363.9	152.94	33.983	7253	155.31	38.68
3	USA	7876	139.67	30.938	7650	133.35	33.27
4	China	10238	104.32	25.83	4726	69.53	17.29
5	South East Asia	13023	87.07	19.129	12239	79.374	19.93
6	Middle East	3350.2	50.54	11.248	4098	56.74	14.05
7	Others	12263	127.48	28.222	11441	127.29	31.68
	Total	108617	1524.11	339.91	100318	1430.94	356.26

Source: MPEDA

Cashew Trade

Box: 16.3

The Share of agricultural products in the total export earnings of the country during 2007-08 is 6.66% and cashew kernels ranked fifth among them contributing 5.19%. This accounted to 0.35% of the total foreign exchange earnings of the country through exports.

16.25 The total export of cashew kernels from India during 2007-2008 was 1,14,340 MT valued at Rs. 2289 crores (US\$ 569 Mln). It showed a decrease of 3.54% in quantity, decrease of 6.77% in value in rupee term and an increase of 4.78% in US\$ terms in comparison with the export of 1,18,540 MTcashew kernels valued at Rs.2,455 crores (US\$ 543 Mln) during 2006-2007.

Table – 16.8 Export of Cashew Kernels: Kerala and India (2003-04 to 2007-08) (Quantity in MT and Value in Rs. Crors)

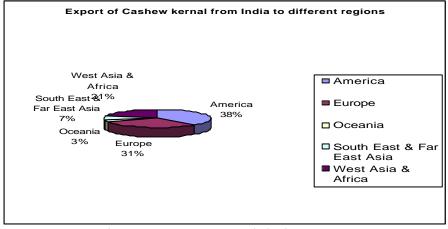
Year	Kerala*		Inc	dia	Share of Kerala (%)		
	Quantity	Value	Quantity	Value	Quantity	Value	
2003-04	68119	1204.56	100828	1804.43	67.56	66.76	
2004-05	79950	1715.94	126667	2709.24	63.12	63.34	
2005-06	74376	1622.82	114143	2514.86	65.16	64.53	
2006-07	72860	1504.87	118540	2455.15	61.46	61.29	
2007-08	69298	1395.02	114340	2288.90	60.61	60.95	

*Export through Cochin Port.

Source: The Cashew Export Promotion Council of India.

16.26 Out of the total quantity of cashew kernels exported during 2007-08, 38.29% were to American zone. European zone accounted for 30.70%, West Asian zone for 19.56%, South East and Far East Asian zone for 6.90%, Oceanic zone for 2.86% and American zone for 1.69%. There was a decrease of 8.73% in exports to American zone and 16.35% to European zone. Exports to West Asian Zone, South East and Far East Asian Zone and oceanic zone showed an increase of 17.53%, 16.63% and 109.68% respectively during the current year compared to 20006-07. Export of cashew kernels to different regions is diagrammatically represented in Fig 16.6.

Fig. 16.6



Source: Cashew Export Promotion Council of India

16.27 A declining trend was observed in the export of cashew nut shell liquid from India during the years 2006 and 2007 and an increasing trend was observed in 2008. The export during 2007-08 was 7813 MT valued at Rs. 11.98 crores as against 6139 MT valued at Rs. 10.29 crores during 2006-07. USA is the prime market, which shared 70.55% in quantity and 63.27% in value during 2007-08. Country wise export is given in Table 16.9.

Table. 16.9 Country-wise Export of Cashew nut Shell Liquid from India 2005-06 to 2007-08 (Quantity: MT, Value: Rs.Crore)

Sl.		200	5-06	200	6-07	200	7-08
No	Countries	Qty (MT)	Value (Rs.	Qty	Value	Qty (MT)	Value (Rs.
140			Crs.)	(MT)	(Rs. Crs.)		Crs.)
1	USA	5828	5.97	4780	7.35	5512	7.58
2	Korea Rep.	588	1.13	1115	2.38	1010	1.96
3	China	0	0.00	32	0.06	638	1.15
4	UK	0	0.00	0.40	0.00	317	0.62
5	Japan	31	0.09	148	0.30	206	0.36
6	Zimbabwe	16	0.03	64	0.19	80	0.21
7	Indonesia	0	0.00	0	0.00	32	0.06
8	Egypt	0	0.00	0	0.00	16	0.03
9	UAE	0	0.00	0	0.00	3	0.01
10	Total	6463	7.21	6139	10.29	7813	11.98

Source: Cashew Export Promotion Council

16.28 The share of Kerala to India's export of Cashew nut shell liquid increased to 69.2% and quantity 61.9% in value during 2007-08. The contribution was 60.8% in quantity and 55% in value during 2006-07. The details of export of cashew nut shell liquid from Kerala and India are furnished in the Table. 16.10 and the trend in the cashew nut shell liquid export from Kerala for the last five years furnished in Fig. 16.7.

Fig. 16.7 Trend of Cashew nut shell liquid export from Kerala (Qty. Tons.) 8000 6784 6674 7000 5834 6000 5410 5000 3736 4000 3000 2000 1000 0 2003-04 2004-05 2005-06 2006-07 2007-08 Year

Source: Cashew Export Promotion Council.

Table. 16.10
Export of Cashew nut shell Liquid – Kerala & India (2003-04 to 2007-08)
(Quantity in MT and value in Rs. Crores)

Year	Kera	ıla*	India**		
1 Cui	Quantity	Value	Quantity	Value	
1	2	3	4	5	
2003-04	6784	6.68	6926	7.03	
2004-05	6674	6.58	7474	7.91	
2005-06	5834	5.97	6405	7.09	
2006-07	3736	5.70	6139	10.29	
2007-08	5410	7.41	7813	11.97	

*Export through Cochin Port

Source: The Cashew Export Promotion Council of India

16.29 The total raw nuts imported to India during 2007-08 increased by 3.4% in quantity and 3.6% in value compared to 2006-07. Kerala imported 372497MT raw cashew nut valued at Rs.1071.21 crores. Details of import of raw cashew nut by India and Kerala are furnished in Table 16.11

Table - 16.11 Import of Raw Cashew nuts: Kerala and India (2003-04 to 2007-08) (Quantity in MT Value in Rs. Crores)

Year	Kera	ala*	India**		
	Quantity Value		Quantity	Value	
1	2	3	4	5	
2003-04	294552	909.45	452398	1400.90	
2004-05	283149	1055.08	578884	2183.26	
2005-06	306765	1134.83	565400	2162.95	
2006-07	322443	971.79	586044	1811.62	
2007-08	372497	1071.21	605970	1746.80	

*Import through Cochin Port

Source: The Cashew Export Promotion Council of India

Coffee

16.30 Export of Coffee from India in terms of quantity decreased from 249029 MT in 2006-07 to 218939 MT during 2007-08 showing 12.08% decrease in quantity and the value realized was Rs.2045.52 crores. The value realised increased by 1.87% compared to 32.9% of previous year. Major share of total coffee export from India was to Italy. During 2007-08 Italy imported 53804 MT of coffee followed by Russia and Germany. Details of coffee export to major countries from 2002-03 to 2007-08 given in Appendix 16.12. Export details of coffee from India during 2002-03 to 2007-2008 given in table 16.12.

16.31 Out of the total coffee export from India the highest contribution is from Cochin port constituting 38.53% of the total export. An increase of 18.96% in quantity export was raised from Cochin Port compared to previous year. Details of port wise export value of coffee from India during 2006-07 and 2007-08 shown in Fig.16.8.

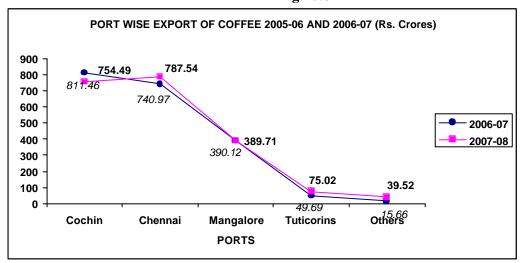
Evport of	Coffee	from	India	(2002-03 to	2007-08)
EXDOCT OF	Conee	: irom	maia	(2002-05 10	ZUU/-UO)

Year	Quantity MT	Value (Rs. Lakhs)	Value (US\$ Million)	Unit Value (Rs./tonne)
1	2	3	4	5
2002-03	207333	1051.45	233.89	50713
2003-04	232684	1158.45	262.03	49786
2004-05	211765	1224.67	294.64	57831
2005-06	201555	1510.38	352.93	74936
2006-07	249029	2007.90	455.18	80629
2007-08 *	218939	2045.52	502.65	93428

Source: Coffee Board

*Provisional

Fig.16.8



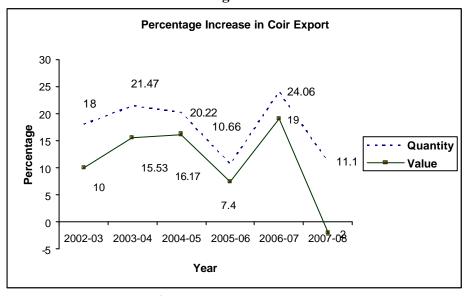
Source: Coffee Board.

Coir & Coir Products

16.32 Export of Coir and Coir products from India during the period 2007-08 recorded an all time high level with impressive increase in both quantity and value. In value terms, the coir exports stood at 592.88 crores attaining -2% growth in value by exporting 1.88 lakh tonnes of Coir Products. The increase recorded in quantity is 18812 tonne and decrease in value it is Rs.12.28 crores. The increasing export trend in value and quantity from 2003-04 to 2007-08 is furnished in Fig. 16.9. Quantity export recorded 24% increase compared to previous year. The export value surpassed the target set forth at Rs.572 crores achieving 6% increase over the target.

16.33 During 2007-08 export of Coir fiber, coir pite, coir rope, geo textiles, powerloom matting, rubberized coir, tuftedn mats shows an increasing trend both terms of value and quantity compared to 2006-07. During 2007-08 the export of handloom mats the quantity decreases to 40917.35 tonnes from 42986.07 tonnes compared to 2006-07 shows 4.8% decrease in quantity and the value decreases to 11.22%. During 2007-08 a decreasing trend shows in the export of curled coirrugs, coiryarn, handloom matings, powerloom mats both in quantity and value. Details of export of coir and coir products of India for the last five years furnished in Appendix 16.13.

Fig.16.9



Source: Coir Board

16.34 The number of countries importing coir and coir products from India increased to 105 from 97 last year. US continues to be the single largest market accounting for 33.82% of the total followed by Netherlands 8.36%. The US, UK, Germany, Netherlands, Italy, Spain, Canada, France Australia and Belgium are the major markets for coir products. Details of major country wise export of coir product from India is given in Appendix 16.14.

CHAPTER 17

INSTITUTIONAL AND BANK FINANCE

The Indian economy continued to exhibit moderate growth amidst growing uncertainties in the global economy. A growing economy needs investment to sustain its growth process. Such investments can be quickly and efficiently undertaken if investors have access to a well developed financial market. Banks have played the role of intermediaries matching savers with investors. As public sector banks still own about 71 per cent of the assets of the banking system, they continue to play an important role in responding to the changes in the economic environment. A number of policy initiatives have been taken by the Reserve Bank of India to make the banking system more responsive to the requirements of the economy as well as to strengthen its role in making growth more inclusive. However, the system needs to change significantly if it is satisfactorily to address the credit requirements of the rural and unorganized sectors of the economy.

Financial stability in India has been achieved through perseverance and prudential policies that prevented unrestricted exposure to international shocks and volatility. As a result, to a certain extent Financial markets remained orderly and Financial Institutions especially banks, remained financially sound. The Reserve Bank's broad approach to financial sector reform has been to develop institutional and financial infrastructure and lay down appropriate regulatory and supervisory régime to ensure financial stability.

Institutional Finance

- 17.2 The flow of credit by Financial Institutions during 2007-08 revealed that NABARD has disbursed an amount of Rs.9046.27 crore at all India level against Rs.8795.02 crore during 2006-07. The disbursement of credit by NABARD in Kerala during 2007-08 was Rs. 570.88 crore including the disbursement towards KSCARDB. Andhra Pradesh received the highest assistance of Rs.1412.14 crore (15.61%) followed by Uttarpradesh Rs.1174.85 crore (13%).
- 17.3 The State wise disbursements by NABARD during 2007-08 and State-wise cumulative disbursement by NABARD (up to March 2008) are given in Appendix 17.1 and Appendix 17.2.

Bank Finance

- The number of bank branches of all scheduled commercial banks in India grew from 70711 of March 2007 to 86764 at the end of March 2008, an increase of 16053 branches within one year. Of this 86764 branches, 30732 are rural branches, 17212 are semi urban branches, 26382 are urban branches and 12438 are metropolitan branches. On a comparison with March 2007 the number of metropolitan bank branches rapidly grew and other bank branches gradually increased within one year. The distribution of 75902 bank branches are spread over 15 major states. The largest number of bank branches are in Uttar Pradesh (10272 Nos) followed by Maharashtra (9507 Nos) and Andhra Pradesh (6858 Nos). The State wise distribution of commercial bank branches and population per bank office are given in Appendix 17.3.
- 17.5 At the end of March 2008, the total number of commercial bank branches in Kerala was 3836 an increase of 163 branches from the last year. Of this 329 are rural branches, 2576 are semi- urban branches and 931 are urban branches. On comparison with other 14 major states in India, the highest number of semi urban bank branches are in Kerala. Of the total commercial banks in the state, public sector banks account major portion of the branch net work.

17.6 The state wise distribution of number of scheduled commercial Bank branches in rural, semi urban, urban and metropolitan areas and their percentage to all India total are furnished in Table 17.1.

Table 17.1 State-wise distribution of Scheduled Commercial Bank Branches at the end of March 2008

Sl.	State	Rur	al	Semi U	J rban	Urb	an	Metroj	olitan	Tota	al
No	State	No.	%	No.	%	No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhrapradesh	2279	7.4	1426	8.3	2285	8.7	868	7.0	6858	8.0
2	Assam	775	2.5	296	1.7	246	0.9	-	-	1317	1.5
3	Bihar	2324	7.6	777	4.5	575	2.2	218	1.8	3894	4.5
4	Gujarath	1423	4.6	907	5.3	1709	6.5	1125	9.0	5164	6.0
5	Haryana	663	2.2	402	2.3	908	3.4	104	0.8	2077	2.4
6	Karnataka	2113	6.9	1094	6.4	2183	8.3	1040	8.4	6430	7.4
7	Kerala	329	1.1	2576	15.0	931	3.5	-	-	3836	4.4
8	Madhyapradesh	1708	5.6	861	5.0	1112	4.2	460	3.7	4141	4.8
9	Maharashtra	2073	6.8	1269	7.4	3570	13.5	2595	20.9	9507	11.0
10	Orissa	1594	5.2	429	2.5	478	1.8	-	-	2501	2.9
11	Panjab	1082	3.5	870	5.1	1091	4.1	439	3.5	3482	4.0
12	Rajasthan	1726	5.6	905	5.3	1063	4.0	338	2.7	4032	4.7
13	Tamil Nadu	1644	5.4	1643	9.6	2154	8.2	932	7.5	6373	7.4
14	Uttar Pradesh	4672	15.2	1578	9.2	2733	10.4	1289	10.4	10272	11.8
15	West Bengal	2280	7.4	567	3.3	2000	7.6	1171	9.4	6018	6.9
	Total	26685	86.8	15600	90.6	23038	87.3	10579	85.1	75902	87.5
	All India	30732	100	17212	100	26382	100	12438	100	86764	100

Source: Quarterly Statistics by Reserve Bank of India, March 2008.

Advances by Scheduled Commercial Banks

17.7 During the current year the total advances financed by scheduled commercial banks at all India level grew by 444999 crore to reach at Rs.2394566 crore in March 2008 as against the total advance of Rs.1949567 crore at the end of March 2007. The growth in advance at all India level was only 22.83 per cent which is lower than that of last year. According to the statistics of RBI, the major chunck of this advance has gone to 15 major states. This year also the highest amount of credit was received by Maharashtra Rs.787840 crore at the end of March 2008 an increase of 145670 crore from the previous year. The advance amount released to Tamil Nadu is Rs.226830 crore and to Karnataka Rs.164110 crore. Kerala received Rs.71226 crore at the end of March 2008 against Rs.60615 crore during the same period in 2007. The increase in advance all together made by all commercial banks in Kerala during 2008 is Rs.10611 crore compared to the last year.

17.8 State wise disbursement of advances by scheduled commercial banks as on March 2007 and March 2008 with their percentage to all India total are given in Table 17.2.

Table 17.2 State-wise Advances Financed by Scheduled Commercial Banks at the end of March 2007 and March 2008.

(Rs. crore)

Sl. No	State	Advanc	es 2007	Advan	ces 2008
51. 110	State	Amount	Percentage	Amount	Percentage
1	2	3	4	5	6
1	Andhrapradesh	124314	6.4	162595	6.8
2	Assam	11154	0.6	13057	0.6
3	Bihar	17156	0.9	20373	0.9
4	Gujarath	76916	3.9	99515	4.2
5	Haryana	34951	1.8	45048	1.9
6	Karnataka	133177	6.8	164110	6.9
7	Kerala	60615	3.1	71226	3.0
8	Madhyapradesh	40737	2.1	49177	2.0
9	Maharashtra	642170	32.9	787840	32.9
10	Orissa	26649	1.4	30396	1.3
11	Panjab	52812	2.7	66998	2.8
12	Rajasthan	48656	2.5	59904	2.5
13	Tamil Nadu	183161	9.4	226830	9.5
14	Uttar Pradesh	81699	4.2	95942	4.0
15	West Bengal	94142	4.8	115255	4.8
	Total	1628309	83.5	2008266	83.9
	All India	1949567	100	2394566	100

Source: Quarterly Banking Statistics, March 2007 & 2008, RBI.

17.9 As per State Level Bankers Committee (SLBC) statistics 2008, the total advances disbursed by banks in Kerala at the end of March 2008 is Rs.75305 crore (Appendix 17.7). The State Bank group disbursed an amount of Rs.24787 crore (32.9%) which shows a robust growth in disbursement from the last fiscal. The private sector banks including IDBI disbursed Rs.25054.6 crore which constitute 33.3% of total advances where as the nationalized banks disbursed Rs.21682 crore which accounts 28.8%. State Bank group and the private sector banks have higher shares in the total advances outstanding in the state closely followed by the Nationalized Banks.

17.10 Advances disbursed by scheduled commercial banks from 1985 to 2008 in Kerala as well as in India with percentage of annual growth and incremental advance in Kerala are furnished in Table 17.3.

Advances by Public Sector Banks.

17.11 Total advances by public sector banks in India during 2007-08 was Rs.1760619 crore (Appendix 17.4) from which Kerala received a mere share of Rs.49749 crore. Out of 15 major states taken for consideration, the highest amount of credit was received by Maharashtra Rs.477262 crore. Next to it was Tamil Nadu which received an amount of Rs.154645 crore. The third and fourth position occupied by Andhra Pradesh (Rs.135656 crore) and Karnataka (Rs.124979 crore) respectively. The state wise deposits, credits and CD ratio of public sector banks in India are shown in Appendix 17.4.

Table 17.3 Advances by Commercial Banks in Kerala and India (From 1985 to 2008)

(Rs. crore)

		Advar	nce in Kerala	Incremental	Adva	nce in India
Sl. No.	Year	Amount	% of growth	Advance in	Amount	% of growth
				Kerala		
1	2	3	4	5	6	7
1	1985	2181	-	-	48953	-
2	1986	2371	8.7	190	56067	14.4
3	1987	2769	16.8	585	63308	20.1
4	1988	3116	12.5	347	70536	11.4
5	1989	3701	18.8	585	83719	20.1
6	1990	4118	11.3	417	101453	19.8
7	1991	4638	12.6	520	116301	14.6
8	1992	5003	7.9	365	125592	8.0
9	1993	5818	16.3	815	151982	21.0
10	1994	6442	10.4	624	164418	8.2
11	1995	7797	21.0	1355	211560	28.7
12	1996	8961	14.9	1164	254015	20.1
13	1997	10482	17.0	1523	278401	9.6
14	1998	12274	17.1	1793	324079	16.4
15	1999	13577	10.6	1303	368837	13.8
16	2000	15941	17.4	2364	435958	18.2
17	2001	19180	20.3	3239	511434	17.3
18	2002	22062	15.0	2882	589723	15.3
19	2003	27007	22.4	4945	759210	28.7
20	2004	31548	16.8	4541	890866	17.3
21	2005	39351	23.5	7803	1157807	30.0
22	2006	49153	24.91	9802	1517497	31.1
23	2007	60615	23.32	11462	1949567	28.50
24	2008	71226	17.51	10611	2394566	22.83
Average	e					
25	1985-1989	2828	14.2	427	64517	16.5
26	1990-1994	5204	11.7	548	131949	14.30
27	1995-1999	10618	16.12	1428	28738	17.72
28	2000-2004	23148	18.38	3594	637438	19.40
29	2005-2008	55086	22.31	9920	1754859	28.10

Source: Quarterly Banking Statistics by Reserve Bank of India.

Growth of Bank Deposit

17.12 Policy measures initiated by the Reserve Bank of India during 2007-08 were aimed at enhancing the prudential standards of the Banking System in order to make it more resilient and align these with the international best practices while ensuring customer protection. As per RBI statistics, the total deposits by all scheduled commercial banks at all India level in March 2008 is Rs.3228817 crore. This represents a growth of 24.2 per cent over the last year. As at the end of March 2008, the total deposit of Kerala was Rs.109103 crore with an increase of Rs.13821 crore and the corresponding figures in 2007 was Rs.95282 crore. Maharashtra is the top most state by mobilizing the largest amount of deposit of Rs.832063 crore during the year under review. Uttarpradesh with Rs.213594 crore and Karnataka with Rs.210349 crore stood in the second and

third position. State wise deposits during 2007-08 and their percentages to all India total are furnished in Table 17.4.

Table 17.4 State-wise Deposits in Scheduled Commercial Banks as at the end of March 2007 and March 2008.

(Rs. crore)

Sl. No	State	Deposi	ts 2007	Depo	sits 2008
51. 140	State	Amount	Percentage	Amount	Percentage
1	2	3	4	5	6
1	Andhrapradesh	141966	5.5	177567	5.5
2	Assam	25757	1	31666	1
3	Bihar	56916	2.2	68597	2.1
4	Gujarath	119224	4.6	152691	4.7
5	Haryana	60669	2.3	74367	2.3
6	Karnataka	171898	6.6	210349	6.5
7	Kerala	95282	3.7	109103	3.4
8	Madhyapradesh	65498	2.5	81502	2.5
9	Maharashtra	655402	25.2	832063	25.8
10	Orissa	41638	1.6	53732	1.7
11	Panjab	84621	3.3	101046	3.1
12	Rajasthan	58973	2.3	73020	2.3
13	Tamil Nadu	163166	6.3	199949	6.2
14	Uttar Pradesh	181006	7	213594	6.6
15	West Bengal	150412	5.8	187610	5.8
	Total	2072428	79.7	2566856	79.5
	All India	2598823	100	3228817	100

Source: Quarterly Banking Statistics, March 2007 & 2008, RBI.

17.13 According to SLBC report, the total deposits of the commercial banks in Kerala was Rs.105488 crore in March 2008 with an annual growth of 11.62% (Table 17.5). Another significant feature of growth in the deposit is that the share of domestic deposit to the total deposit is gradually increasing. The share of domestic deposit to total deposit which was 52.51 per cent during 2002 has steadily increased to 71.67 per cent in 2008. Banking group wise comparison (Appendix 17.7) reveals that 33.09 per cent of the total deposit in the state is with State Bank group and 32.08 per cent with the private sector bank group.

NRE Deposits

17.14 As per SLBC report (Kerala) the NRE deposits in Kerala was Rs.29889 crore as at the end of March 2008 when compared to same period during 2007 when the NRE deposit was Rs.33304 crore; showing a sharp fall of Rs.3415 crore (See Table 17.5). The NRE deposits constitute 28.3 per cent of the total deposits of commercial banks in the state. State Bank group holds the highest share (36.5%) in the NRE deposits followed by private sector banks (31.51%) and Nationalised Banks (30.4%).

17.15 Growth of bank deposits in Kerala from 1988 to 2008 are furnished in Table 17.5.

Table 17.5 Growth of Bank Deposit in Kerala 1988 to 2008

(Rs. crore)

	Total I	Deposit	NRE I	Deposit	Domestic	Deposit
Year	Amount	Annual Growth %	Amount	Annual Growth %	Amount	Annual Growth %
1	2	3	4	5	6	7
1988	4811	-	1369	-	3442	-
1989	5667	17.8	1584	15.7	4083	18.6
1990	6660	17.5	2012	27.0	4608	12.9
1991	7935	19.1	2304	14.5	5554	20.85
1992	9787	23.3	3039	31.9	6632	19.4
1993	12261	25.3	4499	48.0	7613	14.8
1994	15138	23.5	6015	33.7	8926	17.2
1995	17694	16.9	6886	14.5	10572	18.4
1996	20419	15.4	8103	17.7	12068	14.2
1997	23354	14.4	10178	25.6	13176	9.2
1998	27552	18.0	12735	25.1	14817	12.5
1999	31532	14.4	13329	4.7	18203	22.9
2000	38619	22.5	18724	40.5	19895	9.3
2001	44850	16.1	21431	14.5	23419	17.7
2002	51656	15.2	24534	14.5	27122	15.8
2003	59399	15.0	28696	17.0	30703	13.3
2004	65961	9.95	30100	4.89	35861	16.8
2005	69396	5.21	29121	-3.25	40276	12.3
2006	77677	11.93	30671	5.06	47006	16.7
2007	94510	21.07	33304	8.58	58393	24.22
2008	105488	11.62	29889	-10.25	75599	29.47

Source: SLBC, Kerala.

Credit Deposit Ratio

17.16 At All India level, the Credit Deposit Ratio of all scheduled commercial banks by the end of March 2008 stood at 74.2 per cent which was 75 per cent during March 2007. Among the states, the highest CD ratio was observed in Tamil Nadu (113.4%) followed by Maharashtra (94.7%) (Table 17.6). Considering the case of Kerala, as on March 2008 the CD ratio is 65.3 per cent which was 63.6 per cent in March 2007. As per the RBI statistics on public sector banks alone, CD ratio at all India level is 73.7% in March 2008 against 74.31% in March 2007. The CD ratio of Kerala for the public sector banks alone is 69.3% in March 2008 against 68.02% in March 2007. State wise deposits, credits and C.D ratio of scheduled commercial banks are furnished in Table 17.6.

Table 17.6 State wise deposits, credits and C.D ratio of all Scheduled Commercial Banks at the end of March 2008

Sl.	States	Deposits	Credits	C.D
No.		_		Ratio
1	2	3	4	5
1	Andhrapradesh	177567	162595	91.6
2	Assam	31666	13057	41.2
3	Bihar	68597	20373	29.7
4	Gujarath	152691	99515	65.2
5	Haryana	74367	45048	60.6
6	Karnataka	210349	164110	78
7	Kerala	109103	71226	65.3
8	Madhyapradesh	81502	49177	60.3
9	Maharashtra	832063	787840	94.7
10	Orissa	53732	30396	56.6
11	Panjab	101046	66998	66.3
12	Rajasthan	73020	59904	82
13	Tamil Nadu	199949	226830	113.4
14	Uttar Pradesh	213594	95942	44.9
15	West Bengal	187610	115255	61.4
	Total	2566856	2008266	78.2
	All India	3228817	2394566	74.2

Source: Banking Statistics Quarterly Handout, RBI.

17.17 As per SLBC report, the CD ratio of commercial banks in Kerala has increased by 1.3% during the financial year to reach 71.39% in March 2008. Considering the case of major banks operating in Kerala, the CD ratio of Syndicate Bank comes first with 88.41% and Bank of India comes second with a CD ratio of 80.91% in March 2008. The performance of other banks are State Bank of India 75.09%, State Bank of Travancore 68.82% and Union Bank of India 66.93% and so on. CD ratios of selected major banks operating in Kerala from 1992 to 2008 are furnished in Table 17.7.

Table 17.7 Credit Deposit Ratios of Selected Major Banks operating in Kerala (as on March 2008)

Name of Bank	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
State Bank of India	59.90	54.20	45.30	44.70	47.00	48.00	47.53	41.95	39.80	46.68	42.64	42.32	45.59	56.45	67.19	68.4	75.09
State Bank of Travancore	50.60	49.50	44.50	48.00	43.50	45.20	44.82	44.93	45.97	46.00	46.13	48.06	50.89	56.67	62.74	68.65	68.82
Canara Bank	41.50	37.10	29.00	28.00	30.40	35.10	40.37	39.05	36.95	37.41	42.45	45.84	50.09	59.91	67.32	61.23	64.23
Indian Overseas Bank	28.00	25.20	21.80	24.00	25.80	25.00	25.22	26.03	26.25	28.00	33.14	32.33	35.68	39.01	43.08	45.88	47.36
Syndicate Bank	37.30	33.70	27.90	26.40	33.00	29.20	31.25	33.13	34.94	32.79	31.00	34.17	41.27	63.26	70.27	78.03	88.41
Indian Bank	72.00	69.70	61.00	51.50	61.30	47.50	41.13	34.21	3259	35.53	29.80	31.78	33.61	35.59	43.67	51.03	54.98
Bank of India	36.00	39.30	37.30	35.90	39.20	34.00	34.21	28.80	32.83	34.08	31.20	59.31	62.48	80.61	96.64	103.95	80.91
Central Bank of India	58.00	58.80	46.00	53.00	50.30	44.00	42.38	42.84	35.48	37.03	35.00	35.26	53.79	63.70	66.95	73.47	65.69
Union Bank of India	57.00	47.60	44.50	45.00	45.70	47.30	47.30	51.47	51.36	45.00	49.97	53.54	61.33	81.57	90.80	73.08	66.93
Vijaya Bank	46.00	40.30	38.00	35.00	41.60	36.00	38.78	44.89	31.05	44.28	40.51	44.44	56.90	57.06	60.09	58.95	54.34
State Average	51.00	48.00	43.10	44.70	44.40	45.50	44.88	43.06	41.28	42.77	42.71	45.47	48.31	61.39	68.70	70.09	71.39

Source: SLBC, Kerala.

17.18 Share of NRE deposits (as percentage) and C.D. ratios of major banks in Kerala at the end of March 2008 are furnished in Table 17.8.

Table 17.8
Share of NRE Deposit (percentage) and CD Ratio of some major Banks in Kerala (as on March 2008)

Sl.	Name of Bank	Share of NRE	CD Ratio
No.		Deposit %	
1	2	3	4
1	State Bank of India	13.81	75.09
2	State Bank of Travancore	22.6	68.82
3	Bank of India	0.59	80.91
4	Canara Bank	11.54	64.23
5	Central Bank of India	1.27	65.69
6	Indian Bank	2.46	54.98
7	Indian Overseas Bank	4.54	47.36
8	Syndicate Bank	2.2	88.41
9	Union Bank of India	2.24	66.93
10	Vijaya Bank	0.79	54.34
	Total Nationalized Banks	30.4	66.76
11	Catholic Syrian Bank	3.01	43.33
12	Federal Bank	13.45	71.65
13	South Indian Bank	8.86	47.58
	Total Private Sector Banks	31.51	73.02
	Total Regional Rural Banks	0.65	108.34
	Total State	100	72.61

Source: SLBC, Kerala - March 2008.

17.19 Bank group wise total deposits, advances and C.D ratios in Kerala from 1990 to 2008 are given in Appendix 17.5.

17.20 The District wise details of banking statistics in Kerala, shows that the largest number of bank branches are in Ernakulam (579 Nos.), followed by Thrissur (438 Nos.), and Thiruvananthapuram (407 Nos.). This year also Ernakulam district stand first in mobilisation of deposits and disbursement of advances with Rs.26295 crore and Rs.18761 crore respectively (Appendix 17.6). Thiruvananthapuram district stand second with 17217 crore as deposit and 11021 crore as advances. Wayanad stands last with Rs.664 crore as deposits and Rs.1045 crore as advances. In the case of C.D. ratio the highest ratio is in Wayanad 157.41% then Idukki with 136.5%. Pathanamthitta stands last with C.D ratio of 32.6%. Of the total commercial banks in the state, Public sector banks account 66.7% of the branch net work. District wise and bank group wise banking statistics as at the end of March 2008 in Kerala is given in Appendix 17.6. Bank wise performance during 2007-08, in Kerala is given in Appendix 17.7.

Financial Inclusion

17.21 The Reserve Bank has emphasised access to banking services for all sections of the society and all region from time to time. These initiatives resulted in a sharp increase in the number of bank branches. But a large segment of the house holds was left outside the coverage of

the formal banking sector. Census data revealed that in 2001, the proportion of rural house holds availing banking (deposit) services was 30.1% while for urban house holds, it was 49.5%. The Reserve Bank initiated policies focusing on financial inclusion from the year 2005. In consonance with the above approach, introduction of "no frills" account with nil or low minimum balances as well as charges, that would make such accounts accessible to vast sections of the population. So far 340 districts have been identified for 100% financial inclusion. Notably all districts of Haryana, Himachal Pradesh, Karnataka, Kerala, Uttarkhand, Puducherry, Daman & Due, Dadra & Nagar Haveli, Goa and Lakshadweep have reported achieving 100% financial inclusion.

Housing Loans

Rs.13975.48 crore to 555382 beneficiaries as housing loan, corresponding figures for 2006-07 are 12564.33 crore to 504405 beneficiaries. During 2007-08, finance through direct housing was Rs. 13880.69 crore and that through indirect housing was Rs.94.79 crore. State Bank of Travancore alone issued Rs.3010.34 crore to 100541 beneficiaries, SBI disbursed Rs.2073.91 crore to 80155 beneficiaries. Among the Nationalised Banks Canara Bank stands top position with Rs.1058.24 crore to 32869 beneficiaries, Union Bank of India stands 2nd position with 853.78 crore to 25428 beneficiaries. Taking Bank group wise disbursement of house loans for 2007-08, State Bank group disbursed Rs.5120.61 crore to 181718 beneficiaries. Nationalised banks disbursed Rs.4648.55 crore to 156079 beneficiaries, RRB disbursed Rs.351.40 crore to 23554 beneficiaries, private sector bank disbursed Rs.3059.22 crore to 85582 beneficiaries, foreign banks disbursed Rs.68.79 crore to 835 beneficiaries and co-operative bank disbursed Rs.726.90 crore to 107614 beneficiaries.

Educational Loans

17.23 The report of SLBC reveals that at the end of March 2008, Banking sector in Kerala disbursed an amount of Rs.2682.34 crore to 180487 beneficiaries as Educational Loans. State Bank group disbursed Rs.1334.99 crore to 79092 beneficiaries, Nationalised bank group disbursed Rs.1006.63 crore to 73472 beneficiaries, RRB's disbursed Rs.82.38 crore to 8800 beneficiaries and private sector bank group disbursed Rs.188.01 crore to 13984 beneficiaries. State Bank of Travancore issued Rs.945.57 crore to 67221 beneficiaries, Canara Bank disbursed Rs.393.07 crore to 27971 beneficiaries.

Advances to Weaker Section and SC/ST

17.24 As per the SLBC report, during 2007-08 an amount of Rs.9724.06 crore has been disbursed to 2482353 beneficiaries of weaker sections in the state corresponding figures in 2006-07 was Rs.9255.68 crore to 2750797 beneficiaries. Weaker sections advances grew by Rs.468.38 crore during the last fiscal During 2007-08 the advances to SC/ST is Rs.1699.69 crore to 356586 beneficiaries against Rs.978.29 crore to 350934 beneficiaries. The growth of advances to SC/STs showed a sharp increase of Rs.721.4 crore during the last year. State Bank Group disbursed Rs.900.31 crore to 124750 beneficiances, Nationalised bank group disbursed Rs.717.31 crore to 189254 beneficiaries, RRB's disbursed Rs.34.31 crore to 28672 beneficiaries and Private Sector Bank disbursed Rs. 47.76 core to 13910 beneficiaries as SC/ST advances. Almost 97.19% of the SC/ST advances of the state contributed by public sector banks (including RRBs), while the share of private sector banks is just about 2.81%.

Micro Finance

- 17.25 Although the branch network of the formal financial institutions expanded rapidly from the early 1970s, a large segment of the population remained outside the banking fold, especially for its credit requirements. This led to the search for alternative policies and mechanism for reaching out to the poor to satisfy their felt needs. In this context, micro finance interventions were recognized all over the world as an effective tool that could raise incomes, contribute to individual and house hold security and change social relations for the better.
- 17.26 There are different models for purveying micro finance, actively associating in micro credit innovations in the state. The SHG Bank Linkage Programme is now rated as the fastest growing and most cost effective micro finance movement in the world. The SHG Bank linkage programme has emerged as the most important credit delivery mechanism for reaching the unreached and under reached in ensuring socio economic empowerment of the poor, particularly women.
- 17.27 As per SLBC report about 2.58 lakh SHGs maintain savings account having 310.83 crore with commercial banks as at the end of March 2008 in the state. Of this 2.58 lakh SHGs, 2.14 lakh SHGs are (83.03%) exclusive women SHGs and 0.41 lakh SHGs (15.82%) are formed under various government sponsored schemes. The State Bank group which disbursed 102.53 crore to 1.24 lakh SHGs comes first in the state.

CHAPTER 18

GENDER AND DEVELOPMENT

Even after independence and the constitutional guarantee of gender equality in 1950, the condition of women in India continued to remain marginalized in all the socio-economic, educational and political fields. This was brought out very sharply by the report of the Committee on the Status of Women in India in the early 70's which revealed that in some domains, for instance employment, the situation had deteriorated. Gender disparity and discrimination shown to women emerged as a major issue. While initially the approach at redressal was more 'welfare oriented', in the succeeding decades, it shifted to the development of women and in 1980's and onwards, the shift took place from development to the empowerment and autonomy of women.

- 18.2 Empowerment is a continuous process of realizing the goals of equality, human liberation and freedom. Women's empowerment implies equality of opportunity and equity between the genders, ethnic groups, social classes and age groups, collective participation in different spheres of life etc. The major landmark in the field of women empowerment was brought about by 73rd and 74th amendments in the first half of the 90's in which 33% reservation to the women in the Panchayats and Municipalities was made mandatory.
- 18.3 The two most commonly used gender related indices are the Gender Development Index (GDI) and the Gender Empowerment Index (GEM) of the United Nations Development Programme. The GDI is concerned with basic capabilities and living standards. It uses the same variables as the HDI, but focuses on the inequality between men and women as well as on the average achievement of all people taken together. The GEM is concerned with economic, political and professional participation. It uses the percentage of seats held in parliament by women, the percentage of women administrators and managers, the percentage of women professional and technical workers and the earned income share of women, as indicators.
- 18.4 As per the UNDP's Global Human Development Report (HDR) 2007, India ranks 113 out of 157 countries ranked on the basis of their GDI value. Attempts made to construct HDIs within the country show that among the major states in India, Kerala ranked at the top in the GDI. The lowest rank was observed in Bihar, followed by Uttar Pradesh. There has been a substantial improvement in the GDI in Kerala in tandem with the HDI. The GDI was 0.697 in 1997 and increased to 0.746 in 2001 (Source: Human Development Report 2005, Kerala).
- 18.5 Among the districts of Kerala, Alappuzha ranked first with respect to GDI even though it has been in the fourth position with respect to HDI. Ernakulam and Trissur came second and third respectively. Malappuram is in the lowest position with respect to GDI and HDI as well. Kozhikode district, which is in the eighth position in HDI, ranked thirteenth with respect to GDI. But the disparity among districts seems to be regligible with respect to GDI. The district-wise GDI and HDI, 2001 for Kerala is given in the Table 18.1.

Table 18.1 District-wise GDI and HDI – 2001

Sl. No.	District	GDI	GDI Rank	HDI	HDI Rank
1	Thiruvananthapuram	0.743	9	0.773	9
2	Kollam	0.764	6	0.787	6
3	Pathanamthitta	0.765	5	0.795	3
4	Alappuzha	0.777	1	0.794	4
5	Kottayam	0.765	4	0.796	2
6	Idukki	0.742	11	0.754	12
7	Ernakulam	0.775	2	0.801	1
8	Trissur	0.766	3	0.794	5
9	Palakkad	0.743	10	0.761	10
10	Malappuram	0.689	14	0.749	14
11	Kozhikode	0.730	13	0.781	8
12	Wayanad	0.736	12	0.753	13
13	Kannur	0.755	7	0.783	7
14	Kasaragod	0.744	8	0.760	11
	Kerala	0.746		0.773	

Source: - Human Development Report 2005, Kerala

18.6 Even though the gender gap in terms of basic capabilities is much lower in Kerala than in other states of India, indicators of well-being in non-conventional terms such as mental health, crime against women, political participation or property rights have shown reverse trends. High rates of literacy and impressive levels of female education did not translate into rapid growth of paid employment for women or into upward occupational mobility.

Demographic and Health Indicators

18.7 Sex ratio is one of the most important social parameter indicating the balance between males and females in the society. The overall sex ratio in Kerala continues to be favourable to women, being 1058 compared to 933 for the country as a whole. Further, the overall sex ratio is favourable to females in all the districts of Kerala.

18.8 Among the bigger states in India, Kerala has the lowest Infant Mortality Rate. In Kerala, out of every 1000 children born, only 13 die before attaining their first birthday, as per the estimates given by SRS Bulletin, October 2008. The female IMR is 13 and the male IMR is 12 during 2008. The IMR of Kerala and India for different years are given in Table 18.2 and that of the neighbouring states of Kerala are given in Table 18.3.

Table 18.2 Infant Mortality per 1000 live births

Year		Kerala		All India				
1 cai	Male	Female	Total	Male	Female	Total		
1961	55	48	52	122	108	115		
2005	14	15	14	56	61	58		
2006	14	16	15	56	59	57		
2007	12	13	13	55	56	55		

Source: - SRS Bulletin, October 2008, Registrar General, India.

Table 18.3 IMR of Tamil Nadu and Karnataka

Year	7	Tamil Nad	u	Karnataka				
1 cai	Male	Female	Total	Male	Female	Total		
1961	89	82	86	87	74	81		
2005	35	39	37	48	51	50		
2006	36	37	37	46	50	48		
2007	34	36	35	46	47	47		

Source: - SRS Bulletin, October 2008, Registrar General, India.

18.9 Health achievements are reflected in life expectancy and infant and maternal mortality figures. Life expectancy of women in Kerala is much higher than that for India as a whole and also five years more than that of men in Kerala. Details are given in Box 18.1. Life expectancy at birth for various periods and projected levels of expectation of life up to the year 2025 for Kerala, Tamil Nadu, Karnataka and All India are given in Table 18.4.

Table 18.4
Life Expectancy at Birth and Projected Levels of Expectancy of Life

Years	K	erala	Tam	il Nadu	Kar	nataka	All	India			
rears	Male	Female	Male	Female	Male	Female	Male	Female			
I. Life E	I. Life Expectancy at Birth										
1997-2001	70.8	76.2	64.1	66.1	62.6	66.00	61.3	63.0			
1998-2002	70.8	75.9	64.2	66.3	62.8	66.2	61.6	63.3			
1999-2003	70.9	76.0	64.3	66.5	62.9	66.4	61.8	63.5			
2000-2004	71.0	76.1	64.6	66.8	63.1	66.7	62.1	63.7			
2001-2005	71.3	76.3	64.8	67.1	63.4	69.9	62.3	63.9			
II. Projec	ted Lev	els of Ex	pectatio	on of Life	!						
2001-2005	70.8	76.0	66.1	69.1	64.5	69.6	63.8	66.1			
2006-2010	72.0	76.8	67.6	70.6	66.5	71.1	65.8	68.1			
2011-2015	73.2	77.6	68.6	71.8	68.0	72.3	67.3	69.6			
2016-2020	74.2	78.1	69.6	73.0	69.0	73.5	68.8	71.1			
2021-2025	75.2	78.6	70.6	74.0	70.0	74.5	69.8	72.3			

Source: Data book for DCH, Government of India

	Box No.18.1		
Health Indicators		Kerala	India
Life at Birth (per 1000			
	Male	71.3	62.3
	Female	76.3	63.9
	Total	73.8	63.1
Infant Mortality Rate	(per 1000 live births)	13	55
Maternal Mortality Rat	e (per lakh live births)	110	301
Total Fertility Rate (ch	1.7	2.9	
•	•		

18.10 The nutritional status of women and men in the age group of 15-49 years in terms of Body Mass Index (BMI) for Kerala and India are given in Table 18.5.

Table 18.5 Nutritional Status of Women and Men

Body Mass Index (BMI) in Kg/m²	Kerala		In	dia
	Women	Men	Women	Men
Mean BMI	22.6	21.6	20.5	20.2
18.5 to 24.9 (normal)	53.9	60.6	51.8	56.5
17.0-18.4 (mildly thin)	9.6	11.4	19.7	20.4
<17.0 (moderately/ severely thin)	8.4	10.1	15.8	13.8
25.0 – 29.9 (overweight)	23.1	15.7	9.8	8.0
=30.0 (obese)	5.0	2.1	2.8	1.3

Source: NFHS-3- 2005-06, MoHFW, Govt. of India

18.11 The mean BMI for women in the age group 15-49 in Kerala is 22.6 while in India it is 20.5. Chronic energy deficiency is usually indicated by a BMI of less than 18.5. Eighteen percent of women and 21.5 percent of men in Kerala have a BMI below 18.5. The percentage of women who are overweight or obese is highest in Punjab (30 percent), followed by Kerala (28 percent) and Delhi (26 percent).

18.12 Among the states in India, Kerala, Manipur, Goa, and Punjab have the lowest prevalence of anaemia for both women and men. Even in these states more than one-third of women are anaemic. In Kerala, the prevalence of anaemia for men is only eight percent. Details are given in Table 18.6.

Table 18.6 Prevalence of anaemia in Women and Men

Category	Ker	ala	India		
Category	Women	Men	Women	Men	
Mild anaemia	25.8	3.8	38.6	13.0	
(10.0-11.9 g/dl)					
Moderate anaemia	6.5	3.7	15.0	9.9	
(7.0 - 9.9 g/dl)					
Severe anaemia	0.5	0.4	1.8	1.3	
(<7.0 g/dl)					
Any anaemia	32.8	8.0	55.3	24.2	
(<12.0 g/dl)					

Source: NFHS-3- 2005-06, MoHFW, Govt. of India

18.13 The number of women who have diabetes ranges from 282 per 100,000 women in Rajasthan to 2549 per 100,000 women in Kerala. Prevalence of diabetes among men exceeds that of women in each of the four states: Kerala, Goa, Tripura, and West Bengal. The number of women with asthma exceeds 1,000 per 100,000 in 23 states and is exceptionally high (above 3,000 per 100,000) in five states: West Bengal, Mizoram, Kerala, Sikkim, and Tripura with the highest prevalence. Prevalence of goitre or other thyroid disorders is lowest in Jammu and Kashmir among both women and men (237 per 100,000 women and nil among men) and highest

in Kerala among both women and men. Table 18.7 presents the distribution of women and men who have diabetes, asthma, or goitre/other thyroid disorders by state.

Table 18.7 Health Problems of Men and Women

	No. of	women p	er 1,00,000	No. of men per 1,00,000			
State	Diabetes	Asthma	Goitre/other thyroid disorder	Diabetes	Asthma	Goitre/other thyroid disorder	
India	881	1696	949	1051	1627	383	
Delhi	1692	547	1481	1229	736	133	
Haryana	1169	1552	388	608	1266	739	
Himachal Pradesh	1048	384	678	344	527	304	
Jammu &	540	897	237	278	816	0	
Kashmir							
Punjab	849	945	601	802	802	241	
Rajasthan	282	1565	376	362	1739	246	
Uttaranchal	825	537	257	965	972	215	
Chhattisgarh	659	746	563	932	858	358	
Madhya Pradesh	558	1283	599	555	1102	424	
Uttar Pradesh	383	1089	517	456	1225	138	
Bihar	1024	1696	853	940	981	273	
Jharkhand	652	1291	858	629	407	74	
Orissa	556	2533	362	1179	1592	122	
West Bengal	1641	3304	1626	2323	4365	667	
Arunachal Pradesh	537	2037	2037	606	2072	567	
Assam	402	1411	760	601	1105	1371	
Manipur	1006	1400	2623	1059	1106	1389	
Meghalaya	910	1618	864	641	746	179	
Mizoram	1189	3563	1857	315	2351	315	
Nagaland	577	1414	629	1217	2464	725	
Sikkim	1160	5150	1574	1698	2769	1191	
Tripura	1656	5924	2439	2392	5086	552	
Goa	1921	1836	841	3016	1588	584	
Gujarat	968	1530	484	524	1844	72	
Maharashtra	479	1714	590	906	1855	201	
Andhra Pradesh	838	2151	1155	2116	2189	829	
Karnataka	681	1259	798	973	691	285	
Kerala	2549	4037	5744	3078	2984	1888	
Tamil Nadu	2188	1126	1568	1351	687	170	

Source: NFHS-3- 2005-06, MoHFW, Govt. of India

Gender Equality Measures in Health Sector

?? The foeticide of female foetus is prohibited by PNDT Act (Pre-Natal Diagnostic Techniques Act) 1972.

- ?? Family Life Education is given to couples to empower women along with men to equip the couple to make appropriate decision on how to regulate family size.
- ?? Janani Suraksha Yojana is a programme to promote the institutional delivery among poor pregnant women and an effort to ensure safe delivery to reduce maternal and neonatal mortality.
- ?? To ensure safe motherhood, nutrition education is given to adolescent girls, pregnant women and lactating mothers.
- ?? Cancer breast and cancer cervix are addressed specially in family welfare programmes.

Pattern of Education by Gender

18.14 It is generally accepted that the basic problem of access to schools has been overcome in Kerala, which is evident from the fact that more than ninety percent of persons of age seven years and above are literate in Kerala. The pupil-teacher ratio in Kerala was 31 in 1991 and declined to 28 in 2001. Gender gap is extremely low in school education which can be seen from Table 18.8.

Table 18.8 Percentage of Girl Students in Schools - 2007-08 & 2008-09

Level of Education	Percentage of	Girl Students
Level of Education	2007-08	2008-09
Govt. Schools		
Std I – IV	49.51	49.53
Std IV- VII	48.90	48.89
Std VIII – X	49.10	49.22
Total	49.20	49.24
Private Aided Schools		
Std I – IV	49.85	49.53
Std IV- VII	49.09	48.89
Std VIII – X	49.38	49.22
Total	49.45	49.24
Private Unaided		
Std I – IV	48.65	49.53
Std IV- VII	46.11	48.89
Std VIII – X	47.42	49.22
Total	47.63	49.24

Source: Directorate of Public Instructions

18.15 From Table 18.9 we can see that women far exceed men in graduation level education, especially in arts and science colleges for the year 2007-08. Gender gap is not much wider in higher secondary and vocational higher secondary classes also. But in polytechnics and technical high schools, the proportion of women is very low so that men are dominating with ninety per cent of the total intake. While 78.14 per cent of girl students in higher secondary education and 84.47 per cent of girls in vocational higher secondary education passed out their examinations, the corresponding shares of boy students are 66.71 per cent and 71.53 per cent respectively.

Table 18.9
Percentage of Girls in Higher Education 2007-08

CI		Intake of students			
Sl. No.	Category	Total	Girls	% share of Girls	
1	Higher Secondary (Class XII)	257655	140386	54.49	
2	Vocational Higher Secondary				
	I year	21011	10931	52.03	
	II year	26010	13500	51.90	
3	Polytechnic				
	Government	24480	2464	10.07	
	Private/Aided	4505	452	10.03	
4	Technical High School	6300	630	10.00	
5	Arts & Science College				
	B Sc Degree				
	I year	23218	16032	69.05	
	II year	22235	15126	68.03	
	III year	20334	13968	68.69	
	B A Degree				
	I year	26181	18328	70.00	
	II year	25215	16498	65.43	
	III year	22947	14155	61.69	
	B Com				
	I year	9279	4978	53.65	
	II year	9089	4868	53.56	
	III year	8914	4831	54.20	
6	Engineering College		-		
	Graduation				
	Government	2722	1029	37.80	
	Private/Aided	1460	490	33.56	
	Post Graduation				
	Government	296	128	43.24	
	Private/Aided	84	40	47.62	

Source: Various Directorates of Education

18.16 Literacy, together with educational attainment, determines the quality of population and is highly related to employment potential. The high levels of female literacy in Kerala have been well-documented. But 12.9 percent of females of age 15 years and above are not literate while that of males is only 5.3 in Kerala.

18.17 The general educational level of men and women in Kerala and India as per the NSS Report No: 522 for 2005-06 are given in Table 18.10.

Table 18.10 General Educational Level for Kerala and India

Level of	Female of age 15 yrs and		Male of age 15 yrs and		
Education	above per 1	000 females	above per 1000 males		
	Kerala	India	Kerala	India	
Not literate	129	491	53	253	
Literate& up to	257	198	261	254	
primary					
Middle	291	142	343	205	
Secondary	151	79	164	126	
Higher	66	44	58	73	
secondary					
Diploma/	34	4	50	14	
certificate					
Graduate	72	41	73	74	
& above					

Source: NSS Report No: 522, Government of India

18.18 The distribution of males and females of age 15 years and above by general educational level presented in this Table reveals that about 26 per cent were having education only upto primary level both for female and male. Only 17 per cent of the female population and 18 percent of male population were having education of 'higher secondary and above' level.

18.19 Table 18.11 reveals that a higher proportion of girls in the age group 5-29 have never attended schools; nearly twice that of men in Kerala.

Table 18.11 Status of Current Attendance in Kerala and India

Current Status	Female of age 5-29 yrs per 1000 females		Male of age 5-29 yrs per 1000 males		
	Kerala	Kerala India		India	
Never attended	19	210	10	120	
Discontinued	282	234	242	243	
studies					
Dropped out	130	87	162	97	
Currently	568	462	586	535	
attending					

Source: NSS Report No: 522, Government of India

18.20 It may be noted that the drop out rate for females is lower than for males. However, the rate of discontinuing studies is higher for females in Kerala. More than 40 percent of females in the age group 5-29 years either discontinued or dropped from their studies and the corresponding percentage for men was 40. It is interesting to know the reasons for either never attending or discontinuing/dropping out from the education institution. The major reasons for either never attending or discontinuing/dropping out from the educational institution were to supplement household income (11 percent for female & 49 percent for male), education not considered

necessary (3 percent for female & 7 percent for male) and to attend domestic duties (28 percent for female & 1.5 percent for male).

Employment and Unemployment

- 18.21 Work participation rate (WPR) of women falls far short of that for men. As against 51.6 per cent for males and 22.7 per cent for females in 2001 at the all-India level, the corresponding work participation rates in Kerala were 50.6 per cent and 15.3 per cent respectively. While the rate was not far lower in Kerala than at the all-India level for males, it was very much so in the case of females.
- 18.22 The factors that led to the decline in female work participation rate include the structural changes of employment in the state. Several labour-intensive activities such as rice cultivation and traditional cottage industries have been declining in Kerala, during more than the past three decades. These had been the two areas in which most of the women workers had found employment. The conversion of agricultural land to non-agricultural uses and of paddy fields to cultivation of commercial crops had reduced women workforce in the agricultural sector from 43.6 per cent in 1981 to 36.1 per cent in 1991. The crisis in the cottage industries led to a fall in women's workforce in there from 7.7 per cent to 5.9 per cent during the same period. It was also observed that while around 82 per cent of the educated men were employed, the corresponding proportion among women was only 71 per cent. However more recent data from the NSSO shows a steadying of WPRs for women in rural areas and an increase in the urban WPR in Kerala.
- 18.23 About one-half the labour force of the age group 15 to 29 years, 42 per cent for men and 54 per cent for women was unemployed. The educated unemployment rate was two and a half times higher among females than among males. Unemployment rate was the highest among the younger age group of 15 to 19 years for both men and women.
- 18.24 Among the educated, the unemployment rate was the lowest for technically and professionally trained persons such as diploma holders and professionals. It was much higher for females than for males for all categories of education and very high among unmarried females; about three fourths of the unmarried females remained unemployed. The rate was high among widows and divorced or separated women too (Source: Kerala Development Report, Planning Commission, Government of India).
- 18.25 Data from the 61st NSSO Round (2004-05) also brings out the much lower (than male) work participation rates of females in Kerala, even among the educated. Table 18.12 gives the WPR for males and females in Kerala and all-India for various years and Table 18.13 shows the gender gap in WPR of educated males and females in Kerala and India during 2004-05.

Table 18.12 Worker Participation Rates (UPSS*) in Kerala and all-India

Category	Kerala			All-India			
Category	1993-94	1999-00	2004-05	1993-94	1999-00	2004-05	
Rural Male	53.7	55.3	55.9	55.3	53.1	54.6	
Rural Female	23.8	23.8	25.6	32.8	29.9	32.7	
Urban Male	55.9	55.8	54.7	52.1	51.8	54.9	
Urban Female	20.3	20.3	20.0	15.5	13.9	16.6	

Note: *usual principal and subsidiary status

Source: - NSSO Round (2004-05)

Table 18.13
Education Specific WPR for persons of age 15 years and above (UPSS*) 2004-05

Level of	Kerala				All-India			
Education	Rural Male	Rural Female	Urban Male	Urban Female	Rural Male	Rural Female	Urban Male	Urban Female
Not literate	61.82	33.3	63.9	30.4	89.2	55.0	83.1	30.4
Lit. & upto Primary	81.9	38.1	75.7	28.7	89.5	44.9	85.5	23.4
Middle	82.0	32.6	81.3	20.1	80.2	37.1	76.0	16.1
Secondary	69.2	26.2	64.0	17.4	73.2	30.5	67.3	12.3
Higher secondary	53.9	14.7	47.9	13.0	70.9	25.2	60.8	12.9
Diploma/ certificate	81.7	46.6	81.6	40.4	82.1	52.3	79.8	48.6
Graduate & above	78.8	45.9	79.7	42.9	85.1	34.5	79.5	29.0

Note: *usual principal and subsidiary status

Source: - NSSO Round (2004-05)

18.26 Some data such as average wage earnings per day received by casual labourers and regular wage/salaried persons in Kerala as per the 62nd Round of the NSS (Reports on "Employment and Unemployment Situation in India – 2005-06" and "Unorganized Manufacturing Sector in India-2005-06-Employment, Assets and Borrowings") are given in Table 18.14 which indicate sharp disparities between male-female and rural-urban areas. The average wage rate in India for regular wage/salaried employees was Rs. 138.74 for males and Rs. 87.71 for females (rural) and Rs. 205.81 for the males and Rs. 158.23 for the females (urban) and thus, male-female salary differential was around Rs. 50 in both rural and urban areas.

Table 18.14
Data on Employment in Kerala-2005-06

Date of Employment in Testant 2000 00							
	Ru	ıral	Urban				
Particulars	Female	Male	Female	Male			
Average wage/salary earnings (Rs) per day received by regular wage/salaried employees of age 15-59 years	116.93	151.61	150.89	229.74			
Average wage/salary earnings (Rs) per day received by casual labours of age 15-59 years	75.37	137.28	93.56	142.51			
Unemployment rate according to usual principal status	220	72	330	41			
Percentage of workers	51.2	48.8	47.6	52.4			
Number of full time workers	362472	432132	110263	180311			
Number of part time workers	154376	59633	71842	19977			
Number of working owners	327470	233297	102160	85660			
Number of hired workers	130363	211582	49426	99266			

Source: NSS Report Nos. 522 and 525 Gol.

18.27 As per the data available from the Directorate of Employment, Government of Kerala, 20 percent employees are women in Central Government sector, 40 per cent in State Govt. sector, 23 per cent in Central Quasi; 30 per cent in State Quasi and 34 per cent in Local Bodies when the employment in public sector in Kerala as on March 2008 is considered. In private sector, the disparity in the distribution of men and women employees is very low. Of the total work seekers

of 39.53 lakh persons in Kerala, more than 58 percent work seekers are women as on March 2008.

Women's Autonomy

18.28 Autonomy of women is the right of women to participate in public (political and civil society) as well as private life with an equal share in power and equal involvement in the decision making process(Source: NFHS-3, 2005-06). Autonomy in decision making, access to economic resources, mobility etc. are important components of this right. The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment. Percentage of women involved in decision making on their own health care and purchase of household assets, percentage of ever married women who do not require permission to go to the market or visit friends and relatives etc are the indicators assessing the autonomy of women in decision making. Table 18.15 provides information by state on currently married women's participation in decision making, as reported in the NFHS-3 of Government of India.

Table 18.15 Women's participation in decision making by State

Percentage of women who usually make specific decisions							
			vith their husband				
State	Own health Care	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives			
India	62.2	52.9	60.1	60.5			
Delhi	74.2	67.3	75.7	74.9			
Haryana	71.7	54.7	60.8	69.2			
Himachal Pradesh	66.5	56.5	61.5	58.3			
Jammu & Kashmir	43.5	44.9	46.9	43.4			
Punjab	76.8	48.2	56.5	68.5			
Rajasthan	51.9	40.5	49.2	44.0			
Uttaranchal	60.8	49.4	56.4	56.0			
Chhattisgarh	47.9	50.9	63.4	61.2			
Madhya Pradesh	51.7	48.3	54.9	50.2			
Uttar Pradesh	64.2	52.9	55.6	50.3			
Bihar	53.4	50.6	58.4	54.4			
Jharkhand	61.2	59.8	64.7	65.5			
Orissa	64.7	57.8	61.3	63.6			
West Bengal	59.6	37.5	46.9	48.4			
Arunachal Pradesh	68.7	74.1	86.7	90.4			
Assam	80.0	72.0	70.0	80.9			
Manipur	87.4	81.4	85.2	86.0			
Meghalaya	87.5	82.5	84.1	87.3			
Mizoram	91.9	79.6	86.0	89.5			
Nagaland	90.7	82.1	87.2	93.7			
Sikkim	79.5	76.6	78.3	83.7			
Tripura	59.7	48.1	56.9	60.4			
Goa	67.5	67.3	74.6	84.5			
Gujarat	63.2	53.3	66.2	70.4			
Maharashtra	67.8	61.2	70.6	74.2			
Andhra Pradesh	61.8	52.7	60.4	65.5			
Karnataka	53.3	50.5	56.4	55.9			
Kerala	75.3	61.8	65.9	78.4			
Tamil Nadu	73.2	63.3	77.8	76.7			

Source: NFHS-3- 2005-06, MoHFW, Govt. of India

18.29 In the country as a whole, 53 per cent of currently married women participate in decisions about making major household purchases and 60-62 percent participate in each of the other three decisions. Women's pattern of participation by decision varies greatly by state. Nagaland, Mizoram, Meghalaya and Manipur are the leading states where women's participation in decision making ranges from 80 to 92 per cent. In decision making, Kerala has 8th rank for decisions about own health care, 11th rank for decisions about making major household purchases, 13th rank for decisions about making purchases for daily household needs and 9th rank for decisions about visits to her family or relatives.

Gender Role Attitudes

18.30 A fundamental element of empowerment is the rejection of a normatively prescribed power of men over women and of unequal rights and privileges on the basis of the sex of an individual. One such normatively ascribed 'right' of husbands is to regulate and control their wives' behaviour and bodies through whatever actions necessary, including the use of violence. Hence, women who believe that husbands' control over their wives is justified can be considered as less empowered than women who think otherwise. Agreement with any of the reasons justifying wife beating and disagreement with any of the reasons justifying a wife's refusal to have sex with her husband, indicates a low level of women's empowerment, since it implies an acceptance of men's exercise of power over women. The NFHS-3 reveals that agreement with wife beating does not vary much by women's age, number of children, and household structure, but declines sharply with education and wealth quintile. Agreement is lower in urban than in rural areas, among women not employed in the past 12 months of the survey than women who were employed, and among never married women, compared with ever-married women. About half of all women and men agree with at least one or more reasons for wife beating, and even among the most educated, about one-third of women and men agree. Further, the justifications for wife beating most agreed to by both women and men pertain to disrespect for the in-laws and neglect of the house or children. Information on these indicators for Kerala and India obtained for women and men is shown in Table 18.16.

Table 18.16 Attitude towards wife beating

Sl. No.	Percentage of adult age 15-49	Kerala	India
I	Percentage of women who agree that a husband is		
	justified in hitting or beating his wife if:		
a	She goes out without telling him	35.7	29.0
b	She neglects the house or children	44.2	34.7
c	She argues with him	25.7	30.3
d	She refuses to have sexual intercourse with him	14.0	14.1
e	She doesn't cook properly	20.3	20.4
f	He suspects she is unfaithful	22.6	25.1
g	She shows disrespect for in-laws	44.5	40.6
II	Percentage who agree with at least one specified reason	65.7	54.4
III	Percentage of men who agree with at least one specified	54.2	51.0
	reason		

Source: NFHS-3- 2005-06, MoHFW, Govt. of India

Violence against Women

18.31 Although women may be victims of any of the general crimes, only the crimes which are specifically against women are characterised as "Crimes against women". These are broadly classified under two categories.

Crimes under the Indian Penal Code (IPC)

18.32 Rape, Kidnapping & abduction for specified purposes, homicide for dowry, dowry deaths or their attempts, torture both mental and physical, molestation, sexual harassment and importation of girls up to 21 years of age are the crimes classified under IPC category.

The crimes under the Special & Local Laws (SLL)

- 18.33 All laws are not gender specific. The following are the gender specific laws for which crime statistics are recorded through out the country.
 - (i) Immoral Traffic (Prevention) Act, 1956
 - (ii) Dowry Prohibition Act, 1961
 - (iii) The Child Marriage Restraint Act, 1929
 - (iv) Indecent Representation of Women (Prohibition) Act, 1986
 - (v) Commission of Sati (Prevention) Act, 1987
- 18.34 According to the crime statistics given in "Crime in India 2007" published by National Crime Records Bureau, GoI, a total of 185312 incidents of crime against women (both under IPC and SLL) were reported in India during 2007 as compared to 164765 cases during 2006, recording an increase of 12.5 per cent during 2007. Kerala, with nearly three per cent share of country's population has accounted for 4.2 per cent of total crime against women by reporting 7837 cases in 2007.
- 18.35 Among the States/UTs in India, Tripura reported the highest crime rate (30.7) followed by Andhra Pradesh (30.3), Delhi (28.7), Assam (23.1) and Kerala (23.0) as compared to the national average rate of 16.3. The incidence of crimes committed against women during 2007 is given in Table 18.17.

Table 18.17 Incidence of Crimes Committed against Women in Kerala during 2007

Offences	Incidents	Rate of Crime	% share to total incidence in India
Rape (Sec.376 IPC)	512	1.5	2.5
Kidnapping & Abduction (Sec. 369-369, 371-379 IPC)	177	0.5	0.9
Dowry Death (Sec. 304 B IPC)	27	0.1	0.3
Cruelty by Husband and Relatives (Sec. 498 A IPC)	3999	11.8	5.3
Molestation (Sec. 354 IPC)	2624	7.7	6.8
Sexual Harassment, Eve - Teasing (Sec. 509 IPC)	262	0.8	2.4
Immoral Traffic (P) Act 1956	201	0.6	5.6
Indecent Representation of Women (P) Act, 1986	26	0.1	2.2
Dowry Prohibition Act, 1961	9	0.0	0.2
Total	7837	23.00	4.2

Note: - 1) Estimated Mid-Year Population in Kerala, (including women) is 340.12 lakh.

2) Rate of crime is the incidents per mid-year population in lakh number.

Source: - Crime in India 2007, NCRB, GoI.

18.36 During 2007, 1615 more incidents of crime against women are also reported in Kerala as per the State Crime Records Bureau, in addition to the above 7837 incidents, which does not appear to be in the Crime Statistics of India published by National Crime Records Bureau, Government of India.

Domestic Violence

18.37 Domestic violence occurs in all socio economic and cultural population subgroups; and in many societies, including India, women are socialized to accept, tolerate, and even rationalize domestic violence and to remain silent about such experiences. Domestic violence was recognized as a criminal offence in India in 1983. The offence chargeable under section 498-A of the Indian Penal Code that relates to domestic violence is any act of cruelty by a husband (or his family) towards his wife. Among the crimes committed against women in Kerala during 2007, more than fifty per cent of the total incidence of crimes are charged under this offence, (See Table 18.15 above) A comprehensive domestic violence law, known as the Protection of Women from Domestic Violence Act 2005, came into force in October 2006. It has been welcomed by all since it provides for the first time varied remedies to women by way of protection order, residence order and orders of monetary relief in the event of domestic violence incident. The Social Welfare Department is the nodal agency for implementing this Act. The progress of implementation of "Protection of Women from Domestic Violence Act - 2005" for the period January to September 2008 is given below in Table 18.18

Table 18.18
Progress of Implementation of PWDV Act 2005 (January to September 2008)

Sl. No.	Particulars	Number						
1	Number of protection officers appointed	31						
	Government servants: Female: 9 Male: 22	31						
2	Number of service providers registered	58						
3	Number of medical facility notified	72						
4	Number of shelter home notified	24						
5	Number of complaints of domestic violence	1814						
6	Number of Domestic Incident Report (DIR)							
	Lodged with protection officer	903						
	Lodged with service provider	27						
	Sent direct to court	884						
7	Number of DIR forwarded to Magistrate	1080						
8	Number of aggrieved persons provided medical aid by medical facility	2						
9	Number of aggrieved persons provided shelter by shelter home	17						
10	Number of aggrieved persons provided legal aid under Legal Services Authorities Act 1987	81						
11	Number of applications heard by Magistrate	956						
12	Number of applications disposed by Magistrate	124						
13	Number of cases in which exparte order granted by Magistrate	19						
14	Number of cases in which Interim order granted by Magistrate	361						
15	Number of protection orders granted by Magistrate	250						
16	Number of residence orders granted by Magistrate	99						
17	Number of custody orders granted by Magistrate	13						
18	Number of compensation order granted by Magistrate	42						
19	Number of cases in which monetary relief granted by Magistrate	206						
20	Number of cases with details where the judgment has gone against the women	1						
21	Number of cases of breach of protection order or interim protection order brought up before Magistrate							
22	Imprisonment and fine Number of respondents fined or imprisoned for breach of protection order or interim protection order							

Source: - Department of Social Welfare

Protection to the Women Employees of the Call Centres

18.38 The rape and murder of a Bangalore based call centre employee in December 2005 by the driver of the company commissioned taxi has brought into sharp focus on the inadequacy of transport arrangements made by such centres. The incident is a warning that the call centres should make foolproof arrangements to ensure the safety of women, given the fact that women account for about 40 percent of the 3.50 lakh call centre employees in India. The amendment to the Factories Act which allows women to work between 10 p.m and 6 a.m in IT among other sectors clearly puts the onus of ensuring safety of women employees on the employer. It further states that these timings shall be allowed only if the employer ensures safety of women at the workplace and while commuting.

18.39 The National Commission for Women (NCW) has taken up the task of holding a round table discussion on the issues concerning the safety of women, by involving Police, women activists and senior officers from the Ministry of Information Technology. The commission evolved a set of guidelines which include measures to ensure safety of women employees while commuting, additional checks, good in-house practices, and other gender friendly measures.

Gender Gap Index

18.40 The Global Gender Gap Index examines the gap between men and women in four fundamental categories of well-being: economic participation and opportunity, educational attainment, political empowerment and health and survival. The following table displays the ranks and scores of Global Gender Gap Index for India and top ten countries in 2008.

Table 18.19 Gender Gap Index 2008

Sl. No	Country	2008		
51.110	Country	Rank	Score	
1	Norway	1	0.8239	
2	Finland	2	0.8195	
3	Sweden	3	0.8139	
4	Iceland	4	0.7999	
5	New Zealand	5	0.7859	
6	Philippines	6	0.7568	
7	Denmark	7	0.7538	
8	Ireland	8	0.7518	
9	Netherlands	9	0.7399	
10	Latvia	10	0.7397	
11	India	113	0.6060	

Source: Global Gender Gap Report, 2008

18.41 Although gender-based inequalities exist in the majority of the world's cultures, religions, nations and income groups, there are differences in the way these disparities manifest themselves and how they evolve over time. The Global Gender Gap Index, introduced by the World Economic Forum in 2006, is a framework for capturing the magnitude and scope of these disparities and tracking their progress. The Index benchmarks national gender gaps on economic, political, education and health based criteria and provides country rankings that allow for effective comparisons across regions and income groups and overtime. The rankings are designed to create greater awareness among the global audience of the challenges posed by gender gaps and the opportunities created for women by reducing them.

Kerala Women's Commission

18.42 The Kerala Women's Commission, established in 1996 has the responsibility of identifying inadequacies or shortcomings in the laws in force which affect the constitutional right, the quality and fair treatment of women and also on the remedial legislative measures to be taken to meet the situation. The commission is also taking steps for improving the status of women and enquires into unfair practices against them. Following are the activities taken up by the Commission, during 2007-08.

- 1. Conducted nine mega adalaths and 137 ordinary adalaths to dispose the complaints received from women victims all over the state.
- 2. Disposed 3319 petitions out of 5349, received during 2007-08
- 3. Maintaining a free legal aid cell for providing legal advice to the complainants for filing cases before the family courts/civil courts and other criminal courts.
- 4. The Commission conducted DNA tests for those who belong to SC/ST and below poverty line where paternity is disputed. During 2007-08, 16 DNA tests were conducted through Rajiv Gandhi Bio-technology Centre and incurred a cost of Rs.2.40 lakhs for the tests.
- 5. Counseling facility in the headquarters on all Tuesdays and Thursdays.
- 6. Conducted seminars on the constitution of Jagratha Samithys attached to LSGIs, problems of widows, problems of women entrepreneurs etc.
- 7. Constituted a media monitoring cell for curbing the indecent representation of women in medias.
- 8. Conducted research studies on Kerala specific issues like problems of home nurses, impact of Mysore marriages, problems of unmarried tribal mothers, socio economic conditions of tribal families etc.
- 9. While most of the Commission's activities are geared towards creation of awareness about discrimination against women; considerable work has been done under the Gender Awareness Programme. A major activity was the making of short advertisement films and documentaries which are being used by other Departments and organizations for widespread dissemination.

Kerala State Women Development Corporation (KSWDC)

18.43 Kerala State Women Development Corporation is implementing schemes for the empowerment of women in the state, especially those who are economically marginalised, by availing financial assistance from the National Minority Communities Development and Finance Corporation (NMDFC), National Backward Classes Finance Development Corporation (NBCFDC), National Handicapped Finance and Development Corporation (NHFDC) and the National Scheduled Caste Finance and Development Corporation (NSFDC).

18.44 Under the self employment loan schemes, credit facility is extended to women belonging to BPL families to take up any income generating and self-sustaining activity. During 2007-08, the Corporation disbursed loans amounting to Rs.852.41 lakhs to women belonging to backward classes, minority communities, scheduled castes, handicapped women and economically marginalized women of forward communities. Details are given in Table 18.20.

Table 18.20 Achievements of KSWDC during 2007-08

Schemes	No. of beneficiaries	Loan Amount (Rs. in lakh)
NBCFDC	239	117.10
NMDFC	884	635.61
NSFDC	192	92.45
General Scheme	18	7.25
Total	1333	852.41

Source: - Kerala State Women Development Corporation

- 18.45 Kerala State Women Development Corporation provided assistance to women through the following schemes during 2007-08.
 - ?? Forty nine women students who procured admission to professional courses were provided with educational loans amounting to Rs.46.48 lakhs.
 - ?? For the first time in the state, a programme viz "Single Women Benefit Scheme" has been initiated for the welfare of single women, ie widows, unwed mothers, divorcees/separated women with dependent children, by providing assistance for taking up small-scale self-employment ventures. During 2007-08, 52 women were assisted under the scheme.
 - ?? Extended support to women entrepreneurs to exhibit and sell their products by organizing exhibitions, trade fairs etc.
 - ?? The Corporation is running seven working women's hostels to provide safe and clean accommodation to working women at very reasonable rent.
 - ?? The Corporation is conducting various programmes like entrepreneurship development programmes, awareness creation and vocational training programmes for the economically marginalized women in the state to empower them so that they gain competence in the decision-making process and can be brought into the main stream of development.

Box 18.2 Flagship Programme on Finishing School and Employment

KSWDC envisages the following programmes under the Flagship Programme on Finishing School and Employment

- ?? Women's resources centre
- ?? Community bamboo mat making centres
- ?? Handloom weaving garment designing course
- ?? Training in light and heavy vehicle driving
- ?? Training in electronic goods repairing and mobile phone servicing
- ?? Finishing schools in women ITI
- ?? Hotel management, restaurant and counter service
- ?? Multiple skill upgradation programme
- ?? Personality development programmes
- ?? Gold crafting and jewellery designing
- Source: Kerala State Women Development Corporation

18.46 The Kerala State Women Development Corporation has also initiated some works in 2007-08 for setting up of comfort stations cum retiring rooms for women in KSRTC bus stands

and public places. It also plans to set up a women resource centre in Payyannur Women Polytechnic.

Kudumbashree

18.47 Kudumbashree introduced several innovative programmes for the financial, economic and social upliftment of poor women by organizing them into community based structures like neighbourhood groups. "Samagra" is an innovative programme started during 2007-08 with the objectives of productivity improvement, quality improvement, product diversification, ensuring market for the produce, increased women participation etc. Lease Land Farming (LLF) is another initiative, which has brought in significant changes in the lives of the poor and helped them to increase agricultural production by bringing fallow and cultivable waste land into agricultural use.

18.48 Gender self learning programme of Kudumbashree is a product of the improvisation of the strategies for both economic and social empowerment. It initiates capacity to fill the gap so as to achieve equity, equality, recognition, claim on governance, awareness on Domestic Violence Act, rights in decision making process, and to induce ownership of assets through Kudumbashree networks. The process of gender self learning is routed through the larger networks of selected resource persons.

18.49 Thrift and Credit Societies are set up at the neighborhood group (NHG) level to facilitate the poor to save and to avail easy credits, which have now grown up to informal banks of the poor women at their doorsteps. At the end of October 2008, 13590 NHGs are operating in the 58 urban areas covering the major 58 town. In rural area, 176903 NHGs are in operation in the 999 Panchayats in the State. Most of the thrift societies are now capable of providing assistance for income generating activities. Through these micro finance operations, Rs.1119 crore of thrift and Rs.2848 crore of credit are disbursed and utilized by these women.

18.50 Micro enterprise development which fosters the economic status of women is a powerful tool for poverty eradication. Canteens, catering units, IT units, group farming, units of solar dried fruits etc are some examples of micro enterprise units initiated by the women entrepreneurs of Kudumbashree. There are 25572 individual enterprises and 1790 group enterprises in the urban areas and 14684 individual and 20137 group enterprises in the rural area, which are in the process of economic development of 242489 women.

Women Empowerment Initiatives

- 18.51 Social Welfare Department initiated the following women empowerment programmes during 2007-08.
 - ?? Implementation of Domestic Violence Act 2005
 - ?? Published State Women Policy (Draft)
 - ?? Constitution of Gender Board
 - ?? Launched a new Web portal "keralawomen" exclusively for women
 - ?? Gender awareness programme and finishing school for women

Box 18.3 Highlight of Draft Women Policy

Kerala is set to unveil a Women's Policy whose highlight will be to campaign against atrocities against women by setting up a few model villages and vigilance committees. Several mechanisms have been included in the policy to observe that no atrocities are committed on women and to replicate this model to other villages also.

Gender Board

18.52 The Government of Kerala has constituted a Gender Board as an effort to coordinate all activities relating to women development and empowerment. The Gender Board in Kerala, the first in the country, is set up for the better delivery of developmental measures for women, implemented through different departments and agencies and monitoring of policy initiatives. The institution, headed by Minister for Health and Social Welfare has been conceived as part of the Women's Policy of the Government. An initial exercise in gender budgeting (Kerala Budget 2008-09) was undertaken by the Gender Board and State Planning Board.

Box 18.4 A Web Portal Exclusively for Women

The launching of a Web Portal – *keralawomen* – exclusively for and about the women of Kerala is a landmark achievement of the Department of Social Welfare. It is a collaborative web portal inclusive of all government programmes, initiatives, Government Orders, application forms, programmes related to NGOs, department news, events, articles, blogs, policies and programmes, health, institutional mechanism, acts and rules, books, tips and tools directory, information, useful links, videos, etc pertaining to women.

- 18.53 Flagship Programme on Gender Awareness aims to overcome gender discrimination through several measures. Training and sensitization workshops on Gender and the PWDV Act 2005 have been conducted for groups of concerned participants in the Act Protection Officers, Police, Judiciary, lawyers, medical personnel, service providers, shelter homes, counselors by the IMG in Thiruvananthapuram, Kochi and Kozhikode. Media campaign for gender sensitization in DV Act and other social legislations are implemented by producing short films, video-audio spots and documentaries through Kerala State Film Development Corporation. Short films, video spots etc. are telecasted through Doordarsan and audio spots and documentaries are broadcasted through All India Radio. To create awareness about Domestic Violence Act, the Department initiated action to bring out the book 'Sthreeyum Niyamavum' under the Gender Awareness Programme.
- 18.54 The Flagship Programme for Finishing School aims to make the unemployable "employable". The programme was carried out by imparting job training to the inmates of welfare institutions through STED and imparting computer training in collaboration with LBS to the professionally qualified unemployed to succeed in the path of employment.

Major Welfare Institutions Exclusively for Women

18.55 Mahila mandirams are institutions for women who are abandoned, widows and destitutes meant for their care and protection and providing training in vocational trades to enable them to earn a living. There are 12 mahila mandirams in Kerala, in all districts except Idukki and Wayanad. The sanctioned strength of each Mahila mandiram is 25. The details are given below. There are 224 inmates in Mahila mandirams during 2007-08.

Table 18.21 Mahila Mandirams in Kerala

Sl. No.	District	Total inmates during 2008
1	Thiruvananthapuram	23
2	Kollam	12
3	Alappuzha	23
4	Pathanamthitta	14
5	Kottayam	15
6	Ernakulam	29
7	Thrissur	17
8	Palakkad	14
9	Malappuram	12
10	Kozhikode	30
11	Kannur	18
12	Kasaragod	17
	Total	224

Source: - Department of Social Welfare.

- 18.56 There are two homes for physically handicapped women viz. one at Thiruvananthapuram with 23 inmates and the other at Ernakulam with 21 inmates having age above 16 years, for their care and protection.
- 18.57 Asha Bhavans for women are institutions for the care and protection of cured women mental patients who have no one to look after. There are three Asha Bhavans for such women above the age of 13 years. Asha Bhavans are located at Thiruvananthapuram, Thrissur and Kozhikode, with a total of 144 inmates during 2007-08.
- 18.58 Rescue homes are for women who are caught by police under Immoral Traffic Prevention Act and such other acts and acting for their reformation and training in vocational trades. There are two such institutions at Alappuzha and Malappuram. During 2007-08, there are 12 inmates in the Rescue Homes.
- 18.59 Short Stay Home at Kohzikode is a shelter home for women who left home by quarrelling with their husbands and those are rescued by police from immoral life etc for their short stay. During 2007-08, there were four inmates in the Short Stay Home at Kozhikode.

Credit Package for Women

- 18.60 Government of India, Government of Kerala, NABARD, Banks etc are implementing a number of schemes aimed at women beneficiaries.
 - ?? Under SGSY, the emphasis is on the women groups
 - ?? Under PMRY, the units set up by women entrepreneurs are given higher subsidy (50%)
 - ?? Under decentralized plan, the Panchayats are required to earmark 10 percent of the plan funds for the development of women.
 - ?? Under SJSRY and Kudumbashree, women groups are promoted and self employment loans are arranged with bank support.
 - ?? The SHG bank linkage programme launched by NABARD in 1992 is now rated as the fastest growing and most cost effective micro finance movement in the world (*Source: State Focus Paper 2008-09, Kerala by NABARD*). In Kerala, the cumulative number of SHGs credit linked as on March 2007 was around 119700 groups with bank loan of Rs.771 crore. More than 95 percent of the SHGs are women.

Box 18.5 NABARD Schemes for Women

- ?? NABARD has a number of promotional programmes exclusively meant for women like Assistance of Rural Women in Non-Farm Development (ARWIND) and Assistance for Marketing of Non-Farm products of Rural Woman (MAHIMA)
- ?? "Farmers Club" exclusively by women is encouraged.
- ?? Gender awareness/sensitization programmes for bank staff and entrepreneurs are conducted every year in each district.

18.61 Table 18.22 provides the details of the investment and expenditure made by the local self government institution in Kerala through the women component plan of various local bodies.

Table 18.22
Investment and Expenditure of Women Component Plan in LSGIs (Rs. Lakh)

Sl.		Women Component Plan				
No.	Local Body	2007	2008-09			
140.		Investment	Expenditure	Investment		
1	District Panchayat	3085.37	2418.50	3051.70		
2	Block Panchayat	4761.35	4209.40	11125.52		
3	Municipality	1400.04	1019.03	4865.34		
4	Corporation	904.99	711.79	875.79		
5	Grama Panchayat	11937.96	9144.52	34984.56		
	Total	22089.71	17503.24	54902.91		

Source: Information Kerala Mission

CHAPTER 19

LABOUR AND EMPLOYMENT

The term 'labour' in its most general use refers to productive human work. It will refer to the economic resource that includes all forms of human effort that result in the production of a good or service in exchange for a wage or salary. This is sometimes referred to as 'wage labour', a concept that focuses on employees but leaves out the self-employed. It is the duty of the state to arrange for quick redressal of the grievances of labour so as to ensure a decent livelihood to them, as well create lasting social harmony, industrial prosperity and the growth of the economy.

- 19.2 Kerala is generally known as a labour-friendly State. There is genuine concern and commitment to the protection of the interests of labour and promotion of its welfare. However, some still continue to hold the view that labour in Kerala is an irritant factor posing a constraint on investment. But this view is totally baseless since it is based on clear class bias and misinformation. This is well proved by the data on industrial peace and the spurt in investment in the industry sector in the State.
- 19.3 As per 2001 Population Census, the State's population was 3.18 crores and 63.4 per cent of the population was in the age group of 15-59 who constitute the labour force. Projected labour force for 2011 is 237.30 lakhs. Out of India's total main workers, 2.6 per cent are Keralites. Kerala has 102.91 lakhs workers (main and marginal) of whom 16.54 lakhs are agricultural labourers and 3.65 lakhs in household industries. Net out-migration of labour to other parts of India and abroad and the resulting inflow of remittances into the state is an outstanding phenomenon. Some studies by researchers at the Centre for Development Studies, Thiruvananthapuram and IIM, Kozhikode have put the amount of remittances from the Gulf region alone as high as 22 per cent of the state's NDP.

Composition of Workers

19.4 Composition of workers implies the size of labour force engaged in different sectors of the economy. The labour community in Kerala mainly consists of those who are engaged in the informal sector (loading & unloading, casual work, construction work, brick making, self employment etc), traditional industries (coir, cashew, handloom, beedi etc), manufacturing sector (small, medium and large industries), IT industry, units in export promotion zones and those who are seasonally employed. The work participation rate (WPR) for men and women as per 2001 Census was 50.40 and 15.30 respectively. Also mention is to be made about child and migrant labour.

Child Labour

19.5 One social hazard, contributed by present day life is child labour. During the last five years much involvement in rehabilitation and other programmes have been made to eradicate child labour. Child labour in homes and hotels are banned with effect from 10th Oct 2006 under the Child Labour (Prohibition and Regulations) Act 1986. Violators will be charged a fine up to Rs 20000 and an imprisonment of 2 year term. Children below age of 14 years are banned from working as domestic servants or at hotels, tea shops, restaurants and resorts. Children working in lower - end restaurants and high way food stalls and motor workshops are however a common sight in many parts of the country.

Migrant Labour

Another social hazard is inter-state migrant labour. During the last five years much has been done in improving the life situation, education, health etc of the migrant workers. Migrant workers, seeking employment in Kerala from other states like West Bengal, Bihar, Orissa, Chattisghargh, Jharkhand etc apart from the workers already present in this State from Tamil Nadu, are increasing. These workers, many of them being contract labour, are subjected to inhuman exploitation by paying low wages at below subsistence level and forcing them to work under shabby conditions at work place. A large number of them are also suffering from contagious diseases due to lack of sanitation and healthy environment. At the same time the women workers recruited from Kerala for working in the fish processing centres in the North Indian States particularly in Guiarat and Maharashtra are also being exposed to miserable conditions at their work place. The contract system of employment is also increasing in our State. But compared to the migrant workers, the local workers are well organised and succeed in getting decent wages and working conditions. Awareness programmes are being conducted by the State for the migrant workers. The relatively higher wages and the general atmosphere of better respect, status and protection given to labour in Kerala as compared to that in their home states have attracted migrant labour to the state. Further, the reluctance of Kerala workers to take up certain types of work has created demand for migrant labour to fill the gaps. The labour department has initiated a number of programmes like Seminars and Medical Camps aiming at improving awareness among migrant workers as well as promoting their health and living conditions. The medical camps are conducted at the work site and medicines supplied on the spot.

Industrial Relations

19.7 The labour department is a statutory agency to bring about and maintain harmonious relations in industrial establishments. For the maintenance of harmonious relations and creation of a conducive climate for sustained investments, effective enforcement of labour laws and labour welfare schemes is a prerequisite. The enforcement of labour laws is carried out at the grassroots level through 101 Assistant Labour Officers spread all over Kerala. The Labour Commissionerate provides this required support to the state government in framing appropriate labour and industrial relation policies, programmes of timely state interventions in the labour sector, updating labour laws and expediting their implementation to the satisfaction of both workers and employers. While safeguarding the rights and privileges of the working class, the Department helps to create and maintain an investor-friendly environment. There are 30 labour laws administered by the Labour Department. 79 categories of employments have also been covered by the Minimum Wages Act 1948. Out of these minimum wages were notified in 41 employments only.

19.8 Generally, industrial relations in the state in 2008 have been peaceful. However, the working class has come forward to register their protests against the anti-labour policies of the Government of India, but they need not be counted as real 'industrial disputes between labour and employers on terms and conditions of employment'. Details on strikes, lockouts and layoffs for the last 6 years are given in the following Tables

Table 19.1 Strikes

(Numbers)

Items	2003	2004	2005	2006	2007	2008(Up to 30.09.08)
Pending	0	1	1	0	1	0
Arose	19	12	10	7	2	13
Total	19	13	11	7	3	13
Man-day lost	72160	143387	3250553*	86977	86746	61740

Source: Labour Commissionerate

Table 19.2 Lockouts

(Numbers)

						,
Items	2003	2004	2005	2006	2007	2008(Up to 30.09.08)
Pending	24	20	27	23	27	4
Arose	17	23	4	6	0	3
Total	41	43	31	29	27	7
Man-day lost	1932465	1881349	1855429	1811755	1505370	531684

Source: Labour Commissionerate

Table 19.3 Layoffs

(Numbers)

Items	2003	2004	2005	2006	2007	2008(Up to 30.09.08)
Pending	12	10	9	8	6	2
Arose	23	9	10	3	3	3
Total	35	19	19	11	9	5
Man-day lost	888840	11452578	583771	564669	533872	23003

Source: Labour Commissionerate

Conciliation Machinery

19.9 One of the prime functions of Labour Department is to act effectively as conciliation machinery to redress the grievances of employers and employees. This arrangement is now available in all 14 district head quarters. Three Regional Joint Labour Commissionerates and the State Commissionerate provide good support to the conciliation process. The industrial disputes are settled mainly through the conciliation officer who is vested with the power to intervene in industrial disputes, existing or even apprehended with a view to bring about amicable settlements.

Labour Courts and Tribunals

19.10 When conciliation efforts fail, the dispute is referred to adjudication by Labour Courts/Industrial Tribunals. The adjudication process has become time-consuming and burdensome. The Labour Courts and Tribunals are over-burdened with very large number of cases. On an average, it takes about 3 to 5 years for getting a judgment or an award.

Arbitration

19.11 Between adjudication and arbitration, the latter is considered to be more effective for the reasons that the procedures are simple, the proceedings will not be tardy, and the decision is rendered by a person in whom both parties have confidence. In the report of the National Labour Commission (2002), it is stated that, "We would like the system of arbitration to spread and over

time, become the accepted mode of determining disputes which are not settled by the parties themselves."

Industrial Relations Committees (IRCs)

The IRCs functioning in the state as Joint Consultative bodies have been considered by the First and the Second National Commissions on Labour as outstanding contribution of Kerala to the country. Although the decisions/settlements of IRCS are not enforceable by law, the settlement/decision taken by IRCs are considered as a general agreement in the State as a whole. The origin of the IRCs goes to the one started in the Coir Industry in the early 1940s based on the GEORGE Committee Report (Report of the Board of Conciliation of Trade Disputes in the Mats and Matting Industry, 1939, Government of Travancore) and modelled on the Whitley Councils in Great Britain. Since then the idea of IRC has deeply rooted in Kerala. There are now about 14 such IRCs to prevent or resolve disputes in the traditional sector including plantations. These were very active and result-oriented during the initial stage. The Plantation Labour Committee is considered as a model Committee; One unique feature of the IRCs in the state has been the formulation of mutually and amicably agreed formulae to settle industrial disputes on issues like Bonus. Kerala also has the record of a settlement of 'minimum bonus', irrespective of profit or loss, in the Plantations industry, as early as 1944. Even the idea of minimum bonus became accepted in India only after the Bonus Commission suggested it in the late 1970s and the Bonus Act was passed.

Safety of Workers

19.13 The Department of Factories & Boilers is the Statutory Authority to ensure safety, health and welfare of factory workers and the general public living in the vicinity of factories through implementing various laws. Inspection of major accident hazard (MAH) factories, air monitoring studies in hazardous factories, workshop/training programmes for workers and managers, medical examination of factory workers are the major activities of the department. The department is in the pursuit of prevention of industrial accidents and creation of an environment conductive to industrial hygiene as well as prevention of occupational diseases by inspection and advisory service. The department has neither any externally aided activities nor any schemes to be implemented under Local Self Government's Plan.

19.14 There are 18214 establishments in the year 2008 which came under Factories and Boilers Act as against 18160 in 2007, indicating an increase to the extent of 54. Details are given in the following Table

Table 19.4
Establishments and workers coming under the purview of Various Acts enforced by Factories and Boilers Department (Numbers)

Year	Establishment	Workers
2006	16532	450479
2007	18160	579348
2008(up to 30.09.08)	18214	590004

Source: Factories and Boilers Dept

19.15 There is a sharp decline in various programmes conducted by Factories and Boilers Department in 2008. A total of only 588 programmes so far conducted in 2008 as against 1138 in 2007. More details are furnished in the following Table

Table 19.5
Programmes conducted by Factories and Boilers Department

(Numbers)

Sl.No.	Programmes	2007-08 (Revised)	2008-09(up to 30-09-08)
1	Priority inspection at MAH factories	24	23
2	Air monitoring studies in hazardous factories	23	15
3	Workshop/training programmes for workers/managers	9	6
4	Inspection at hazardous factories by specialist inspectors	455	188
5	Medical examination of factory workers	627	354
	Total	1138	588

Source: Factories and Boilers Dept

19.16 Administrative sanction was accorded to start a Welding Institute & National Testing Research Centre at Ernakulam. The Institute is autonomous in nature under the control of Government of Kerala and Department of Factories & Boilers in collaboration with FACT-Aluva

Kerala Institute of Labour and Employment

19.17 The Kerala Institute of Labour and Employment, an autonomous body constituted by the Government of Kerala for the purpose of training and research in Labour and Employment, started functioning on 4.2.1978 as a registered society under Travancore-Cochin Literary, Scientific and Charitable Societies Registration Act 1955. The institute is performing a prominent role in promoting programmes relating to labour and employment. KILE is conducting training programmes, workshops and seminars on labour related subjects, and training to the departmental officers and other stake holders of industry. Memorial Lecture series in the names of prominent trade union leaders were launched.

19.18 The Institute had conducted training program on Right to Information Act 2005 and on Building Functional Competence during 2007. Total number of participants and number of programmes conducted by Kerala Institute of Labour and Employment during 2008 is given in the following Table:

Table 19.6
Programmes conducted by
Kerala Institute of Labour and Employment during 2008

		1 0	0
Sl. No	Programmes	Numbers	Beneficiaries
1	Training Programmes	10	
2	Workshop	7	
3	Seminars	3	1039
4	Talks/Other programmes	2	
	Total	22	

Source: KILE

19.19 A book entitled 'Kerala Labour Challenges and Responses' was published incorporating the outcome of various workshops and seminars conducted by the Institute.

Social Protection Measures

- 19.20 From ancient times till recent years, the Indian society had a traditional care system where the members were taken care of by their families, kin, castes and community. Now this system has virtually disintegrated with the emergence of nuclear family, urbanization, modern education, migration and transformation of the world into a global village by the dynamic forces of globalisation. The major and tragic outcome of this is the ever-growing insensitivity of people to fellow creatures.
- 19.21 The Directive Principles of State Policy in the Indian Constitution, among other things, expressly entrust the State 'to make provision for securing the right to work, to education and to public assistance in case of unemployment, old age, sickness and disablement' (Article 38), 'just conditions of work and maternity benefit' (Article 42), and, 'social security, social insurance and unemployment relief' (Article 83). However, after launching the package of New Economic Reforms consisting of Liberalisation, Privatisation and Globalisation (LPG), the Government of India has started relinquishing its constitutional obligations making a mockery of the Directive principles of State Policy. This is done under the pressure of Global as well as national Corporate Capitalism.
- 19.22 There is nothing wrong in viewing the society as consisting of two basic classes, namely, Labour and Capital. The process of globalisation has been very rapid with Capital and Commodities and Services, including their markets. Labour has been victimised by the process of globalisation. Capital has been globalised, but labour is yet to be globalised. Capital can freely move about, but labour cannot. The WTO is insisting on social clauses and labour standards to be linked with trade in goods. There is an open conflict between the IMF, World Bank and the WTO on the one side and the ILO on the other.
- 19.23 Today, workers and their trade unions in India are under attack. They are forced to confront escalating unemployment, casusalisation, informalisation, wage and staff cuts, destruction of entire industries, declining health and safety standard, union busting and quite often, the co-option of union leaders by employers, erosion of basis labour rights, militancy from aggressive employers, imposition of unfair labour practices, loss of social protection and safety nets etc. The composition of the working class and the nature of the proletariat have undergone big changes. The strength of blue-collar workers is declining and that of knowledge workers is increasing. Part-time and temporary workers are engaged in low paying jobs. Trade unions are losing their leverage and control over members. Union membership is declining fast. In certain sectors with rising wages, workers do not identify themselves as belonging to the class of the proletariat. The material living standards and life styles of workers have dramatically improved. Central Government and some state governments have shown enthusiasm in implementing globalising policy shifts, privatisation, deregulation, decontrol, restructuring, de-indexing wage growth, cutting back or closing down public sector, downsizing and then calling it 'right-sizing' to justify it, scrapping social protection measures and framing new labour laws for ensuring labour market flexibility to please Capital. Governments and nation states are, voluntarily or under pressure, giving up discretionary and regulatory prerogatives amounting to virtual surrender to global capitalism. In this context, Kerala has taken a different stand as it has always been a pro-labour one.

19.24 The ILO is also very much concerned with blatant violation of labour rights. It has taken up the issue of countering Social Exclusion, Global Deficit of Decent Work and fast vanishing Social Policy resulting from the sad demise of Nation State. The ILO Conventions provide for social protection for Labour. Most comprehensive is the Convention No.102 of 1952 on medical care, sickness, unemployment, old age, employment injury, family maternity, invalidity and survivor's benefits. The 90th Conference of the ILO held in June 3-20, 2002 registered its protest and condemned the emerging global economic order which is creating "filthy inequality, deeper poverty, and, social exclusion". The International Institute of Labour Studies (IILS) in 2000 had focused on Social Policy, Social Justice and Decent Work. It drew attention to three critical shortfalls emerging from globalisation. They are in the field of opportunities being created for productive work, not only work, but of work that is considered decent by ordinary people and Social Protection.

19.25 ILO's Socio-Economic Security Survey (SES) covering 48000 in 15 countries and 10000 in 11 countries conducted as a People's Survey (2002) identified seven forms of labour related insecurities in the areas of Income, Labour Market, Employment, Work, Skills, Job, and, Voice Representation. Some instances of such insecurities are mentioned here:

"Non-payment or delayed payment of wages, unauthorised deductions, denial of statutory benefits, conversion of full time jobs in to part-time, permanent job to casual job, skilled job in to semi-skilled and then to unskilled so as to reduce wages, contracting out and outsourcing work, informalisation, lack of protection on occupational hazards, injury and accidents at workplace, harassment at workplace, raising workload and working hours, encouraging trade union busting". The Survey has prepared score values and classified countries as Pace Setters, Pragmatists, Conventionals and Much-to-be done groups. It is found that India came under the last category.

19.26 India's Economic Reforms contains, among other things, a component on Labour Law Reform. This is reflected in the Report of the Second National Commission on Labour (2002) headed by Ravindra Varma. The leaders of monopoly capital in the country has been forcibly demanding flexible labour laws so that they can continue with their indulgence in labour market abuses with out fear of law. According to them, flexibility means right of managements to 'adjust' their labour force from time to time according to their whims and fancies in the name of 'changing needs of the industry' or 'to meet the exigencies caused by genuine economic reasons' or 'in the best interest of the undertaking' etc. Indian industry and monopoly capital now want to shift their failure in facing global competition to the shoulders of workers and trade unions. They also accuse Indian labour laws as a serious stumbling block in the creation of more employment and closure of units. The Second National Commission on Labour has recommended, among other things, such retrograde steps like removal of protection of 48 hour work week, legitimisation of contract labour and leaving out Unfair Labour Practices from the statute books.

19.27 In contrast to the national scenario, Kerala has established a network of social protection measures not only covering labour but also other sections of society which needed them Here we discuss only measures directed at labour. The measures directed at other sections are covered under the chapter on Social Security and Welfare. Labour being a concurrent subject, both the Central and State Governments have enacted several laws on social protection measures for labour. Kerala has good track record in the field of social protection measures, particularly the ones directed at the working class. Eradication of child labour, awareness programme on interstate migrant workers, survey of interstate migrant workers and unorganised daily waged employees, distress relief fund are few important measures taken up recently. The most important statutory measures undertaken in Kerala for industrial workers are ESI, EPF, gratuity, maternity benefit, workmen compensation and special protection for women, children and old.

Global Financial Crisis and Labour

19.28 The year 2008 saw a serious global financial crisis triggered by the financial meltdown in the USA. It is rightly said that as the USA fell in to a recession, the rest of the global economy also got sucked downwards with it. The collapse of credit instruments originating in the USA started weakening the financial balance sheets of many economies all over the world. This is the worst crisis since the Great Depression of the 1930s. The World Economic Outlook of the IMF (April 2008) described the crisis as 'as the largest financial shock since the Great Depression', inflicting heavy damage on markets and institutions. Other commentators have described the crisis as a 'systemic financial meltdown', a 'financial tsunami', or even 'the Very Great Depression in the making'. But the impact of this crisis on labour seems to be serious. In the USA alone 10 % of the workforce is unemployed or underemployed. The ILO estimates that at least 5 million will be added to the ranks of the unemployed. Global unemployment rate may also go up substantially. Regions like India and Kerala will be hit because of reduced credit flows, export earnings, and, inflow of inward remittances from expatriate population. The only relief possible is the change in the Rupee-Dollar exchange rate rewarding exporters as well as Indian expatriates sending their remittances home.

19.29 The current crisis is but the latest manifestation of fundamental contradictions the world capitalist system that is intensifying in the era of imperialist globalization. Increasing economic polarization, over accumulation of capital and overproduction that give rise to economic crises and ultimately ruin the society's productive forces – these are inherent in a system that is based on the private monopoly control of a few over the social means of production – and no amount of fiscal stimulus or financial regulation can fix these problems. The policy to shift 'toxic debt load' of private banks and brokers on to the government budget pushing the budget deficit would finally impact on the people. It would also worsen the fundamental imbalances in the real economy. For the labour movement the current situation is both a challenge and opportunity. It must resist/counter monopoly capital's desperate attempt to shift the burden of the crisis by consolidating the ranks of all working people, building unity with other oppressed and exploited sections of people. It must also deepen its understanding of imperialism's offensives –economic, political, military and ideological—against working people.

19.30 JUAN SOMAVIA, the Director General of ILO. has given out shocking projection about the impact of global financial crisis on employment [U.N. News Centre, 20th October, 2008)].According to him, the number of jobless in the world will rise by 20 million from 190 million in 2007 to 210 million in 2008. The number of working poor living on less than one dollar a day could rise by some 40 million. Those at \$2 a day could even rise by more than 100 million. The sectors to be hit hardest would be Construction, Automobile and ancillaries, Tourism, Finance, Services and Real Estate. The actual number could be much higher than that projected. As the ILO Chief says: "the present crisis is not simply a crisis on Wall Street, it is a crisis on all streets". He concludes by adding that we need an economic rescue plan for workers and families and rules and policies that deliver decent jobs. We also need to protect and promote sustainable enterprises and decent work opportunities. Besides the impact of the present crisis leading to massive job loss, we also need to tackle the long pending crisis of massive global poverty. This requires a joint international action plan.

19.31 The global financial and economic crisis has serious implications for Kerala economy in general and labour in particular. Already the traditional industries have been badly hit. The plantation sector is witnessing serious distress among workers. The IT&ES sector is laying off their employees in large numbers. Many IT companies have stopped their annual campus

recruitment exercises and those who had been recruited have not been served with appointment/placement orders. All round cuts in wages and fringe benefits are reported from many sectors in the name of cost cutting. The export of manpower to other states and abroad is also badly hit with serious repercussions on Kerala's scenario on employment and income. All this would call for a major shift in development strategy in the state.

Employees' State Insurance Scheme

19.32 This is the most comprehensive welfare measure implemented by Insurance Medical Services Department that aim to protect and promote the well being of the employees of the organised sector of State government in collaboration with Sate government and ESI Corporation. It provides medical care to the insured persons through its network of hospitals and dispensaries with full fledged outpatient, inpatient and specialist treatment under Allopathay, Ayurveda and homoeopathy.

Workmen's Compensation Scheme

19.33 The Labour Department is administering this scheme more or less satisfactorily except for the delay in taking decisions in some complicated cases. The following Table pertaining to details of industrial accidents from 2002 to 2007:

Table 19.7 Industrial Accidents 2003-2008

(Numbers)

Year	Accident			
1 Cai	Fatal	Non-fatal		
2003	18	393		
2004	9	254		
2005	18	931		
2006	62	355		
2007	115	524		
2008(Up to	17	93		
30.09.08)	17	73		

Source: Labour Commissionerate

19.34 The Factories and Boilers Department coming under the Labour Department ensure safety, health and welfare of factory workers and the general public living in the vicinity of factories. The number of fatal accidents is very low in the State. But, the frequency of non-fatal accidents reported needs the attention of the officers in charge of safety measures in the various establishments. There is no co-ordination between the Department of Labour and the Directorate of Factories & Boilers in handling accidents cases and monitoring the relief and compensation given to the victims. The same can be said about the incidence of occupational diseases and the care support given to the affected employees.

19.35 The Factories Act stipulates that all cases of occupational diseases detected by general medical practitioners should be reported to the Chief Inspector of Factories. It also provides for periodic medical examination of workers especially in hazardous industries.

Fire & Rescue Services

19.36 Fire & Rescue services department was established in 1963. Its pivotal role is vital in every incident of fire road accident, drowning cases, explosions, land slides, flood, earth quakes,

drought, Tsunami, railway disasters, building collapse etc. At present there are 85 Fire & Rescue Services Stations, 3 Divisional Fire & Rescue Services Offices and Head Office in the State.

Labour Welfare Funds

19.37 At present, there are 14 Welfare Fund Boards functioning in the State under Labour Department to provide welfare amenities to the concerned sector of labour. There are 18 welfare schemes implemented by the Labour Department in 2008. They are Kerala Beedi & Cigar Worker's Welfare Scheme, Kerala Handloom Worker's Welfare Scheme, Kerala Agricultural Worker's Welfare Scheme, Kerala Bamboo, Kattuvalli, Thazha Worker's Welfare Scheme, Kerala Head Load Worker's Welfare Scheme, Kerala Motor transport Worker's Welfare Scheme, Kerala Auto rickshaw Worker's Welfare Scheme, Kerala Automobile Worker's Welfare Scheme, Kerala Cashew Worker's Relief & Welfare Scheme, Kerala Labour Welfare Scheme, Kerala Artisans & Skilled Worker's Benefit Scheme, Kerala Laundry Worker's Welfare Scheme, Kerala Barber & Beautician Worker's Welfare Scheme, Kerala Toddy Worker's Welfare Scheme, Kerala Abkari Worker's Welfare Scheme, Kerala Tailoring Worker's Welfare Scheme, The Building & Other Construction Worker's Welfare Scheme, Kerala Shops & Establishment Workers Welfare Scheme. In majority of welfare funds there is government contribution. During the year 2008 steps are being taken to restructure the welfare fund boards with a view to prevent duplication of membership and also to standardize the basket of benefits given to members. One major problem facing the labour welfare funds is the high establishment cost and a restructuring is suggested as solution for it. As a first step in this direction a comprehensive data bank and appropriate software will be put in to operation.

19.38 Among the schemes the Kerala Head Load Workers Welfare Fund Scheme appears to be unique since the Head Load Workers Welfare Board has the status of a deemed employer. The Kerala Building and Other Construction Workers Welfare Board is also distinct as its functioning is regulated by a central statute viz, the Building and Other Construction Workers Act 1996. Under this Act, a Welfare Fund Cess is levied on construction works. The range of benefits granted to the registered members of these Welfare Funds/ Schemes include pension, PF, gratuity, medical benefits, educational scholarships to children of workers, grant for marriage of daughters, maternity benefits etc.

Industrial Training Institutes

19.39 It is observed that an overwhelming majority of workforce in Kerala does not possess any identifiable marketable skills. It is evident from the data on employment exchanges where most of the employment seekers are found to be with out any professional or marketable skills. A part of the unemployment problem emanates from the mismatch between the skill requirements of employment providers and the skill base of the job seekers. Rapid expansion of higher education has also contributed to this mismatch in the labour market. This mismatch is likely to become more acute in the process of structural change in the economy. It is, therefore, necessary to reorient the educational and training systems towards improving the capability to supply the requisite skills in the medium and long term and introduce greater flexibility in the skill training system so as to enable it to quickly respond to labour market changes in the short run.

19.40 Kerala has wide network of skill training institutions both in the state as well as private sector. The Industrial Training Institutes (ITIs) in the state sector and Industrial Training Centres (ITCs) in the private sector constitute the backbone of industrial skill training in Kerala. The Craftsman Training Scheme was introduced by the Government of India in 1950 to ensure a steady flow of skilled workers in different trades for the domestic industry. The ITIs in Kerala offer various courses in trades which are recognised by the Government of India. The day to day administration of the ITIs under the Craftsman Training Scheme was transferred to the State

Government/Union Territory administrations with effect from the year 1956. The Department was named as 'Industrial Training Department' in 1970. It is in charge of Craftsman Training Scheme as well as Apprenticeship Training Scheme. Table 19.8 gives the district-wise distribution of ITIs. In addition to this, there are 504 ITCs in the state. There are also 41 ITCs under the SC Development Department and three VTCs under ST Development Department.

Table 19.8
District-wise ITI's in the State
* Basic Training Centre (BTC)

Sl.No.	District	No. of ITIs
1	Thiruvananthapuram	5
2	Kollam	4+1*
3	Pathanamthitta	2
4	Alappuzha	3
5	Kottayam	4
6	Idukki	2
7	Ernakulam	2
8	Thrissur	4
9	Palakkad	4
10	Malappuram	2
11	Wayanad	2
12	Kozhikode	3
13	Kannur	5
14	Kasaragod	4
	Total	47

Source: Industrial Training Department

19.41 The 47 government ITIs in the State including the newly started 13 ITIs and one Basic Training Centre at Kollam are ITI Dhanuvachapuram, ITI Chackai, Thiruvananthapuram, ITI For Women Kazhakkuttom, ITI Attingal, ITI Aryanad, ITI Chathannoor, ITI Chandanathope, Kollam, ITI For Women, Kollam, ITI Chengannur, ITI For Women, Chengannur, ITI Chenneerkara, ITI Ettumanoor, ITI Pallickathode, ITI Kattappana, ITI Kalamassery, ITI For Women, Kalamassery, ITI Chalakudy, ITI For Women, Chalakudy, ITI Mala, ITI Malampuzha, ITI For Women, Malampuzha, ITI Kuzhalmannam, ITI Nilambur, ITI Areacode, ITI Kozhikode, ITI For Women, Kozhikode, ITI Quilandy, ITI Kannur, ITI For Women, Kannur, ITI Kayyur, ITI, Kalpetta, ITI Kasaragode and ITI Attappadi, ITI Elamad, ITI Mezhuveli, ITI Rajakkad, ITI Purakkad, ITI Mulakkulam, ITI Nenmeni, ITI Bepur, ITI Maranchery, ITI Payyannur, ITI Uduma, ITI Chelakkara, ITI Valayam, ITI Eriyad.

19.42 Total seat strength under Industrial Training Institute was 11070 in 2006-07 (Revised) and trainees enrolled were 9618. As against this, the total enrolment is 10240 in 2007-08.Out of 10240, SC and ST students accounts 1554 and 155 respectively and girls 2291 (Appendix 19.1). Similarly number of trainees admitted during 2008 in ITCs was 19531 as against the last year's enrolment of 15000 (Appendix 19.2). The Industrial Training Institutes are conducting one year, two year and three year courses.

19.43 There are 27 trades in one year course. Similarly there are 19 trades in two year course of which no person was admitted in electro plating and mechanical industrial electronics. In the one year course, the students strength is highest in trades like welder (780), COPA (504), plumber (433) and carpenter (374) and the total students admitted in one year course amounts to 4067

(Appendix 19.3). Out of the total strength of 4742 students in the two year courses, 606 are in fitter trade and 579 are in Electronic Mechanic (Appendix 19.4).

Centers of Excellence

19.44 During the year 2008 a greater thrust is given to the modernisation of ITIs through schemes relating to revamping of existing trades/upgradation of equipments, direct upgradation of ITIs, staring employment oriented courses/Production Centres/New Trades, getting affiliation with NCVT and conversion of ITI Kayyur as Model ITI and introduction of English speaking course. Kerala has received Government of India assistance (CSS-75%) to upgrade 5 ITIs as 'Centres of Excellence'. The Annual Plan 2008-09 has also given funds to the Department to start new ITIs since Kerala has the smallest number of ITIs in the country.

19.45 Government of India and DGET has introduced a Centrally Sponsored Scheme of upgradation of ITIs into Centers of Excellence in order to produce world class work force, which can keep pace with the technological and skill demands of the industry. With this view, Government of India had decided to upgrade 500 ITIs in the country into Centres of Excellence in a phased manner, at the rate of 100 ITIs in every year.

19.46 Fourteen ITIs have been upgraded in the State into Centres of Excellence in a phased manner with different sources of funding. The details are furnished in the following Table: 19.9:

Table 19.9
Up gradation of ITIs into Centers of Excellence with different sources of funding

Sl No	ITI	Sector/Course		
	Domesti	ic funding		
1	ITI Chackai	Automobile		
2	ITI Chandanathope	Automobile		
3	ITI Kalamassery	Automobile		
4	ITI Ettumanoor	Production and Manufacturing		
5	ITI Chalakudy	Production and Manufacturing		
	World Bank			
6	Pallickathode	Hospitality Management and Tourism		
7	Dhanuvachapuram	Production and Manufacturing		
8	Kollam (W)	Food Processing		
9	Malampuzha	Industrial Sector Electrical		
	Public Priva	te Partnership		
10	Attingal			
11	Chengannur			
12	Kozhikode			
13	Kannur			
14	Kasaragod	Industrial Sector Electrical		

Source: Industrial Training Department

Modern Trades in ITIs

19.47 Up gradation of trades have been envisaged through retraining and updating the skill of teachers and modernisation of the existing equipments. During 2004, 20 units in 8 trades were introduced in 12 ITIs. During 2005, 26 units in 13 trades were introduced in 13 ITIs. In 2006, 4 units in 4 trades were introduced in 2 ITIs and in 2007, 26 units in 13 trades were introduced in 13 ITIs. In the last two years 26 units in 15 trades were introduced in 13 ITIs (Appendix 19.5).

19.48 During the year 2008 a greater thrust is given to the modernisation of ITIs through schemes relating to revamping of existing trades/upgradation of equipments, direct upgradation of ITIs, staring employment oriented courses/Production Centres/New Trades, getting affiliation with NCVT and conversion of ITI Kayyur as Model ITI and introduction of English speaking course. Kerala has received Government of India assistance (CSS-75%) to upgrade 5 ITIs as 'Centres of Excellence'. The Annual Plan 2008-09 has also given funds to the Department to start new ITIs since Kerala has the smallest number of ITIs in the country.

Apprenticeship Training

19.49 Apprenticeship training is also provided through 9 RICs (Related Instruction Centers) and 5 ITIs. It has been observed that, the approved seat strength for apprenticeship were not utilised fully. During 2006, only 6920 apprentices were trained against the seat strength of 7899. In 2007, 7445 apprentices were trained as against the seat strength of 8401. Out of this 6633 were boys and 812 were girls (Appendix 19.6). Similarly in 2008, 7930 apprentices were trained as against the seat strength of 8676. Out of this 6917 were boys and 1013 were girls.

Annual Intake and Out turn of ITIs Students

19.50 The joining and passing out ratio in the ITIs is much higher in comparison with college level courses. Out of 4742 students admitted in two year course in 2006, only 62% (2926) passed the course. Compared to this of the 5363 students admitted in 2005, 3362 (63%) passed out.

19.51 In case of regular trainees percentage of pass of ITI students was much impressive. It was 73.14 per cent while in case of ITC students; it was 61.60 per cent only. Details in this regard are furnished in the following Table 19.10

Table 19.10
Result analysis of regular trainees during the last three years

Year of trade test	ITI/ITC	No. of Trainees appeared	No. of trainees passed	Per cent
July 2006	ITI	8080	5850	72
July 2000	ITC	17458	9406	54
July 2007 (Revised)	ITI	7323	5494	75
July 2007 (Revised)	ITC	14864	8158	55
July 2008	ITI	7119	5207	73
	ITC	14934	9200	62

Source: Industrial Training Department

19.52 Kerala State Institute of Design is functioning in the premises of ITI Chandanathoppe, Kollam. The vision of the Kerala State Institute of Design is to create a vibrant craft design community in Kerala through synergistic partnership between artisan communities, professionally trained designers and general public to enable the artisan and craftsman community a decent living and respectability in society.

19.53 The Labour Department is entrusted with the implementation of Rashtriya Swastha Bima Yojana and a novel comprehensive health insurance scheme. The details of the schemes are given in the Box below

Box Number 19.1 Rashtriya Swastha Bima Yojana and Comprehensive Health Insurance Scheme

The Union government has launched a Health Insurance Scheme, the Rashtriya Swastha **Bima Yojana** (RSBY) for BPL workers as defined by the Planning Commission and their families in the unorganized sector to be implemented by the Labour Department. The annual insurance cover is for a maximum amount of Rs 30,000 for a family of five, including the worker, spouse, children and dependent parents (if included in the BPL family list) and the annual insurance premium not exceeding Rs 750 is to be decided through tender process. The Union government meets 75 per cent of the insurance premium (including the cost of the smart card) and the State government 25 per cent. The beneficiary family makes a small contribution. An additional benefit has been negotiated in the scheme as being operationalised in Kerala -- an accidental death of either spouse entitles the next of kin to a compensation of Rs 25,000 in that year. This scheme was launched in Kerala on October 2nd 2008 to cover all districts and a total of 11.79 lakh (Absolute Poor) households as part of a more ambitious insurance programme, the Comprehensive Health Insurance Scheme (CHIS) which covers the non-RSBY population. The latter is divided into two categories: (a) those belonging to the BPL (Poor) list of the State government, that is about 10 lakh households; and (b) APL families that belong neither to the State government nor the Planning Commission list. In the case of the first category the beneficiary pays the same contribution as the RSBY beneficiary and the State government meets all the remaining expenses, including for the smart card. In the case of families in the second category, the beneficiary contribution would cover the entire amount of the premium, plus the cost of the smart card.

Work on RSBY and CHIS has started and a nodal apex society, *Comprehensive Health Insurance Agency of Kerala* (CHIAK) has been set up under the Labour Department for the implementation of both the schemes to be operated separately. It was started in Alleppey district where it has become functional; almost 85,000 BPL households have been registered; 200 have already availed of the services, largely from the government hospitals. In Quilon too it is operational. In the other districts it has been introduced and would become operational in a month or two. All over the State about 2,65,000 households have been registered.

UNEMPLOYMENT

- 19.54 Today the problem of unemployment is the single largest puzzle of Kerala economy. Unemployment is said to prevail when supply of labour exceeds its demand. That is unemployment exist, if all able bodied men are not able to work at the existing wage rate. Growth of supply of labour is determined by population growth and participation of population on the total workforce. In Kerala from the decade of 1970's onwards there has been a rapid rise in the labour supply because of the increase in the number of women seeking wage employment. Thus, though the supply of work seekers increased, the demand for them did not increase. As a consequence there was an alarming increase in unemployment rate from time to time.
- 19.55 The unemployment problem in Kerala is not only about educational unemployment but also simple unemployment of semi skilled and unskilled workers. This is the highest in the country and on the rise, too. One important feature of Kerala Economy, which makes it different from the rest of the country, is net out migration of labour force particularly to Gulf region and inflow of huge remittances into the State. Huge out migration, as has been rightly pointed out, happens mainly because of lack of employment opportunity.

19.56 The worsening unemployment situation is obviously related to the inability of the economy of the State to generate any fresh employment during the last decade. While this phenomenon of "Jobless Growth" is observable in all the States in the country, the situation in Kerala appears to be particularly distressing because most of the labour intensive/labour absorbing traditional industries depending on exports are facing a survival crisis in the liberalised trade environment.

19.57 Unemployment and under employment among workers in traditional sectors are indeed of major concerns. One of the most important groups of such workers is the traditional agricultural workers. According to the 2001 Census, the number of agricultural workers in Kerala was around 16.20 lakhs and this is more than twice the number of cultivators (7.20 lakhs) and more than four times the number in the household industry (3.70 lakhs). Close to three- fourth of workers in the household industry is in rural areas and nearly half of them are female workers. Both rural and urban female unemployment rate increased dramatically during the last five years.

19.58 Unemployment arises due to several factors such as low rate of economic growth and the changing profile of the work force. In Kerala these factors have substantially contributed to large scale unemployment. As the economy developed, the demand for unskilled and less skilled labour seems to have declined. On the other hand, the demand for skilled labour, on account of technological development and upgradation and changes in the organisation of work, has begun to increase. The demand for multi-skilled workers also has started rising. At the same time the overall rate of growth in employment got decelerated by more than the rate of deceleration of workforce. The organised sector is not growing enough to absorb work seekers. Significant employment generation is taking place in tertiary/service sector activities. The unorganised/informal sector employment is also increasing due to various reasons. One such reason is the entrepreneur's strategy to remain small or tiny to avoid labour laws.

Employment Exchanges

19.59 To meet the mismatch between supply and demand for manpower the Industrial Training Department and the Employment Department in the state play a complementary role. While the former looks after skill training to make the manpower marketable, the latter looks after the needs of the work seekers. Now let us look at the data provided by the Employment Exchanges in the state. All categories of employment seekers above the age of 14 are allowed to register in the Employment Exchanges. 42.60 lakhs of employment seekers are there in the Live Register of Employment Exchanges as on 30.06.2008, of which 23.07 lakhs are females. Details are given in the following table:19.11

Table 19.11 Registered job seekers in Employment Exchanges (June 2008)

Sl. No.	Category	Numbers
1	Illiterate	197
2	Below Matric	624225
3	Matric	2537326
4	Pre-degree	673282
5	Degree	232949
6	Post Graduates	52889
7	Professional & Technical	139353
	Total	4260221

Source: Employment Directorate

19.60 The Employment Department operates about 96 institutions and they provide placement service, vocational guidance, employment market information, self-employment guidance, unemployment assistance and self-employment schemes for the registered unemployed. But more and more educated and skilled unemployed people are added to the stream everyday so that these services have been considered inadequate to tackle the problem of unemployment in the State. Also most of the unemployed do not possess marketable skills and this reduces their employability. A temporary relief to the problem of growing unemployment can only be sorted by providing speedy and accurate list of qualified persons to the prospective employers. This would call for convergent action by the Employment Department and Industrial Training Department.

19.61 As on December 2004, the number of employment seekers in the live register of employment exchanges in India was 405 lakhs. This number decreased to 394 lakhs in December 2005 and increased to 407 lakhs in June 2006. Of the total of 407 lakhs job seekers, 294 are men and 113 are women.

BOX 19.2

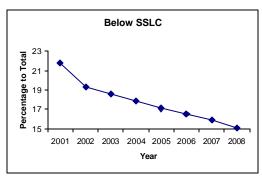
In India as on 30th June 2006 maximum number of jobseekers (74.6 lakhs) awaiting employment were in West Bengal while minimum (0.06 lakhs) were in Dadra and Nagar Haveli – Ministry of Labour and Employment Annual Report 2006-07.

19.62 According to the live register of employment exchanges, the total number of work seekers in 2005 was 36.7 lakhs. This number increased to 38.6 lakhs in 2006 registering an increase of 5.2 per cent. The total number in June 2008 is 41.2 lakhs of which 39.6 lakhs are general work seekers and 1.6 lakhs professional / technical work seekers. Details of work seekers from 2000 to 2008 is given in Appendix 19.7.

19.63 The number of work seekers below SSLC increased from 6.29 lakhs in 2005 to 6.40 lakhs in 2006 and again to 6.24 lakhs in June 2008. The total number of work seekers who possess SSLC and above increased from 30.41 lakhs in 2005 to 32.19 lakhs in 2006 and to 34.96 lakhs upto June 2008. The percentage of work seekers below SSLC to the total work seekers is showing a decreasing trend and the percentage of work seekers who possess SSLC and above is increasing (Table. 19.12). The trend of work seekers in Kerala since 2001 is shown below. (Fig.19.1).

19.64 The number of work seekers with PDC of HSC increased from 5.75 lakhs in 2005 to 6.17 lakhs in 2006 and again to 6.73 lakhs in June 2008. The number of graduates registerd in employment exchanges stood at 229684 in 2005. It increased to 232739 in 2006 and again to 232949 in June 2008. The number of job seekers with Postgraduate degree decreased from 0.55 lakhs in 2005 to 0.54 lakhs in 2006 and to 0.53 lakhs in June 2008. See Appendix 19.8.

Fig: 19.1 Trends of Work seekers in Kerala



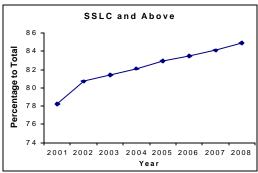


Table. 19.12 Number of Work Seekers in Kerala (in lakhs)

Year (at the end of the	Below	SSLC	SSLC & above		Total Work
December)	Persons	Percentage to Total	Persons	Percentage to Total	Seekers
2001	9.67	21.8	34.64	78.2	44.31
2002	7.12	19.3	29.68	80.7	36.80
2003	7.46	18.6	32.58	81.4	40.05
2004	6.73	17.9	30.83	82.1	37.56
2005	6.29	17.1	30.41	82.9	36.70
2006	6.37	16.5	32.19	83.5	38.57
2007	6.31	15.8	33.58	84.2	39.89
06/2008	6.24	15.1	34.96	84.9	41.2

Source: Directorate of Employment

Table 19.13 Share of Employment Seekers according to level of Education –Kerala (2001,2003,2005,2007 and 2008)

Sl.	Level of Education		Share (Percent)				
No	Level of Education	2001	2003	2005	2007	2008	
1	Below SSLC	21.82	18.63	17.13	15.82	15.15	
2	SSLC	58.1	59.03	59.45	60.72	61.58	
3	PDC or HSC	12.25	14.11	15.66	16.18	16.34	
4	Degree	6.33	6.70	6.26	5.96	5.65	
5	Post Graduate	1.50	1.53	1.50	1.32	1.28	
	Total Work Seekers	100	100	100	100	100	

Source: Directorate of Employment

19.65 The share of work seekers in various levels of education is given in Table 19.13. Of the total employment seekers in 2008, 15.15 percent are below SSLC, 61.58 percent SSLC, 16.34 percent PDC or equivalent, 5.65 percent graduates and 1.28 percent postgraduates. The distribution of work seekers according to level of education for the period from 2000 to 2008 is given in Appendix 19.8.

19.66 The number of professional and technical work seekers in 2005 was 1.77 lakhs. This number increased to 1.84 lakhs in 2006 and decreased to 1.59 lakhs in June 2008. The share of employment seekers with various professional and technical qualifications is given in Table. 19.14, and it is seen that more than 90 percent of the technical and professional employment seekers are ITI and Diploma holders in engineering.

Table 19.14
Share of Professional and Technical work seekers in Kerala

Sl.	Educational Qualification	Share (Percent)				
No	Educational Qualification	2001	2003	2005	2007	2008
1	Medical Graduates	1.52	2.24	1.94	1.55	1.65
2	Engineering Graduates	5.85	5.12	3.61	5.10	5.53
3	Diploma holders in	26.19	25.59	23.37	23.56	22.29
	Engineering					
4	ITI Certificate holders	65.38	66.22	70.32	68.93	69.62
5	Agricultural Graduates	0.85	0.56	0.45	0.47	0.49
6	Veterinary Graduates	0.21	0.27	0.31	0.39	0.42
	Total	100	100	100	100	100

Source: Directorate of Employment

19.67 The job seekers with engineering degree increased from 6389 in 2005 to 8466 in 2006 and decreased to 7706 in June 2008. Engineering diploma holders who had registered their names in employment exchanges increased from 41345 in 2005 to 41700 in 2006 and decreased to 31066 in June 2008. The ITI/ NTC Certificate holders seeking employment decreased from 1.24 lakhs in 2005 to 1.10 lakhs in 2006 and again to 0.97 lakhs in June 2008. The number of medical graduates who had registered their name in the employment exchanges decreased from 3428 in 2005 to 2925 in 2006 and again to 2297 in June 2008. The number of veterinary graduate work seekers has decreased from 547 in 2005 to 522 in 2006 and increased to 580 in June 2008. The number of job seeking agricultural graduates has decreased from 803 in 2005 to 762 in 2006 and again to 690 in June 2008. (Appendix 19.9)

19.68 A peculiar feature of Kerala's unemployment situation is that women outnumber men seeking employment through employment exchanges. This position is reflected in all the 14 districts of Kerala. Out of the total number of 39.53 lakhs job seekers in March 2008, women number 23.08 lakhs (58%). The district-wise unemployment of women and men in 14 districts of Kerala as on 31.03.08 is shown in following graph (Fig.19.2).

Workseekers in Kerala as on 31-3-2008

4
3.5
3
2.5
2
1
0.5
0

Weekers in Kerala as on 31-3-2008

Fig. 19.2

Source: Directorate of Employment

19.69 Thiruvananthapuram District ranks first in the number of work seekers in both general and professional categories. As on 31.3.2008, the total number of work seekers in Thiruvananthapuram District is 5.76 lakhs of which 3.53 lakhs are women and 2.23 lakhs are men. The second largest number of work seekers is from Kollam district. There are 4.09 lakhs job seekers in Kollam District in March 2008, out of which 2.4 lakhs are women and 1.69 lakhs are men. The lowest number of work seekers is in Wayanad preceded by Kasargod District. In Wayanad, there are 0.83 lakh work seekers, whereas in Kasargod the number is 0.99 lakhs in March 2008. Details of district wise distribution of work seekers is given in Appendix 19.10

Unemployment Allowance Scheme (UAS)

19.70 Government of Kerala has introduced an unemployment assistance scheme in 1982 for the unemployment through the Department of National Employment Service. As per the Kerala Panchayat Raj & Municipalities Act 1994, the scheme of unemployment assistance was transferred to the local bodies and the powers for inviting applications for unemployment allowance, processing of applications after the scrutiny of employment officers, sanctioning and the distribution of unemployment allowance are vested with the local bodies. The amount of unemployment allowance provided in the budget is allotted to the Employment Department and the department distributes the amount to local bodies as per their requirements. The annual family income of the applicant should not be above Rs. 12,000 (per annum) and personal income should not be above Rs. 100 per month. The candidates should have passed SSLC and possess three years registration seniority after attaining 18 years of age. The candidates belonging to SC/ST and PH should have appeared the SSLC examination through proper schools. The Physically Handicapped candidates need a registration seniority of two years after attaining 18 years of age. The upper age limit is 35 years. Students are not eligible for applying for unemployment allowance scheme. There are 337032 beneficiaries in the State under the scheme.

The monthly rate of unemployment allowance is Rs. 120 w.e.f. 01.04.2000. During 2006 an amount of Rs.3667.71 lakhs was disbursed to 3.40 lakhs persons and during 2007 Rs. 5005.76 lakhs to 3.62 lakhs persons. The Budget provision for unemployment allowance during 2008-09 is Rs.52 crores. An amount of Rs.23 crores were disbursed for the period from September 2007 to February 2008.

Kerala State Self Employment Scheme for Registered Unemployed (KESRU)

19.71 Self-employment scheme called KESRU (Kerala State Self Employment Scheme for the Registered Unemployed) is being implemented since March 1999. All literates and registered unemployed candidates within the age group of 21 to 50, other than students are eligible to apply under the scheme if their annual family income is below Rs. 40,000 and individual income is below Rs. 500 per month. But those who are undergoing part time courses and courses of less than 6 months duration are exempted from the definition of student. The maximum loan amount admissible is Rs. 100000 depending upon the requirement of the project and 20% of the loan amount will be given as subsidy from the Department. But four or five members can start joint ventures and they will be provided a maximum of Rs.5 lakhs. During the financial year 2007-08 an amount of Rs.1 crore and Thirteen lakhs was disbursed to 862 beneficiaries. (Appendix-19.11)

Multipurpose Job Clubs

19.72 During the Annual Plan 2007-08, the state government has started implementing a Flagship Scheme called Multipurpose Job Club exclusively meant for unemployed persons who are willing to take up employment by entering in to partnership with similar other persons by joining a multipurpose job club being organised by the Employment and Training Department. Those who join the club will get financial assistance in the form of loan from banks. The Department will act as a promoter bringing the banks and the work seekers together and the Department will also provide help to the work seekers with training and preparation of viable projects. All round enthusiasm has been reported from almost all districts in the state. During the current financial year Rs.1 crore has been spent for 68 multi-purpose job clubs started in the state of which 14 are in the Kasargode district. Idukki and Wayanad have registered only one job club each. There is state level steering committee to oversee and periodically review the working of the job clubs. Among the constraints faced are reluctance of new generation banks to lend, insistence on collateral and charging different rates of interest even by the same bank in different districts. These issues have been brought by the Employment Department to the attention of the State Level Bankers' Steering Committee

Employment in the Organised Sector

19.73 In India, the number of persons employed in the organised sector during 1994 was 273.7 lakhs out of the total of 3744.5 lakhs persons employed. In 2000, it increased to 281.1 lakhs persons constituting 7 per cent of the total 3970 lakh persons employed. In March 2004, the number of persons employed in the organised sector was 264.43 lakhs and it increased to 264.6 lakhs in March 2005. The details of organised sector employment are given in Appendix -19.12. Employment of women in the organized sector (both public and private) as on March 2003 was 49.68 lakhs constituting 18.4 per cent of the total organised sector employment in the country. Their number decreased to 49.34 lakhs in March 2004 and increased to 50.2 lakhs in March 2005 (19% of the organised sector employment).

19.74 The organised public and private sector together employ 11.46 lakhs employees in Kerala, which constitute 4.3 per cent of the total employees in the organised sector in India in 2004. The

private sector accounts for 46.3 percent of the employment in the organised sector in Kerala but this figure is 31.2 per cent for India. Details are given in Table 19.15.

BOX 19.3

Growth rate of employment is less than the growth rate of the labour force indicating an increase in the unemployment rate

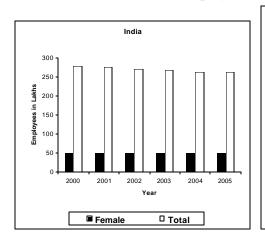
Table 19.15
Employment in Organised (Public & Private) Sector – India & Kerala- 2004
(Lakhs persons)

Particulars		India	Kerala	Share of Kerala (Per cent)
Public Sector	Male	153.07	4.23	2.8
1 uone sector	Female	28.9	1.87	6.5
	Total	181.97	6.10	3.4
	Male	62.02	2.49	4.0
Private Sector	Female	20.44	2.43	11.9
	Total	82.46	4.93	6.0
Total	Male	215.09	6.72	3.1
10tai	Female	49.34	4.30	8.7
	Total	264.43	11.02	4.2

Source: Directorate of Employment

19.75 The share of female employees in the organised sector in Kerala is about 40 per cent and for India it is 19 per cent. In the private sector, share of female workers is 50 per cent in Kerala but less than 25 per cent in India. See Table 19.16 A comparative situation of female employment in India and Kerala is shown through following graph Fig.19.3.

Fig: 19.3
Female Employment in the Organised Sector



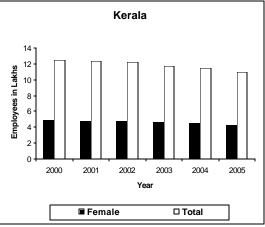


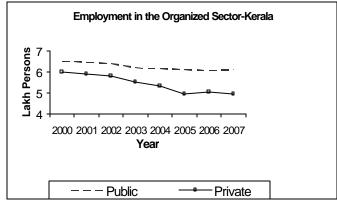
Table 19.16 Share of female employees in the organized sector India & Kerala (2004)

Sl. No.	Sector	Percentage of Employer	
140.		India Kerala	
1	2	3 4	
1	Public Sector	15.88	30.55
2	Private Sector	24.79	50.00
	Total	18.66	39.56

Source: Directorate of Employment

19.76 In Kerala, the total employment in the organized sector started declining from 2001 onwards (Appendix 19.13). The total number of persons employed in the organized sector in December 1999 was 12.32 lakhs persons. The total number grew to 12.51 lakhs persons in December 2000. During 2006 total number of employees in the organized sector came down to 11.11 lakhs persons (4.36 lakhs women & 6.75 lakhs men) of which 6.07 lakhs persons (4.21 lakhs men and 1.86 lakhs women) were in public sector and 5.04 lakhs persons (2.54 lakhs men & 2.50 lakh women) in private sector. It decreased to 11.04 lakhs persons (6.66 lakhs men & 4.38 lakhs women) in December 2007 of which 6.10 lakhs persons (4.16 lakhs men & 1.94 lakhs women) are in public sector and 4.94 lakhs persons (2.51 lakhs men & 2.43 lakhs women) are in private sector. Of the total of 6.10 lakhs employed in the public sector during December 2007, 0.76 lakhs were Central Government employees, 2.76 lakhs State Government employees, 2.32 lakhs Quasi Government employees and 0.26 lakhs Local government employees. Details on public sector employment are given in Table 19.17. District-wise employment in public and private sectors in Kerala as on 31st March of every year from 2003 to 2008 are included in the Appendix 19.14.

Fig.19.4



Source: Directorate of Employment

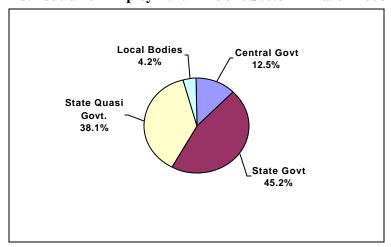
Table 19.17 Employment in Public Sector in Kerala

Year (at the end of December)	Central Govt.	State Govt.	Quasi Govt	Local Bodies	Total
1	2	3	4	5	6
2000	101908	292950	231363	25020	651241
2001	97115	294469	227745	26341	645670
2002	83496	289473	238242	26341	645670
2003	80979	272483	238568	27233	619263
2004	78348	279595	230794	26464	615201
2005	77376	278390	228932	24850	609548
2006	76526	277408	226898	26078	606910
2007	76099	275639	232259	26045	610042

Source: Directorate of Employment

19.77 Though the total employment in the public sector increased from 606910 in 2006 to 610042 in 2007 showing an increase of 0.52 percent, the branch-wise analysis shows that except Quasi Government sector all other sectors showed negative trend. The percentage distribution of employment in public sector is shown in following graph Fig.19.5

Fig.19.5
Distribution of Employment in Public Sector – March 2008



Source: Directorate of Employment

19.78 District-wise employment in public sector as on 31st March 2008 revealed that out of the total 6.10 lakhs employees, 1.42 lakhs belongs to Thiruvananthapuram district, of which 0.41 lakhs are women. The lowest number of 15163 public sector employees is in Idukki district, of which 4166 are women. Branch-wise and district-wise details of public sector employment in Kerala as on 31st March 2008 is given in Appendix 19.15.

19.79 The EMI data in Table 19.18 gives the sector-wise distribution of employment over the last three decades in Kerala and the All India figures are given in Appendix. 19.16.

Table 19.18 Employment in Public and Private Establishments in Kerala as on 31st March

Sl				Number	of Persons	Employed		
N o	Industry	2002	2003	2004	2005	2006	2007	2008
1	2	3	4	5	6	7	8	9
1	Agriculture and allied Industries	102681	110072	97713	85178	83203	81863	80080
2	Mining and Quarrying	3550	3515	3080	11645	21138	2982	4243
3	Manufacturing	310851	298695	310720	254498	213661	244796	255095
4	Construction	24383	27144	26387	26081	27366	21162	21348
5	Electricity, Gas. Water & Sanitary Services	24779	21526	22420	22148	21490	25723	24270
6	Trade, Restaurants & Hotels	24778	31502	29566	31263	27452	31923	38121
7	Transport, Storage & Communication	104072	102322	101656	102584	101644	101060	102889
8	Financing, Insurance, Real Estate & Business Services	83871	88846	86661	96531	82201	86901	86081
9	Community, Social & Personal Services	535038	527777	526220	509845	523375	514570	505290
	Total	1214003	1211399	1204423	1139773	1101530	1110980	1117417

Source: -Directorate of Employment and Training

19.80 Analysis of the growth of employment in public and private establishments in Kerala in 2008 revealed that Electricity Gas Water and sanitary services registered highest decrease of 5.6 percent followed by 2.18 percent in Agriculture and allied Industries, 1.8 percent in Community, Social and Personal Services, and 0.94 percent in Financing, Insurance, Real Estate, and Business services. Among other Industry Divisions, Mining and Quarrying registered highest increase of 42.29 percent followed by 19.42 per cent in Trade, Restaurants and Hotels, 4.21 percent in Manufacturing and 1.81 percent Transport storage and communication and 0.88 percent construction.

Placement through Employment Exchanges

19.81 In India there are 947 Employment Exchanges which include 82 University Employment Information and Guidance Bureau, 43 Special Employment Exchanges for Physically Handicapped, 15 Professional and Executive Employment Exchanges and one Special Employment Exchange for Plantation Labour. Year-wise registration, placement, vacancies notified, submission made and live Register for the period 2000 to 2006 are given in Table 19.19.

Table 19.19 Employment Exchange Details – All India

(In Thousands)

Year (at the end of the year)	Employme nt Exchanges	Registratio n	Placement	Vacancies Notified	Submission Made	Live Register
1	2	3	4	5	6	7
2000	958	6041.9	177.7	284.5	2322.8	41343.6
2001	938	5552.6	169.2	304.1	1908.8	41995.9
2002	939	5064.0	142.6	220.3	1748.8	41171.2
2003	945	5462.9	154.9	256.1	1917.3	41388.7
2004	947	5373.0	137.7	274.61	1801.4	40457.6
2005	947	5437.1	173.2	349.2	2402.0	39347.8
2006 (Jan-June)	947	7289.5	177.00	358.2	3029.5	41466.0

Source: Ministry of Labour and Employment.

19.82 In Kerala total placement through Employment Exchanges had been declining from 2000 to 2004. Total placement in 2000 was 23012. It declined to 8711 in 2004 and increased to 11450 in 2005. In 2006 it declined to 10742 and increased to 12132 in 2007 and again decreased to 9659 in june 2008. The number of placements through employment exchanges and the average number of employers using employment exchanges are given in Appendix. 19.17. The placement through employment exchanges since 2000 is illustrated through following graph Fig.19.6.

Placement through Employment Exchanges-Kerala Number of Persons Year

Fig. 19.6

Migration

19.83 Emigration of Keralites remains strong, with a study conducted by CDS in 2004 showing that the number of emigrants went up by 35 percent in last five years from 13.6 lakhs in 1999 to 18.4 lakhs in 2004. According to the latest study by CDS, international migration has remained absolutely stationary during 2003-07 and it was 18.5 lakh in 2007. The number of return emigrants had been 8.9 lakhs in 2003 and it was 8.9 lakhs in 2007 also.

BOX 19.4

People living outside their countries of birth numbered an estimated 191 million in 2005. 115.4 million (60%) of whom lived in developed countries and 75.2 million in developing countries. The United States accounted for one in every five migrants in the world. (Population Newsletter by United Nations Department of Economic and Social Affairs.)

- 19.84 According to the study, labourers in non-agricultural sectors constituted the largest proportion of emigrants from Kerala, 27.4 per cent of the total. Unemployed persons were the second largest group (24.3 per cent). Workers from the private sector (16.0 per cent), and from self-employment sector (12.5 per cent) also emigrated in large numbers.
- 19.85 The unemployment rate among emigrants was as high as 29.1 per cent, prior to emigration, but it is only 6.9 per cent among emigrants who have returned to Kerala. Emigration has thus had a significant salutary impact on the unemployment situation.
- 19.86 The study further shows that out-migration (OMI) from Kerala to other states in India has registered a significant decline, not only in terms of the rate as in the case of external migration, but also in absolute numbers. OMI declined from 11.2 lakhs in 2003 to 8.7 lakhs in 2007. OMI per 100 households declined from 16.2 in 2003 to 11.5 in 2007.

BOX 19.5

Female migrants constitute nearly half of all migrants worldwide and they are more numerous than male migrants in developed countries. (Population Newsletter by United Nations Development of Economic and Social Affairs).

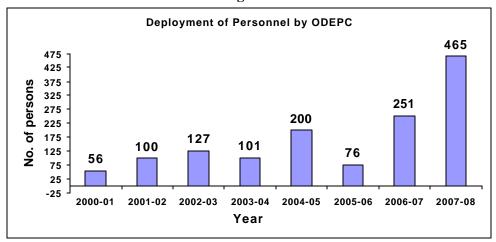
- 19.87 Unemployed persons have been the largest group (26.9 per cent) among out-migrants. The unemployment rate among out-migrants has been as high as 56.6 per cent, but it is only 8.4 per cent among returned out-migrants. As with external migration, internal migration also has had a significant salutary effect on the unemployment situation.
- 19.88 In the past, Gulf countries used to be the principal destination of Kerala emigrants. In 1998, 95 per cent of Kerala emigrants went to one of the Gulf countries. By 2003 the corresponding percentage declined to 91 per cent. In 2007 the proportion of Kerala emigrants who went to the Gulf region has come down further to 89 per cent.
- 19.89 However significant changes are observed in the distribution of emigrants within the Gulf region. Saudi Arabia had been the principal destination country in 1998. By 2003, it yielded its first rank to the United Arab Emirates, which at that time received 37 per cent of the total emigrants from Kerala compared to 27 per cent in Saudi Arabia. The UAE continued its dominance and by 2007 it has received 42 per cent of the Kerala emigrants. In the mean time, Saudi Arabia's share declined further to 24 per cent. Apart from the UAE, Kuwait also continues to attract an increasing share of Kerala emigrants.

- 19.90 Outside the Gulf region, the United States of America is a major destination country. It received 5.7 per cent of the total number of emigrants from the state. Its share had been only 2.2 per cent in 1998.
- 19.91 Malappuram district had the distinction of sending out the largest number of emigrants from Kerala in 1998 and in 2003. It has retained the distinction in 2007 also. In fact in 2007, Malappuram district was the place of origin of 336,000 emigrants or about 18.2 per cent of the total number of emigrants from Kerala. The district next in importance with respect to emigration from the state has been Kannur, with 254,000 emigrants. In 1998 only 6.5 per cent of Kerala emigrants, had originated from Kannur, but by 2007 its share increase to 13.8 per cent.
- 19.92 The other districts with relatively large number of emigrants have been Thiruvananthapuram with 189,000 emigrants (10.2 per cent), Thrissur with 170,000 emigrants (9.2 per cent) Kollam with 147,000 emigrants (7.9 per cent), Ernakulam with 143,000 emigrants (7.7 per cent) and Alappuzha with 114,000 emigrants (6.2 per cent). The districts with the smallest number of emigrants have been Idukki (0.1 per cent) and Wayanad (0.8 per cent).
- 19.93 The total number of emigrants have been 18.48 lakh in 2007. Among them 8.83 lakh (48.2 per cent) were Muslims, 6.17 lakhs Hindus (33.3 per cent) and the balance 3.47 lakhs (18.5 per cent) Christians. Thus Muslims who constitute less than a quarter of the total population has almost double that proportion among the emigrants.
- 19.94 In 2007, the average age of male emigrants has been 26.8 years and that of females 22.7 years. Also the largest number of emigrants has been in the age group of 25-29 years. These have been very few emigrants older than 50 years.
- 19.9 During 2005, 1.25 lakhs workers from Kerala went abroad in search of job, constituting 22.8 per cent of the 5.49 lakhs emigrants from the country. The other leading states are Tamil Nadu (21.3 per cent), Karnataka (13.7 per cent), Andhra Pradesh (8.8 per cent), Gujarat (9.1 per cent), Maharashtra (5.3 per cent), Punjab (4.4 per cent) and Rajasthan (3.9 per cent). More than 80 per cent of the emigrants went to West Asia of which 35.4 per cent went to UAE and 18.2 per cent to Saudi Arabia.

Placement through ODEPC

- 19.96 The Overseas Development and Employment Promotion Consultants Ltd. (ODEPC) started functioning in 1977 with the main objective of promoting employment in foreign countries. As part of diversification, ODEPC started travel agency business also. The authorized share capital of the Company is Rs. 1 crore and paid up capital is Rs.65.79 lakhs. The sale of air tickets during 2007-08 showed remarkable improvement in that the turnover was Rs.323.24 lakhs.
- 19.97 ODEPC is the first and the only recruiting agency in the Govt. sector deploying Indian manpower to foreign countries. ODEPC has deployed 465 candidates for various jobs to foreign countries like Saudi Arabia, UAE, Sultanate of Oman, Qatar, Malaysia, Mali etc. during the year 2007-08. For the first time the Southern Province Cement Company based in Saudi Arabia has recruited 102 candidates for different posts. The deployment of personnel by ODEPC since 2000-01 is illustrated through the following graph Fig.19.7.

Fig.19.7



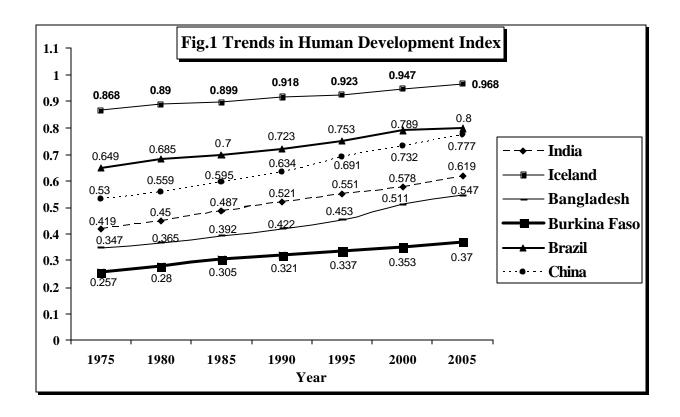
19.98 During the year 2008 (upto 19.12.2008) 465 persons deployed; of them 111 to Saudi Arabia, 284 to Mali, 35 to UAE, 19 to Oman and 7 to Qatar, and 9 Malaysia. Of the persons deployed, 351 were Staff Nurses, 33 Technicians, 5 Doctors, 12 Administrative Staff, 5 Engineers, 6 Foremen, 5 Sales personnel, 9 drivers, 8 milkers and 32 paramedicals.

CHAPTER 20

HUMAN DEVELOPMENT AND SOCIO ECONOMIC WELL BEING

Kerala's human development index is a glowing reflection of the state's developmental achievements. The state's progress in key areas such as health and education has been widely appreciated. Illiteracy has been almost eradicated and infant mortality reduced to nearly that of some developed countries. The fertility rate has also seen a sharp decline. Human Development Index places Kerala far above the general situation prevailing in the other states of India, and indeed, most parts of the developing world.

20.2 The use of several composite indices to quantitatively measure human development such as Human Development Index (HDI), Human Poverty Index (HPI), Gender Relative Development Index (GDI) is universal. The HDI is constructed to compare country achievements across the most basic dimensions of human development. Creative alternation of human development indicators to a national context includes Argentina's extended HDI, the Arab HDRs alternative HDI and comprehensive knowledge indicator, Columbia's HPI corrected for violence, Mexico's refined development index and Thailand's human achievement index. In some countries as diverse as Argentina, Indonesia, Latvia and in Angola disaggregated human development data are proving instrumental in the allocation of scarce public resources. The HDRs are a vehicle for developing and articulating a human development approach to development.



- 20.3 The HDI trend calculated at five year intervals over a period of 30 years is shown in figure. The HDI is an important tool for monitoring long term trends in human development. The index value of India improved from 0.419 in 1975 to 0.619 in 2005, and the global ranking was 128 in 2005. While the concept of human development is much broader than any single composite index can measure, the HDI offers a powerful alternative to GDP per capita as summary measure of human well being.
- 20.4 The HDI, HPI and Gender related Development Index of some of the countries and Kerala are shown in Table. The superior position of Kerala is evident from the table and human development index value of Kerala is close to some of the developed countries.

Table 20.1 Human Development Index (HDI), Gender-related Development index (GDI) and Human Poverty Index (HPI) of some selected countries and in Kerala-2005

	GDP per capita	Н	DI	G	DI	Н	PI
Name of	Annual growth	Value	Rank	Value	Rank	Value	Rank
Country	rate %, 1990-2005						
Iceland	2.2	0.968	1	0.962	1	NA	
Norway	2.7	0.968	2	0.957	3	6.8	2
Australia	2.5	0.962	3	0.960	2	12.1	13
US	2.1	0.951	12	0.937	16	15.4	17
UK	2.5	0.946	16	0.944	10	14.8	16
Germany	1.4	0.935	22	0.931	20	10.3	6
Brazil	1.1	0.800	70	0.798	60	9.7	23
India	4.2	0.619	128	0.600	113	31.3	62
Sierra Leone	-1.4	0.336	177	0.320	157	51.7	102
Barbados	1.5	0.892	31	0.887	30	3.0	1
Uruguay	0.8	0.852	46	0.849	45	3.5	2
China	8.8	0.777	81	0.776	73	11.7	29
Sri Lanka	3.7	0.743	99	0.735	89	17.8	44
Pakistan	1.3	0.551	136	0.525	125	36.2	77
Bangladesh	2.9	0.547	140	0.539	121	40.5	93
Kerala	5.03*	0.773		0.746		29.5	

NA: Not Available

Source: Global Human Development Report, 2007/2008, Kerala Human Development Report 2005

20.5 Recently a number of Universities have started incorporating the HDRs in their curricula. In Thailand, a course on human development indicators is now mandatory for high ranking officers at the National Defense College. In Argentina, the Ministry of Education recently published a human development curriculum and human development became an optional subject in secondary schools.

Human Development Reports (HDR)

20.6 The first HDRs ushered in a change on how people thought about development and determined concrete development priorities. Although the early global HDRs established the human development paradigm as a credible alternative to structural adjustment policies and a preoccupation with national income accounting, it was the rapid expansion by the middle to late 1990s in regional, national and sub national HDRs that inspired a global human development movement and embedded human development approaches in policy arenas. The Indian HDR was

^{*}During the period 1987-2003; Source; Kerala HDR 2005

published in 2001 and a committee has been constituted by the Planning Commission to prepare the second national HDR. The first Kerala HDR was published in 2006 by the State Planning Board. At present more than 500 national and sub national HDRs are prepared in 143 countries and 31 regional HDRs are available. The theme of the global HDR 2009 is on migration

Human development and Migration

- 20.7 Approximately 190 million people accounting for 3 per cent of world population are international migrants living in countries other than those in which they were born (ODI). Migration both within and beyond borders has become an increasingly prominent theme in domestic and international debates. Migration has been selected as the theme for the 2009 Global Human Development Report. The global distribution of capabilities is extraordinarily unequal and migration can expand their choices in terms of incomes, accessing services and participation. But the opportunities open to people vary from those who are best endowed to those with limited skills and assets. These under lying inequalities will be a theme of the global report.
- 20.8 There is a range of evidence about the positive impacts of migration on human development through such avenues as increased household income and improved access to education and health services. There is further evidence that migration can empower traditionally disadvantaged groups. At the same time migration can also introduce new vulnerabilities and costs for migrants, their families and sending communities. There can also include risks to the healthy mental and physical development of children or increases in the workload of women and children left behind in countries of origin. Migration can also result in unwanted consequences on sending communities, depleting the skilled professionals in key sectors such as health and education.
- 20.9 Remittances represent an important lifeline for a large number of people and constitute an enormous transfer of private resources from migrants to their families in labour sending communities. The importance of remittances in the Kerala economy is well documented. Recorded world remittances were estimated at US\$ 318 billion in 2007 and out of this, remittances sent home by migrants from developing countries are estimated at \$ 240 billion WB 2007. In 2007, India (US\$ 27 billion) Mexico (US\$25 billion) and China (US\$25.7) are the three top recipients of remittances for accounting for nearly one third of remittances received by the developing countries.
- 20.10 Demand exists at both ends of the skills spectrum. The United States currently employs the greatest number of foreign trained doctors and nurses followed by the U.K. Health workers are moving to OECD countries from developing countries (Table). A large number of doctors and nurses are working in developed countries from Kerala.

Table 20.2 Doctors and nurses working in OECD countries

OECD Country	Doctors fr	om abroad	Nurses from abroad		
OECD Country	No	% of total	No	% of total	
Australia	11122	21	-	-	
Canada	13620	23	19061	6	
New Zealand	2832	34	10616	21	
UK	69813	33	65000	10	
US	213331	27	99456	5	

Source: WHO, 2006 quoted in WMR 2008.

- 20.11 The result of these migratory flow has been diminished access to health care and services for individuals who depend on public health care system in the state. The migration study conducted by the Centre for Development Studies in 2002 has attempted to construct a time series estimation of remittances from abroad to the Kerala economy for the period 1972 to 2000. Reliable estimates of the quantum of such remittances over time have been difficult to obtain. The study finds that by the early nineties remittance to the Kerala economy assumed a significant share of state income. This ranged from 17 per cent during 1991-92 and 24 per cent during 1997-98 with an average of 22 per cent in the second half of the nineties. It was estimated that in 1998, there were 13.62 lakh, Kerala migrants being abroad. The 2007 CDS survey has estimated the number of Kerala migrants abroad at 18.50 lakhs and the migrants are estimated to sent back Rs.24525 crores in 2006-07 forming about 20 per cent of NSDP of the state.
- 20.12 Labour migration from India has been slowly changing over the last few decades, where as the 1970s and 1980s saw a large outflow of Indian workers to the middle east, since the 1990s the new wave of labour migration has been of highly skilled migrants particularly working in the IT sector. However the impact of growing number of foreign firms investing in India together with saturation of IT job market in the developed countries has brought about unprecedented opportunities in the country.
- 20.13 Guiding and advising migrants to enable them to invest in the acquisition of skills that promise the highest returns are essential for tapping the opportunities in the world. Also ensure that they have access to reliable information on skills that are in strong demand abroad.

Human Development achievements

20.14 One of the key indicators of Kerala's human development achievements is the high life expectancy at birth which is similar to the figures for developed countries. Kerala's achievement compared to some of the neighboring countries and developed countries are shown below.

Table 20.3 CDR/IMR/life expectancy of selected countries

Country	CDR	IMR (2005)	Life Expectancy (LE) 2007	Adult literacy rate (%)
China	7	23	72.9	90.9
Australia	7.4	5	80.6	98
Srilanka	5.8	12	74.38	90.7
USA	8.2	7	78.0	99
Bangladesh	8.0	54	62.8	43.1
Switzerland	8.5	4	80.6	99
Pakistan	8.7	80	63.8	49.9
Norway	9.5	3	79.7	100
Nepal	9.2	56	62.0	48.6
UK	10.2	5	78.7	99
India	7.6	56	68.6	61
Germany	10.6	4	79.0	99
Kerala 1	6.1	14	73.9	90.9

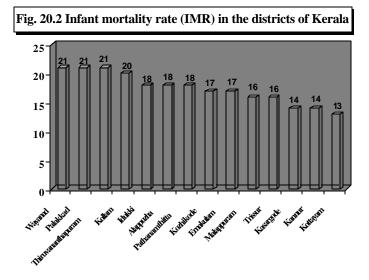
Source: SDR 2008, Compiled for UNICEF and WHO, The World Fact Book, Central Intelligence Agency

1 Registrar General of India (LE-2004 & Literacy-2001)

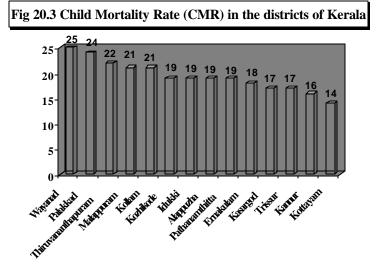
20.15 The life expectancy at birth in Kerala is the highest among all the states in India and among the major 15 states the lowest value was 57.7 years for Madhya Pradesh during 2001-05. The life expectancy for Kerala is higher that that of China.

Infant and Child Mortality Rate

20.16 Among the major states in India, Kerala reported the lowest IMR (Economic Survey, 2007-08). IMR of Kerala from 1911 to 2001 indicates decline from 242 in 1911-20 to 12 in 2001. The largest decline is seen during the period 1961-1970 during which it declined to 66 from 128 during 1951-60. During the last decade the decline was very low and it declined from 17 in 1991 to 12 in 2001.



20.17 Among all the districts in India, Kottayam district in Kerala is having the lowest IMR (13) and the lowest CMR (14). District wise variation in IMR and CMR in Kerala is seen in figure.20.3



- 20.18 The variation in life expectancy of Kerala from 1911 to 2002 pointed out a 47 years increase for females and 46 years increase for males during the period.
- 20.19 The age wise life expectancy in the state showed that in almost all age groups except 70+, female life expectancy is higher than male life expectancy. Sex difference in life expectancy decreases with increase in age.

Error! Objects cannot be created from editing field codes. Access to Health Care and health expenditure

- 20.20 Half of the households in Kerala depends on government health facility which is lower than the corresponding percentage of 66% for the nation as a whole (NFHS-3). The state has reported the highest proportion of hospitalized persons both in rural and urban areas. Share of public provider in non-hospitalized medical treatment of ailments in Kerala is higher than that of all India percentages (Kerala, rural; 37%; Kerala urban, 22%; India rural, 2%; India urban, 19% NSSO, 2004). Also there is a decreasing trend in the hospitalized treatment from public sources in Kerala.
- 20.21 Public health expenditure is 13% of the total heath expenditure in Kerala which is lower than the national figure of 20.7 as per the National Health Accounts 2001-02. However the per capita health expenditure is the highest in the state and the per capita private health expenditure is also the highest in the state. Per capita health expenditure in Kerala increased from Rs 89 in 1987 to Rs 1722 in 2004
- 20.22 The table below presents some indicators on health in nine states. The table shows that the total per capita expenditure on health (Public and private) (achieved) bears no relation to IMR ranking, Kerala has the highest per capita expenditure on health which is 86 percent higher than all India average and 120 percent higher than that of Tamil Nadu. There is clear correlation across states between the proportion of non-institutional deliverances and neonatal and infant mortality rates across states as reported in the reports of Planning Commission. The IMR outcome in Kerala demonstrates that even the lowest income quintile segments receive equitable access to quality health care.

Table 20.4 Access to medical care in different states

		Population	Population		Per capi	ta Exp (I	Rs)
State	Govt. hospital doctor bed		Public	Private	Total	Public expenditure as % of total	
Madhya Pradesh	76	NA	3409	132	733	864	15.2
Orissa	75	7656	2874	134	449	582	23.0
Bihar	61	NA	28959	92	687	779	11.8
Haryana	60	13284	3185	163	1408	1570	10.4
Gujarat	54	19332	1544	147	670	816	18.0
Jharkhand	50	23005	20133	146	NA	NA	NA
Himachal Pradesh	49	NA	845	493	812	1305	37.8
Tamilnadu	37	7651	849	202	644	846	23.9

Kerala	14	10308	1172	240	1618	1858	12.9
India	58	NA	2257	207	790	997	20.8

Source: Quoted in Social Development Report 2008 and Orginal Soruce is CBHI and GoI.

Education development index

20.23 The National Institute of Educational Planning and Administration has created a comprehensive database on elementary education in India known as District Information System for Education (DISE). The project covers primary and upper primary schools of all the districts of the country. The University has successfully developed school report cards. Data from 6704 primary schools were used for the study from Kerala during 2007-08. State wise Education Development Indices were computed using school wise data. A set of 23 indicators have been used in computing EDI which are regrouped into four subgroups on access, infrastructure, teachers and outcome indicators. Some of the major indicators used are availability of schools per 1000 child population, percentages of habitations not covered, schools with student classroom ratio greater than or equal to 60, schools with drinking water and toilet facilities, students with girls toilet, percentage of female teachers, pupil- teacher ratio, single teacher schools, teachers with out professional qualifications, gross enrolment ratio, repletion rate, drop out rate, gender parity index in enrolment, percentage of passed children to total enrolment, percentage with more than 60 percent marks etc. A composite Education Development Index (EDI) has been computed for the entire elementary education. Among the 21 major states, the top five states are Kerala (EDI-0.791), Tamil Nadu (EDI-0.771), Haryana (EDI-0.755), Gujarat (EDI-0.748) and Karnataka (0.743). The EDIs can play a significant role in assessing progress as well as devising the future course of investment on elementary education.

Table 20.5 Educational Development index, 2007-08: Primary level

		Infrastru	Teacher's	Outcome	Composite	Rank
	Access	cture	index	index	index	
States	Index	index			EDI	
Andhra Pradesh	0.631	0.690	0.674	0.826	0.740	6
Assam	0.701	0.316	0.328	0.622	0.515	14
Bihar	0.0.556	0.233	0.334	0.530	0.406	17
Chattisgarh	0.673	0.555	0.448	0.675	0.570	13
Gujarat	0.574	0.762	0.794	0.698	0.748	4
Haryana	0.524	0.903	0.727	0.692	0.755	3
Jharkhand	0.636	0.339	0.379	0.551	0.491	15
Karnataka	0.540	0.691	0.711	0.880	0.743	5
Kerala	0.257	0.894	0.950	0.732	0.791	1
Madhya Pradesh	0.554	0.721	0.446	0.546	0.590	10
Maharashtra	0.477	0.739	0.732	0.767	0.727	8
Orissa	0.485	0.616	0.536	0.563	0.572	12
Punjab	0.487	0.917	0.663	0.721	0.732	7
Rajasthan	0.586	0.716	0.471	0.589	0.653	9
Tamil Nadu	0.505	0.808	0.811	0.859	0.771	2
UP	0.487	0.691	0.414	0.700	0.586	11
WB	0.481	0.521	0.508	0.666	0.488	16

Source: NIEPA, DISE 2007-08 GoI

20.24 In India, Pondichery (0.808) ranks first in the Educational Development Index among the states and union territories considered as a whole, followed by Kerala (0.791), Lakshadweep (0.788) and Delhi (0.780). The lowest value of EDI is for Bihar (0.406) followed by Arunachal Pradesh (0.485) and West Bengal (0.488).

Cost of Basic services

20.25 The salient findings of the study conducted by the Centre for Development Studies on cost of basic services in Kerala are shown in Box. The required data were collected as part of the Migration Monitoring study and the survey was conducted during April- June 2007 in the state.

Box 20.1

Cost of basic services in Kerala

- ? 13 per cent of 8 million children attended school in 2007 and are getting free education and for others the average annual expenses per student is Rs.2772
- ? During one month period prior to the date of the study about 6.2 million person (18.4%) had suffered from one form of sickness or other. 4.48 million persons were found to be suffering from one or more of eight chronic diseases-diabetes, cardiovascular problems, arthritis, cholesterol, hypertension, asthma, cancer and kidney diseases. The average monthly expenditure per person with chronic diseases varied from Rs.200 per person with hyper tension to Rs. 764 for those with cancer. Persons with chronic diseases in the state spent a total of Rs.1220 million per month for treatment. Those with hypertension spent the largest amount of Rs.295 million.
- ? The proportion of childbirth took place in private hospitals is 69% and the remaining in Government hospitals in 2007. The average total cost of treatment including delivery was Rs.7905. The cost was Rs.11915 if the delivery took place in private hospital and Rs.6688 if in Government hospital.

Source: CDS, 2008

Financing of Human Development

- 20.26 Financing Human Development is a crucial aspect for the sustenance of the high human development achievement of the state. Government spending on social services which include rural development, education, health care, nutrition, drinking water, sanitation and housing is a critical input that the poor and the marginalized can leverage to bridge the gap between the insufficiency of the personal income and the basic human needs.
- 20.27 The analysis of spending on human development is made in terms of four ratios suggested by the global HDR. These are public expenditure ratio (PER), social allocation ratio (SAR), social priority ratio (SPR) and human expenditure ratio (HER). The public expenditure ratio (PER) refers to the total budgetary expenditures of the state government as a proportion of GSDP in the state. The social allocation ratio refers to the share of budgetary expenditure on the social sector (socials services and rural development) as a proportion of the total budgetary expenditure of the state government. The social priority ratio refers to the budgetary expenditure on human priority areas as a percentage of expenditure by the state government on the social sector. Human priority areas include elementary education, health and family welfare excluding medical education, training and research and the state insurance and compensation for family welfare, nutrition, water supply and sanitation and rural development. The human expenditure ratio (HER) is the product of the first three ratios and measures the expenditure by the state government in human priority areas as a proportion of GSDP in the state. The different indicators of spending on human development and their trends for Kerala and some major states for the years 1990-91 to 2002-03 estimated from the Finance accounts are presented in the Table

Table 20.6
Human Development expenditure in selected states of India (Per cent)

States	Pl	ER	S	AR	Sl	PR	H	ER
	1990-	2001-	1990-	2001-	1990-	2001-	1990-	2001-
	91	02	91	02	91	02	91	02
Andhra	17.83	18.86	43.12	36.43	48.88	54.14	3.76	3.72
Pradesh								
Bihar	20.97	24.47	43.49	35.47	66.35	69.12	6.09	6.0
Gujarat	17.52	17.69	37.01	39.80	56.36	35.46	3.66	2.50
Karnataka	17.78	20.06	41.22	34.96	55.45	52.29	4.06	3.67
Kerala	19.42	16.18	45.57	39.33	54.86	50.88	4.86	3.24
Madhya	15.64	17.66	43.03	39.49	59.02	55.76	3.97	3.89
Pradesh								
Maharashtra	15.51	15.43	33.27	36.46	47.19	54.42	2.43	3.06
Tamil Nadu	17.88	15.85	46.88	38.19	58.68	52.14	4.92	3.16
West Bengal	15.30	16.83	47.94	35.72	47.86	44.24	3.51	2.66

Source: Karnataka HDR 2005

20.28 UNDP's HDR 1991 suggests the PER for a country should be around 25 per cent, SAR should be about 40 per cent and SPR about 50 percent. The human expenditure (ER) ratio should be around 5 percent. Even through the PER and HER are high for Bihar, the low HDI is due to the lower per capita GSDP levels. The higher share of SPR for Kerala is evident from the Table . However the expenditure incurred by the panchayats after Ninth plan in Kerala is not accounted in the share. This is the major reason for the decline in the share for Kerala on the ratios during the latter period .

20.29 Ultimately it is human development spending per capita in absolute terms that is more important than the human expenditure ratio. Any analysis of public spending on human development must go beyond the four ratios and factors in per capita public expenditure as well The real per capita public expenditure is shown in Table . The per capita social expenditure and human development expenditure are on higher side for Kerala.

Table 20.7 Real per capita public expenditure

State Per capita public ex			Per capita Social fact		_	Per capita human priority exp	
	1990-91	2001-02	1990-91	2001-02	1990-91	2001-02	
Andhra	1361	2198	587	801	287	434	
Pradesh							
Bihar	1026	915	449	325	298	224	
Gujarat	1775	3048	657	1213	370	430	
Karnataka	1313	2574	541	900	300	471	
Kerala	1481	1996	675	785	370	400	
Madhya	1111	1590	478	628	282	350	
Pradesh							
Maharashtra	1758	2572	585	938	276	510	
Tamil Nadu	1561	2364	732	903	429	471	

West Bengal	1011	1922	484	687	232	304

Source: Karnataka HDR, 2005

Sub sector wise per capita expenditure

20.30 Further disaggregated expenditure figures for human development related areas of health, education and other services are shown in Table. The Table shows per capita average state government expenditure over the period 1998-99 to 2000-01 on general, social and economic services. In general services, interest payments, pensions and lotteries are excluded. Large states are considered. Within the social sector expenditure, per capita expenditure on education, health and water supply and sanitation are also shown. The states are arranged in ascending order of Per capita GSDP. The general pattern is that the states with low per capita GSDP also have low per capita expenditure. These figures cover both non-plan and plan revenue expenditure.

20.31 According to HDI, the lowest ranked state is Bihar followed by U.P, Orissa and M.P. There is a positive relationship between per capita GSDP and HDI. At the same time states which have provided more in terms of per capita budgetary expenditures on health and education, have ranks that are higher than their relative position in the ranking of per capita GSDP.

20.32 The Social Sector Expenditure (SSE) comprising rural development and social services was 6.2 per cent of GSDP for the period 2004-07 for the state against the national average of 5.3 per cent and the share increase to 6.6 percent during 2007-08 in the state against the national average of 6.1 percent. The per capita SSE was Rs 2861 during 2007-08 in Kerala as against all India average of Rs 2492 (RBI, 2008-09). Apart form this, the share of expenditure by the local governments also should be added to the SSE in Kerala. The priority of spending for human development is evident from the share of expenditure in the state.

The per capita social expenditure and human development expenditure are on higher side for Kerala.

Table 20.8
Per capita expenditure on general, social and economic services
(Rs) 1998-99 to 2000-01

States	General	Social	Economic	Education	Health	Water
		services	Services			supply & Sanitation
Bihar	189.1	474	204.9	311.1	50.9	19.1
Orissa	224.1	931.2	406.5	463.1	94.7	56.2
UP	267.5	555.8	324.9	340.4	63.4	20.0
Assam	334.4	929.9	369.3	615.2	92.2	59.2
MP	235.6	781.3	469.0	344.5	86.2	63.4
Rajasthan	265.4	1020.7	405	545.3	128.3	111.5
West Bengal	262.4	958.2	392.6	512.3	136.8	42.5
AP	255.8	1004.1	634.3	411.7	118.2	57.7
Kerala	318.2	1254.8	716.5	713.3	172.3	52.3
Karnataka	279.2	1083.9	755.8	558.3	135.70	60.3
Tamil Nadu	336.4	1240.9	685.3	651.5	154.4	38.3
Gujarat	274.6	1331.3	1285.7	664.4	154.3	39.0
HAryana	320.9	1145.4	902.4	587.6	122.1	102.1
Maharashtra	624.4	1276.1	647.7	730.9	131.7	79.7

Punjab 533.	6 1220.5	733.9	716.3	221.1	55.0
-------------	----------	-------	-------	-------	------

Source: 12th Finance Commission Report 2005

Note: General services excluding interest payments and pensions

Human Development Initiatives in Kerala

- 20.33 With the support of the Planning Commission and the UNDP the project on "Strengthening State Plans for Human Development" has been initiated for implementation in Kerala in 2006. Human Development Resource Co-ordination Unit (HDRC) has been established in State Planning Board. The major objectives of the project are to build and strengthen capacity of the state government officials to provide human development perspective in state plan and identify specific policy options for achieving human development goals. The project also aimed to strengthen state and district statistical system and engendering of the state's plans.
- 20.34 The key activities started under the project are the preparation of district and Panchayat human development reports, four research projects on human development related areas and strengthening of statistical system. Preparation of some thematic reports of Tribal HDR and fisher folk HDR in Kerala were already initiated in this project.
- 20.35 The district human development reports are under preparation in Kottayam, Ernakulam, Wayanad and Kannur districts. The preparation of two panchayat level human development reports is also progressing. The salient features of the draft Kottathara Panchayat Human Development Report (KoHDR) is shown in Box.

Box 20.2 Kottathara Human Development Report 2007

Most of the plans in the states are based on district and state level information. But the intra district variation in development plans can be bridged by incorporating the strengths and opportunities at the local levels. With this intention the Panchayat Human Development Reports were planned in order to covers the policies, planning and strategies at the micro level for sustainable human development in the states. Kottathara Human Development Report 2007 (KoHDR) is the first of its kind in Kerala.

The report mainly:

- Covers the extent of poverty and inequity in educational and health achievements across social groups
- Explains the way PRIs have taken the problem of socially disadvantaged groups and gender dimensions in Kottathara Gram Panchayat in Wayanad district of Kerala.

The main findings:

- About 15 percent of the population (15 years +) has never gone to school, the bulk of them from among Paniya and OBC. The increase in proportion of population completing high school and graduation has increased largely for forward caste and higher income quintiles.
- Low level of education denies opportunities to the majority of workforce in nonagricultural activities and their dependence on agriculture as producers or labourers leads to the persistence of poverty.

- Land ownership is highly skewed with only a quarter of the population owning more than 100 cents.
- The incidence of poverty is relatively high among the socially disadvantaged, poorly educated and households headed by women compared to their counterparts.
- A steep gradient could be observed with regard to education, occupation, ownership of assets, and condition of the house across social groups
- Women reported a higher prevalence of poor health compared to men and the gap persists across social groups.
- About 80% of the households have incurred some expenditure on health care during the three-month recall period, with the proportion increasing from 50% for Paniya to 86% for forward Caste.
- Health expenditure could be a burden for households as 3.6% of the households reported health expenditure to be over 50% of their income and another 11.9% reporting it to be between 25-50% of their income.
- The panchayat is one of the poorest in Kerala, however the impact of the social protection and development schemes have reached the socially and economically disadvantaged groups and made a difference to their living conditions.

Major Recommendations

- The state department should work in conjunction with Panchayat Board since the decentralized planning is incapable of making a macro level impact in the local economy through income and growth targets.
- Urgent need for baseline data base of planning development in the Grama Panchayat is recommended

Human development and outliers

20.36 Though Kerala's development experience showed significant improvement in literacy, health and education among the general population, wide disparity exists among outliers like SC,ST, fisher folk etc. In 1991, 46 per cent of the total population is deprived of basic amenities where as 64 per cent of scheduled caste and 62 per cent of scheduled tribes are deprived of basic amenities while in 2001, the percentage of general population under deprivation came down to 22 per cent and the corresponding percentage for SC and ST are 40 and 52 per cent respectively.

20.37 The Social Development Index(SDI) at the all India level for SCs is estimated at 24.89 and STs 19.56 which are significantly lower than that for non SCs/STs at 34.38. The SDI of SCs of Kerala is 61.55 while for ST it is 50.24 and for others it is 68.02. Among all the states, the index value is the highest for Kerala for general group as well as for SCs and STs. Maharashtra, Kerala, Himachal Pradesh, West Bengal and Gujarat have low absolute gap in SDI values between SC/STs and others. At the national level in 2001, the SDI for STs had an absolute gap of 14.82 percentage points as compared to non SCs/STs.

Error! Objects cannot be created from editing field codes.

20.38 The fishermen in Kerala constitute a weaker section of the community and there exist a wide gap in human development dimensions compared to general population. Literacy of social groups is shown in table

Table 20.9 Literacy (%) of social groups in Kerala

	1961	1971	1981	1991	2001
SC	24	40	56	80	83
ST	17	26	32	57	64

Fish workers	50	55	67	82	86*
Average for the state	47	60	82	90	91

Kerala Development Report, 2008

20.39 As seen in literacy level, educational attainment of fisher folk is also lower than that of the general population. According to Marine Census 2005, 27.2% of the fishermen in Kerala were not educated. Around 29% of the fishermen in Kerala have primary education which is lower than that of the general population. More than a third of the fishermen population possessed secondary education.

20.40 Compared to other Indian states, Kerala shows equitable levels of school education between different sexes and among different social groups (KDR, 2008). Results of the Sociotechno Economic Survey of Fisher folk in Kerala in 2004 showed that, even though government implemented many welfare schemes through government and non-government agencies, there is no perceptible change in the living conditions of majority of the fisher folk in Kerala. The basic human development indicator such as literacy rate of fisher folk is below the state average Socio Techno Economic Survey reported the drop out rate of fisher folk in Kerala as 12.4% which varies 12.7% among boys and 12.1% among girls (Socio Economic Survey, 2004). This rate is comparatively high compared to the drop out rate among the general population in the same period (Government of Kerala DPI, 2006-07).

Error! Objects cannot be created from editing field codes. Disabled Population

20.41 There are 8.61 lakh people (2.7 percent of population as per the 2001 Census reports) suffering from some kind of disability in Kerala. Of the total disabled persons in the state, 5.77 lakh (67.04 %) are literate and the remaining are illiterate. At the all India level the corresponding figures are 49.30 per cent and 50.69 per cent respectively. The type of disability is shown in table

Table 20.10 Disability in Kerala, 2001

Type of disability	Per cent
Seeing	39
Movement	28
Mental	16
Hearing	9
Speech	8

Source: Census of India, 2001

Human Security and Human Development

20.42 Human security is a concept emerging from the daily concerns of people and is characterised as safety from chronic threats such as hunger, diseases and repression as well as protection from sudden and harmful disruption in the pattern of daily life, whether in houses, jobs or in communities (UNDP, 1994).

^{*} Literacy rate of fishermen in Kerala based on Socio-Economic Survey, 2004

20.43 Development is not enough for protecting lives of individuals and well being. Development gains can be undermined by conflicts and wars, extreme situation such as natural disasters and sudden downturns that cannot be addressed solely through human development. If development leaves some groups of people particularly vulnerable to down turn then human security is a frame work for protection against the worst harm to the most vulnerable. In Sen's words, this simple recognition of vulnerability in growth makes it obligatory to provide security as a central part of development. Human development is about people and expanding their choices to lead the lives they value, human security recognizes the condition that threaten survival, the continuation of daily life and the dignity of human beings such as extreme impoverishment, environmental pollution, ill health, illiteracy etc.

Crime Rates in Kerala

20.44 As per the records of National Crime Records Bureau, total cognizable crime rates of Kerala is far above the all India average. Surprisingly, as per the records, Kerala, the state with high human development has got a very high rank in crime rates also. The total rate of violent crimes in 2007 is higher in Kerala than that of national average.

Table 20.11
Incidence and Rate of Violent Crimes and Prison Population in Kerala during 2007

m ixerata during 2007						
Total Violent Crimes	No of crimes	Rate				
Kerala	10558	31				
All India	215613	19				
Against Women						
Kerala	487	1.4				
All India	20410	1.8				
Against Children						
Kerala	7837	23				
All India	185312	16.3				
Prison Population in Different Jails	Convicted	Under Trial				
Kerala	2876	3619				
All India	116675	245244				

Source: National Crime Records Bureau

20.45 The district wise break up of the crime rates in Kerala shows an interesting picture. There exists an positive relationship between the HDI value and rate of crimes among the district. The highest crime rate is recorded in Eranakulam district which has got the highest HDI value as per the Kerala Human Development Report, 2005. Likewise, in the northern districts where the HDI value is low, rate of crimes seems to be low compared to the Southern districts.

Table.20.12
Reported Cases of Crime under IPC and SLL for the Year 2008 (1-01-2008 to 31-12-2008)

	Nui	Number of Cases			Cases per lakh of population		
District	IPC	SLL	Total	IPC	SLL	Total	

Thiruvananthapuram	13333	9663	22996	412	299	711
Kollam	8707	13628	22335	337	527	864
Pathanamthitta	5331	4147	9478	432	336	768
Alappuzha	8367	4756	13123	397	225	622
Kottayam	8007	3382	11389	410	173	583
Idukki	4923	4660	9583	436	413	849
Ernakulam	17106	47862	64968	551	1541	2092
Thrissur	10031	13348	23379	337	449	786
Palakkad	5570	9134	14704	213	349	562
Malappuram	7416	10615	18031	205	293	497
Kozhikode	9615	12818	22433	334	445	779
Wayanad	2498	1239	3737	320	159	479
Kannur	5900	8585	14485	245	356	601
Kasargod	3791	1702	5493	315	141	456
Kerala	110595	145539	256134	347	457	804

Source: Crime Records Bureau, Thiruvananthapurm

Crime against Women and Children

20.46 High gender developed state is also known for high rates of crime and violence against Women. The highly educated and healthy women in India are highly vulnerable to the atrocities. Though the rate of crime against children is below the national average, the rate of atrocities reported against women is far above the national average. The lowest crime rate is reported in Eranakulam district where the GDI value is the highest. Kannur, Alapuzha, Palakkad and Malappuram are the other districts where low crime rate against women is reported (see appendix table).

Prison Population

20.47 The number of prisoners is taken as one of the indicators of human security by UNDP. The prison population under trial and convicted in the country as well as in the state is given in Table. Suicides

20.48 There is one other shocking area where Kerala leads all the other Indian states: Kerala has the highest number of suicides. Increasing number of family suicides is another disturbing phenomenon. In Kerala basic social and economic needs have been fulfilled but the emotional as well as other forms of pressure take their place, sometimes with life-threatening effects. Kerala is ranked first among all the states and third among UTs and states in India as per the latest report of Crime Records bureau.

Table 20.13
States/ UTs with Higher Suicide Rate during 2005 to 2007

2005		2006		2007	
Puducherry	52.1	Puducherry	50.2	Puducherry	48.6
A & N Islands	35.8	A & N Islands	33.6	A & N Islands	38.5
D & N Haveli	28.3	Kerala	26.8	D & N Haveli	29.6
Kerala	27.7	Sikkim	25	Kerala	26.3
Chattishgarh	21.6	Tripura	22.3	Karnataka	21.6
National Rate	10.3	National Rate	10.5	National Rate	10.8

Source: National Crime Records Bureau

- 20.49 Family problem followed by illness (mental and physical) is cited as the major cause for suicides in Kerala. All India percentage share of illness as the reason of suicide is 22.3 while that of Kerala is 31.5 and the respective percentages of family problems are 23.8 and 42.3.
- 20.50 More disturbingly, family suicides are very common in Kerala and newspapers come out with sensational news of suicides. Out of 100 the total family suicides reported in the country, 39 occurred in the state (see appendix table).
- 20.51 Suicide rate per lakh of population is highest in Wayanad followed by Idukki and Thiruvananthapuram. Suicides have not been related to the economic backwardness alone. In Malappuram district which is the lowest human developed district, the suicide rate is also the lowest. The suicide rate of Malappuram district is only 12 for the last year.
- 20.52 The State Planning Board as part of the UNDP-Planning Commission supported project on Strengthening State Plans for Human Development, a study has been sanctioned to M.G University on Suicides in the State. The salient findings of the study are shown in Box.

Table 20.14
Distribution of Suicides By Causes in Kerala

	Distribution of Suicides By Causes in Refaia								
Sl.No.	Causes	2000	2001	2002	2003	2004	2005	2006	2007
	Bankruptcy/Sudden Change in								
1	Economic Status	1317	1451	1135	1019	888	831	746	756
2	Suspected Illicit relation	27	27	39	8	9	14	18	22
	Cancellation/non-settlement of								
3	marriage	35	25	41	55	51	45	31	21
	Not having children								
4	(Barrenness/impotency)	33	26	26	35	39	43	30	33
5	Illness	2322	2483	2516	2738	2821	2741	2874	2823
i	Aids/STD	6	6	3	16	2	3	2	1
ii	Cancer	140	143	141	42	86	85	65	85
iii	Paralysis	91	108	136	44	30	35	11	24
iv	Insanity/Mental illness	812	954	1013	1352	1381	1395	1511	1384
v	Other Prolonged Illness	1273	1272	1223	1284	1322	1223	1285	1329

6	Death of deal person	76	83	93	76	90	94	73	94
7	Dowry dispute	35	26	22	10	15	17	19	22
8	Divorce	27	26	18	8	11	14	24	5
9	Drug abuse/addiction	89	83	181	158	80	63	117	137
10	Failure in Examination	71	86	89	88	71	70	60	47
11	Fall in social reputation	91	88	23	92	14	11	79	45
12	Family Problems	2005	1788	2300	2027	2028	2649	3418	3787
13	Ideological Causes	0	0	28	0	2	112	1	0
14	Illegitimate Pregnancy	12	15	6	4	6	1	2	4
15	Loe Affairs	133	150	85	100	90	81	70	81
16	Physical Abuse (Rape, incest etc.)	13	0	6	0	3	1	11	1
17	Poverty	11	3	2	13	6	10	0	0
18	Professional/Career Problem	172	204	71	29	19	34	19	22
19	Property dispute	52	50	42	29	9	14	5	19
20	Unemployment	180	192	99	130	219	136	98	55
21	Causes not known	1024	840	1561	1343	1189	852	612	806
22	Other Causes	1579	1926	1427	1476	1393	1411	719	182
	Total	9304	9572	9810	9438	9053	9244	9026	8962

Source: Crime Records Bureau, Thiruvananthapuram

Table 20.15
Number of Suicides in Kerala- District Wise (1-1-2008 to 31-12-2008)

District	Number of Suicides	Rate of Suicide (per lakh population)	District	Number of Suicides	Rate of Suicide (per lakh population)
Thiruvananthapuram-	1171	36	Thrissur	848	29
Kollam	865	33	Palakkad	793	30
Pathanamthitta	309	25	Malappuram	426	12
Alappuzha	471	22	Kozhikode	591	21
Kottayam	461	24	Wayanad	331	42
Idukki	410	36	Kannur	589	24
Ernakulam	806	26	Kasargod	250	21
			Kerala	8321	26

Source: Crime Records Bureau, Thiruvananthapuram

Box No. 20.3 Suicide Trends in Kerala: Causes and Alleviations

Contextualized against the backdrop of suicide trends in Kerala continuing at alarming rates and with the emergence of a new addition, especially in the last decade, in the form of farmers' suicides, this study explores into the theoretical and pragmatical aspects of these trends. The study has framed itself out of perspectives touching upon the socio-economic and the psychosociological aspects of the phenomenon. The Panchayath level field analysis in four districts in Kerala, viz., Wayanad, Idukki, Pathanamthitta and Palakkad – understood as the suicide prone regions in the state – were used for the study. The major *findings* of the study are:

- ?? The breakdown of the joint family system into nuclear families and the collapse of other traditional support institutions have created conditions aggravating distress accumulated through existential problems in individual minds and this has lead to the increasing suicides among the youths (especially from affluent families) of Kerala
- ?? The highest number of suicides is reported from the Wayanad district where farmer

- SMR (Suicide Mortality Rate) is also very high compared to that of other districts.
- ?? Invariably in all districts, the number of SMR among the male is quite higher.
- ?? The age-group configurations show that the maximum suicides have occurred within the age-group of 41>60.
- ?? The socio-economic background of the suicides shows that the occurrence is remarkably high among the middle class.
- ?? In all the four districts poisoning is the most common means resorted to for ending the life
- ?? The rising SMR among the tribal people is another notable feature about the suicides in the four districts.
- ?? There is only a negligible number of the mentally ill among the suicide victims and their number is higher in the Pathanamthitta district.
- ?? High suicide mortality rates are found among lower middle class farmers, persons engaged in petty commodity production and self employment. Sudden economic crisis caused by crop loss, unfavourable market fluctuation and intensification of debt heading for solvency crisis are the reasons for this. But field level empirical data hardly establish the much discussed causal links of farmer suicides to crop-loss price fall and debt.
- ?? The frustration of the aged as well as the educated but unemployed adults is found to have been causing suicides. The incompatible worldviews between generations precluding the possibility of mutual understanding and capability to be empathetic to each other are another serious problem.
- ?? Inter-family and intra-family conflicts based on property disputes, intoxication issues, instances of suspicion of chastity, incidents of detection of extra-marital relations, dowry related cases etc have caused increasing suicides.
- ?? The discursive pressure to middle class morality, social status and dignity combined with machinations of the market of the contemporary Kerala has put the people in a very vulnerable state.
- ?? Just as absence of sentiments and emotional bond their excess have also been found causing suicides. The excess of love, affection, concern and obligation toward the closest kin that causes suicides under the unbearable shock on the sudden death or irrecoverable illness of any of them.
- ?? Humiliation and shame are found to be causing suicides across all age groups of people belonging to the middle class. A confiscation, a police case, a scandal affecting chastity, a sexual harassment, an unexpected imprisonment, a corruption charge, inclusion in a case of sexual assault, caste-based or religious community-based
- ?? Various socio economic and politico-cultural developments like decline of per capita land, social impact of migration, expansion of capitalist macro economy and consumption pattern etc. The sociological fallouts of the global cultural change and its consequent social exclusion act as one important factor leading to suicides.
- ?? Another major outcome of the study emerges from the lines of distinction it draws between Western and our society. Such a distinction, the study argues, is crucial as factors specific to culture and economy function differently in different contexts in addition to the fundamental differences that exist in terms of these very factors. These differences vary in terms of individual liberalism, spread of nuclear families, availability of a formal/informal support system, and a range of other factors specified in the study.

On the basis of the secondary and field level data, the study *recommends* some alleviating steps to be taken like evolving sustainable farming systems, encouraging recurring crops of agrobiodiversity, evolving institutions specifically meant for alleviation of distress in suicide prone people, avoiding the administrative delay for the debt-relief measures, making permanent institutional arrangements for the mental preparation of the local people for the awareness,

strengthening the popular spheres of interaction through local bodies, instituting some programmes at the local level for the democratization of the family with more openness and mutual understanding, introducing the long term strategies to address the loopholes of the policies etc.

Source: "Suicide Trends in Kerala: Causes and Alleviations", Rajan Gurukkal, M.G University

Accidents

20.53 On an average, Kerala is listed among the low accident prone states as the total accident rate of the state is below the national average. The average rate of total accidents occurred in Kerala in 2007 is 27.8 while the rate at all India level is 30.00

Table 20.16 State/UT – wise Rate of Accidental Deaths in Comparison to All India, 2007

	More Accident Prone			Less Accident Prone		
Sl. No.	States/ UTS	Rate (More than 30.0)	Sl. No.	States/ UTS	Rate (More than 30.0)	
1	D& N Haveli	104.3	1	Punjab	28.6	
2	Puducherry	96.8	2	Arunachal Pradesh	28.6	
3	Daman & Diu	68.5	3	Kerala	27.8	
4	Chattisgarh	57.2	4	Orissa	24.7	
5	Goa	56.2	5	Tripura	22.4	
6	Maharashtra	55.3	6	Uttarakhand	19.8	
7	Delhi	47.7	7	West Bengal	18.5	
8	A & N Isalands	46.2	8	Jharkhand	18.2	
9	Madhya Pradesh	44.8	9	Jammu & Kashmir	16.1	
10	Haryana	43.2	10	Sikkim	14.9	
11	Gujarat	40.7	11	Uttar Pradesh	14.5	
12	Karnataka	39	12	Assam	13.3	
13	Andhra Pradesh	38	13	Meghalaya	11.8	
14	Tamil Nadu	37.8	14	Manipur	8.9	
15	Himachal Pradesh	35.8	15	Bihar	8.9	
16	Chandigarh	32.8	16	Mizoram	7.3	
17	Rajastan	31.7	17	Nagaland	6	
			18	Lakshadweep	5.9	

20.54 But the rate of accidents due to unnatural causes like road accidents (40.6 %) and drowning (18.5%) is higher in Kerala than that of all India figure (36.3 % and 8.6% respectively). The number of road accidents in 2008 is highest in Eranakula m followed by Thiruvananthapuram and Thrissur districts while it is lowest in Wayanad followed by Kasargod.

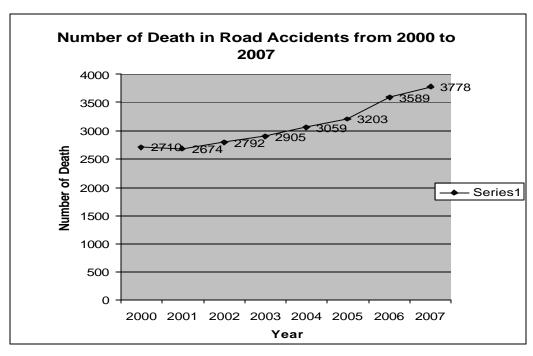
Table 20.17
Reported Cases of Road Accidents for the Year 2008
(1-01-2008- 31-12-2008)

District	Number of Cases	District	Number of Cases
Thiruvananthapuram	4608	Thrissur	4168
Kollam	2798	Palakkad	2185
Pathanamthitta	1514	Malappuram	2690
Alappuzha	3204	Kozhikode	3251

Kottayam	2639	Wayanad	575
Idukki	1095	Kannur	1724
Ernakulam	6049	Kasargod	805
Source: Crime Records Bu Thiruvanathapuram	reau,	Kerala	37305

20.55 The number of death due to road accidents is increasing over the years in Kerala. The following figure shows the number of death in road accidents from 2000 to 2007.

Fig 20.7



Source: Crime Records Bureau, Thiruvananthapuram

Food and Nutrition insecurity and Human Development

Average Monthly Per capita Consumption Expenditure (MPCE) and MPCE on Food

20.56 Monthly Per capita Consumption Expenditure of Kerala is higher than that of all India level both in urban and rural areas. MPCE is highest in Punjab followed by Kerala among the major states in India. Likewise, on an average expenditure on food is also very high in Kerala. It is Rs. 506 in rural Kerala and Rs.579 in urban Kerala. As the MPCE on food as well as average MPCE is very high, the percentage of food expenditure to total MPCE is comparatively low in Kerala. Both in urban and rural Kerala, the percentage share of food expenditure in total MPCE is lower than that of all India level.

Table 20.18
Average rural and urban MPCE: Major States

State	Rural	Urban

	Average MPCE	MPCE on food	% share of food in total exp.	Average MPCE	MPCE on food	% share of food in total exp.
Andhra Pradesh	727	381	52	1361	508	37
Assam	721	409	57	1369	633	46
Bihar	541	323	60	865	436	50
Chattisgarh	528	272	52	1048	415	40
Gujarat	797	432	54	1422	564	40
Haryana	1013	480	47	1336	526	39
Jharkhand	553	322	58	1119	519	46
Karnataka	624	327	52	1180	468	40
Kerala	1250	506	40	1681	579	34
Madhya Pradesh	515	264	51	1002	409	41
Maharashtra	776	372	48	1673	588	35
Orissa	459	265	58	1072	452	42
Punjab	1198	511	43	1609	596	37
Rajasthan	767	405	53	1185	508	43
Tamil Nadu	729	368	50	1227	486	40
Uttar Pradesh	653	341	52	996	437	44
West Bengal	630	371	59	1371	551	40
India	695	363	52	1312	517	39

Source: NSS Report No. 527: Household Consumer Expenditure in India, 2006-07

20.57 Monthly per capita consumption expenditure of farmer households is low compared to that of all rural households both in Kerala and all India level. Farm households spend less amount both on food and non-food items compared to rural households. The situation is same in all the states though the difference between the MPCE of farm households and all rural households varies.

Table 20.19
Monthly Per capita Consumption Expenditure for Farmer Households

	MPCE	for Farmer Hou (Rs)	seholds	MPCE for all rural Households (Rs)			
State	Food	Non-food	total	Food	Non-food	total	
Andhra Pradesh	289	223.55	512.56	299.3	267.59	566.89	
Assam	311.72	167.7	479.42	329.61	190.85	520.45	
Bihar	250.28	153.32	403.6	252.17	162.45	414.63	
Chattisgarh	219.11	159.78	378.89	232.4	176.24	408.64	
Gujarat	313.29	249.58	562.86	341.83	284.18	626.02	
Haryana	393.97	347.13	741.1	388.47	392.3	780.76	
Jharkhand	225.06	127.79	352.85	254.75	167.32	422.07	

Karnataka	262.71	228.48	491.19	292.01	263.49	555.5
Kerala	418.88	481.71	900.59	440.82	540.59	981.41
Madhya Pradesh	217.17	189.13	406.3	242.05	212.53	454.58
Maharashtra	268.25	255.87	524.12	289.72	294.33	584.05
Orissa	202.81	138.94	341.75	230.93	166.96	397.89
Punjab	403.84	424.17	828.01	402.59	483.52	886.1
Rajasthan	308.63	248.82	557.45	308.62	260.97	569.59
Tamil Nadu	302.07	270.74	572.81	314.87	294.21	609.08
Uttar Pradesh	257.3	217.59	474.89	274.64	234.39	509.03
West Bengal	311.32	196.42	507.74	325.2	212.86	538.06
India	278.74	224.09	502.83	298.57	255.59	554.15

Source: NSS Report No.495: Consumption Expenditure of Farmer Households, 2003

Nutritional status

20.58 The per capita calorie intake as per the report of National Sample Survey Organization in Kerala is below the national average of calorie intake. And it is also surprising that the calorie intake per day in Kerala is lower than that of many North Indian States like Bihar, Orissa, Rajastan and Uttar Pradesh where the other human development indicators show dismissal picture. Calorie intake is highest in Punjab among rural India while that of highest in Jharkhand in urban India.

Food Availability and Hunger

20.59 Per thousand distribution of households by food availability shows that the proportion of households getting adequate food throughout the year in Kerala is lower than that of all India level though in rural Kerala the proportion is higher than that of all India level.

20.60 Like wise, the social indicators shown in Economic Survey, 2007-08 also indicates the existence of hunger in Kerala. The intensity of hunger is more than that of all India level. The percentage of households with inadequate food is 2.3 in Kerala while that of all India is 1.9. The inequality measured in terms of Lorenz Ratio also shows that inequality is very high in Kerala. Among the major states of India, inequality is highest in Kerala followed by Madhya Pradesh, Punjab and West Bengal in rural India and by Haryana, Tamil Nadu and Maharashtra in urban India.

Table 20.20 State wise information on Per Capita Calorie in take, 2004-05

	Rur	al	Urban		
	% Expenditure on Food	Calorie in take per day (Keal)	% Expenditure on Food	Calorie in take per day (Keal)	
Andhra Pradesh	55.2	1995	41.6	2000	
Assam	66.0	2067	49.5	2143	
Bihar	64.8	2049	51.1	2190	
Chattisgarh	56.2	1942	39.0	2087	
Gujarat	58.0	1923	44.9	1991	
Haryana	48.6	2226	41.4	2033	
Jharkhand	61.9	1961	46.9	2458	

Karnataka	55.7	1845	43.2	1944
Kerala	45.0	2014	40.0	1996
Madhya Pradesh	52.9	1929	38.9	1954
Maharashtra	51.7	1933	40.4	1847
Orissa	61.6	2023	49.9	2139
Punjab	49.2	2240	37.6	2150
Rajasthan	54.8	2180	41.6	2116
Tamil Nadu	52.4	1842	42.7	1935
Uttar Pradesh	53.6	2200	45.0	2124
West Bengal	58.7	2070	43.4	2011
India	55.0	2047	42.5	2020

Source: NSS Report No. 513: Nutritional Intake in India, 2004-05

Table 20.21 Per 1000 Distribution of households by food availability status

	Adequate Food	Throughout the	e Year				
	as ascertained	as judged		Getting	Inadequate		
	by a direct	by the		Inadequate	food		Total
	question	investigator	all	food some months	(all months)	n.r	
All India							
Rural	472	502	974	20	4	2	1000
Urban	297	697	994	4	1	1	1000
Total	424	555	979	16	4	1	1000
Kerala							
Rural	420	555	975	22	3	0	1000
Urban	359	623	982	17	1	0	1000
Total	405	571	976	21	3	0	1000

Source: NSS Report No. 512: Perceived Adequacy of Food Consumption in Indian Households 2004-05

Table. 20.22 Poverty and Inequality among Major States in India

	% of Population	Average MPCE (2004-05)		Inadequate	Lorenz Ratio (2004-05)	
State	below poverty line (2004- 05)	Rural	Urban	Food (2004-05)- % of households	Rur al	Urban
Andhra Pradesh	15.8	586	1019	0.5	0.288	0.37
Assam	19.7	543	1058	5	0.197	0.314
Bihar	41.4	417	696	2.7	0.208	0.339
Gujarat	16.8	596	1115	0.2	0.268	0.304
Haryana	14	863	1142	0.1	0.323	0.361

Karnataka	25	508	1033	0.2	0.264	0.365
Kerala	15	1013	1291	2.3	0.341	0.4
Madhya Pradesh	38.3	439.06	903.68	1.6	0.269	0.397
Maharashtra	30.7	567.76	1148.27	0.8	0.31	0.371
Orissa	46.4	398.89	757.31	5.3	0.302	0.355
Punjab	8.4	846.75	1326.09	0.7	0.278	0.393
Rajasthan	22.1	590.83	964.02	0	0.248	0.367
Tamil Nadu	22.5	602.17	1079.65	0.3	0.315	0.358
Uttar Pradesh	32.8	532.63	857.05	1.5	0.287	0.37
West Bengal	24.7	562.11	1123.61	9	0.273	0.376
India	27.5	559	1052	1.9	0.297	0.373

Source: Economic Survey: 2007-08

Major Human Development Challenges

Morbidity

20.61 The coexistence of high level of morbidity with low levels of mortality and high life expectancy in Kerala has attracted much attention. Generally coronary heart diseases, diabetes and hypertension are considered as life style diseases. The incidence of morbidity across age groups by gender in rural and urban sectors in Kerala and India are shown in the table. The incidence of diseases across all age groups in Kerala is significantly higher than the all India average.

20.62 Kerala state is in an advance stage of epidemiological transition. The high proportion of the elderly in the state contributes a high proportion of this morbidity. The high level of morbidity co exists with low levels of mortality and high life expectancy in Kerala has serious policy implications.

20.63 There is also rise in non communicable disease prevalence in the state. Kerala reported the highest prevalence of diabetes, both among adult males and females among all the states in India. The number of women who have diabetes is 2549 per one lakh women against 881 per one lakh women in India. In case of adult men, diabetes is reported by 3078 per one lakh men and the corresponding figure for the country as whole is 1051 (NFHS-3). The major reported diseases in rural areas were heart disease, respiratory, fever, etc and in urban areas were heart disease, respiratory, asthma, diabetes etc

Table 20.23 Incidence of Morbidity in Kerala and India

moracine of the planty in the first and the same									
	Keral	la	All India						
	Rural	Urban	Rural	Urban					
<u>Male</u> 0-14	22.2	25.5	7.6	8.4					
15-29	11.8	12.2	4.1	4.4					
30-44	19.2	13.7	6.4	6.4					
45-59	31.5	32.2	10.7	12.7					
60 & above	56.2	52.9	28.5	35.2					

All	24.2	23.5	8.3	9.1
<u>Female</u> 0-14	18.6	19.8	6.8	7.4
15-29	16.0	13.6	5.7	5.6
30-44	22.0	15.3	9.3	9.5
45-59	39.0	36.3	13.2	17.3
60 & above	58.6	57.4	28.2	38.3
All	26.6	24.4	9.3	10.8

Source: NSS Report No.507, 2006

. 20.64Economic disparity in the levels of morbidity is seen in Kerala. Incidence of morbidity is higher among non poor compared to poor categories of the state. Compared to the Indian figures, the difference in morbidity incidence among poor and non poor is more evident in Kerala. Significant spatial difference is observed in the state with more differentials in urban areas. The regional variation in morbidity incidence is apparently high in southern part of the state compared to the northern region. Irrespective of the regional difference the incidence of morbidity is high in rural areas where as a reverse picture is observed in the nation as a whole.

Table 20.24 Morbidity for poor and non-poor in Kerala and All India (2004)

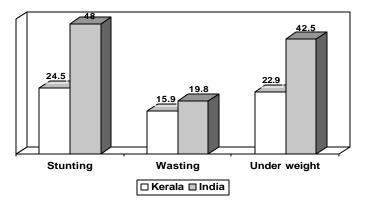
	Northern Kerala		Southern Kerala		Kerala		India	
Characteristics	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Poor	15.51	14.47	29.31	23.18	21.97	17.98	6.47	8.17
Non-poor	19.01	16.84	31.11	29.48	26.28	26.22	9.97	10.61
Total	18.24	15.77	30.86	28.46	25.53	24.06	8.82	9.95

Source: IGIDR, 2008

Child Health

20.65 A comparative figure of nutritional status of children based on the standard three indices of physical growth like stunting, wasting and under weight in Kerala and India is seen in the following figure. All the three nutritional status indicators of Kerala are lower than the national average. Among the major states in India, the proportion of under weight and Stunting children is the lowest in Kerala.

Fig 20.8
Percentage of children under age five by nutritional status



Error!

Objects cannot

be created from

editing field codes.

Source: NFHS-3

Elderly in Kerala

20.66 From very early time onwards life expectancy at birth has been the highest in Kerala. However, the morbidity pattern as well as the dependency of the elderly in Kerala leads to a dismal picture. There were 83 young dependents (0-14 ages) for 100 working age population in 1961. This has decreased to 36 in 2001 and is expected to go down to 30 in 2021. Against this, the old age dependency ratio increased from 11 in 1961 to 16 in 2001 and is projected to increase to 26 in 2021

Table 20.25
Percentage distribution of population in broad age group and dependency ratio, Kerala, 1961-2001

	Age gro	oup		Dependency ratio				
Year	0-14	15-59	60+	Young	Old	Total		
1961	42.62	51.53	5.84	83.0	11.3	94.3		
1971	40.26	53.52	6.22	75.2	11.6	86.8		
1981	35.00	57.50	7.50	60.9	13.0	73.9		
1991	29.80	61.40	8.80	48.5	14.3	62.8		
2001	26.08	63.44	10.48	36.0	16.0	52.0		

Source: Census of India

20.67 The proportion of aged 60+ increased from 5.9 percent in 1961 to 10 percent in 2001, which may be attributed to a decline in fertility. The age structure change has resulted a new set of problems in the society with direct and indirect effect on state budgets.

CHAPTER 21

INFORMATION AND COMMUNICATION TECHNOLOGY

IT sector is creating greater employment than any other sector in the state. With about 40,000 direct employment in Technopark and Infopark, and indirect employment of about 2,00,000 (IT is well-accepted to have multiplier of 1:4), the number of jobs created due to IT in the last decade is around 2.5 lakhs. This would be higher than any other sector in the state. Moreover, there is potential for still higher number of jobs. It is possible to scale up the IT development to the next level. This is proposed to be done by increasing the number of IT parks from the present two locations to 10 locations over the next 3 years. Since such scaling would require huge financial resources, the strategy is to do this jointly with private participation. To do this, Government of Kerala has created a dedicated company, entitled, Kerala State IT Infrastructure Ltd. exclusively for the development of IT infrastructure.

- 21.2 Our strategy to increase IT infrastructure is coincidentally happening at a time when the overall global economy is going through a severe turbulence. While the economic downturn is going to put pressure on the private participation, it is also an opportunity for Kerala. The economic downturn provides an opportunity to develop the proposed economic infrastructure so that when the next growing phase of the cyclic IT industry comes, Kerala is ready with world class IT infrastructure. Besides, economic pressures would force IT companies to look at cost-cutting measures, which could make Kerala an attractive destination compared to bigger metro destinations like Bangalore, Hyderabad and Chennai.
- 21.3 Kerala State Information Technology Infrastructure Ltd (KSITIL) is a public limited company formed for the creation of infrastructure for IT/ITES in the State with 51% share capital contribution of the Government. The company has been incorporated under the Companies Act on 31.1.2008 and has commenced business on 5.3.2008.
- 21.4 The business model for the company is to acquire land, create value addition to providing basic infrastructure like electricity, water, road, obtain SEZ statue and such other Government approvals that may be required and then allot lands to private developers for development of either IT SEZs or IT parks, realizing value of land based on market prices. Revenue so generated is reinvested in projects it promotes as company 's share capital. The company hold upto 26% share in the projects.
- 21.5 The company is currently in the process of acquiring land for the following projects: phase 3 expansion of the Tehnopark, Technocity at Thiruvananthapuram, Cyberpark at Kozhikode, Infopark expansion at Kochi. Further new sites for acquisition are under consideration at Kollam, Kochi and Kozhikode. In addition, it has been decided that land shall be provided in the districts of Kollam, Alapuzha (Ambalapuzha and Cherthala), Thrissur, Kannur and Kasaragod for development of IT parks. In all these areas the company is simultaneously in the process of developing basic infrastructure necessary to start the IT development process. It has made SEZ applications and initial master planning activity has been started. Approval for SEZ status has also been received in respect of Kannur, Kasaragode, Ambalapuzha and Cherthala IT parks.
- 21.6 Another scheme being implemented by KSITI is the Technolodge scheme. Technolodge scheme proposes to promote setting up of rural IT parks thereby promoting development of IT in smaller towns also. Technolodge scheme is proposed to be undertaken wherever Government

land (one to two acres) or vacant Government building (about 5000 sq. ft to 10000 sq. ft) are available. Government has already issued orders for identifying such lands, which are suitable for transfer to KSITI for setting up of IT parks. Technolodge may be developed either directly by KSITI or in partnership with private investment.

- 21.7 The year ending March 2008 has been a period where Kerala's stand in the IT sector was promising and which is on a steady growth path. Cities in Kerala especially Trivandrum and Kochi have been rated as the next booming metros and challenging IT locations in India. It is also predicted by National Association of Software & Service Companies (NASSCOM0 that the tier two cities such as Trivandrum, Kochi etc. offering quality life with good infrastructure and educational institutions will attract more IT/ITES businesses than existing leading locations like Bangalore, Hydrabad and Chennai.
- 21.8 Both Trivandrum and Kochi are in the process of building modern IT parks. The third phase expansion of Technopark and TECHNOCITY in Trivandrum, the expansion of InfoPark, Kochi and the SMART CITY with private participation are underway. IT majors such as Tata Consultancy Services, Infosys Technologies, Wipro Technologies, etc, have already acquired land in Trivandrum and Kochi and are in the process of constructing their own campuses. The State Government is also in the process of setting up a hub and spoke model IT development by developing TECHNOPARK in Trivandrum Infopark in Kochi and Cyber park in Kozhikode as the hubs and other district locations as the Spokes. Activities for setting up IT Parks in Kollam, Cherthala, Ambalapuzha, Kozhikode, Kannur and Kasaragod have already commenced.
- 21.9 The State has made substantial progress in ICT sector in terms of investments, infrastructure development and employment generated in ICT sector through focused initiatives of the IT Department. A significant stride in the IT sector during the past year has been its conscious march towards building quality infrastructure and providing quality manpower required by the Industry.

Infrastructure

- 21.10 Creation of IT Infrastructure in terms up space matching with the demand from companies in ICT/ITES industry was of prime focus. The Technopark Thiruvananthapuram has a total built up space of four million sq. ft and Infopark has about one million sq.ft. Major IT Cos Infosys, TCS, UST Global, IBS, Tata Elexi, NEST are constructing their own campuses in Technopark and Wipro, TCS and IBS in Infopark. Private sector companies, Muthoot Group, L & T and Leela Group, has created another 1.2 million sq.ft. space in Technopark and Infopark. Developers like Brigade Group, Parsvnath, Sun Forest City, Emar MGF, Suzlon, SREI, K. Raheja, Maytas etc. have also come forward to invest in creating IT space in the State
- 21.11 Designed to international standards the Technopark at Trivandrum is the one and only CMMI Level assessed Technology Park in the country, and provides a serene environment with high quality support infrastructure at low cost for IT / ITES companies. Around 150 transnational companies with 20,000 IT professionals operate from the sprawling 143 acre campus. The self contained Park provides a convention centre, club house, guest house, cafeterias, banks, post office, shopping mall, etc to its clients.

Key highlights

- 1. Number of companies grew from 135 to 1500 companies during 2008
- 2. Employment grew from 18,000 to 20000
- 3. IT Software export grew from Rs. 700 crores to Rs. 1200 crores
- 4. Investment by Companies grew from Rs. 800 crores to Rs. 1500 crores
- 5. Two SEZs launched in Technopark

21.12 Ongoing expansion in various stages of completion

- 1. Infosys campus construction underway and first phase to be inaugurated in April 2009.
- 2. Nest / Tata Elxsi Phase IT/ Case Consult buildings coming up
- 3. Leela Holdings IT building to be completed in January 2009
- 4. TCS Development Centre construction to begin soon
- 5. Setting up integrated TECHNOCITY Campus in 447 acres land registration progressing
- 6. Adding up another 92 acres as 3^d phase expansion understanding with land owners reached and land registration in progress
- 7. SEZ applications for 40 acres in Phase III and 60 acres in TECHNOCITY forwarded to the Government of India for approval
- 8. TECHNOPARK Constructing one more building with 1,000,000 sq.ft
- 9. Ring road for the campus under construction
- 10. Expansion of Technopark Club completed
- 11. Price Waterhouse Coopers preparing Master Plans for Technopark Phase 3, Technology and district level parks
- 12. Bids process for Phase III and Technocity in progress
- 13. Land identified for Kollam and SEZ application forwarded to Government of India for approval
- 14. SEZ approval obtained for Kasaragod and Kannur
- 15. Work on substation for Phase 2/ Phase 3 started

2. IT Industry - current scenario

21.13 The three Indian IT majors Tata Consultancy Services, Infosys and Wipro, have commenced activities for building their own campuses in the State. Major home grown companies US Technology Global, IBS Software Solutions, Sun Tec. Etc., are growing and are in the process of setting up their own campuses in the State. Major global players like RR Donnellery & Co., Allianz Corn hill, Ernst & Young, MIckinsey & Co., etc., are also expanding their operations. Other major companies like Tata Elxsi, Collabere, Kanoo Group of Baharin, Saudi Engineering Group, RM PLc. UK, Alamy Images, UK, Toroid India, etc, are also expanding their activities. One of the global ten animation studios Toonz Animation, has been doing exceedingly well. Currently, the campus hosts around 150 IT/ITES companies and provide direct employment to 20,000 professionals

Physical Infrastructure - Technopark, Thiruvananthapuram

21.14 During the period under review, TECHNOPARK at Thiruvananthapuram has become a premium technology park with 4 million sq. ft. built up area and has been able to attract many to IT Companies into its fold. The Bangalore based IT major, Infosys Technologies Ltd has set up its operations in the flagship buildings of the State owned prestigious

Technopark at Trivandrum by acquiring 1.5 lakh sq. ft. built up space in 'Bhavani' and Thejaswini. The Nasdaq listed Infosys is in the process of building its own campus in Trivandrum, adjacent to the Technopark Campus in the 50 acres of land being acquired by the State Government and the first phase is expected to be ready for operation by April 2009. IBS has started work on their second building in the SEZ.

21.15 The details of buildings planned in the two Special Economic Zones already approved by the Government of India are given below:

36 acres SEZ – I in existing TECHNOPARK Campus Ist Phase

Sl.No	Name of Company	Area in acres	Built – up in sq. ft.	Investment in crores (Rs.)	Employment Nos.	Exports in 5 years crores (Rs.)
1	Tata Consultancy	26	800,000	300	8,000	1200
	Services					
2	IBS Software Services	5	450,000	150	4,000	600

86 acres SEZ –II in Attinkuzhi near Techno park 2nd Phase expansion

Sl.No	Name of Company	Area in acres	Built – up in sq. ft.	Investment in crores (Rs.)	Employment Nos.	Exports in 5 years crores (Rs.)
1	Infosys Technologies	50	2 million	400 crores	15,000	2961.13
2	US Technology	36	2 million	400 crores	15,000	2500

21.16 Companies in Technopark have exported Rs. 1,200 crores of software during 2007-08. The all India export during the same period is Rs. 108,612 crores. Karnataka had an export of Rs. 54,000 crores. Tamil Nadu Rs. 28,400 crores and Andhra Pradesh Rs. 26,122 crores

Table
The status as on 28.10.2008 of Technopark is given below

Description	Current Status
Total Land area	229 acres
3 rd phase land acquired (out of 92 acres)	70 acres
Technocity land acquired (out of 447 acres)	96.61
Built – up area	4,000,000 sq.ft
Building under construction by IT Cos/ Developers	1,300,000 sq. ft
Area – construction planned	1,000,00 sq. ft
No. of companies	150 companies
Employmnet – direct	20,000
Investment in Infra Facilities	
1) Investment by Technopark	222 crores
2) Investment by Companies	1,500 crores
Exports as reported by companies 2007-08	1,200 crores

India Institute of Information Technologies and Management – Kerala (III TM – K)

- 21.17 The Indian Institute of Information Technology and Management Kerala (IIITM K) is unique in initiating a number of education, research, development and services activities of direct relevance to society and the government. Here we summarize the several ongoing services, developments and proposed programs in this area of IT for the Social Sector. These may broadly be classified into the following areas.
 - (i) Education Grid: Education related programs, system, processes and services
 - (ii) Agriculture related Information Systems and Services
 - (iii) New concepts and systems in E-Governance
 - (iv) Community Informatics developments
 - (v) Specific courses, training programs, consulting and development services for capacity building areas of relevance to social development

Infopark

21.18 Infopark is currently operating from 100.86 acres of land and has been notified as a Special Economic Zone by Government of India. Presently 43 IT Companies are operating from the Park employing around 8000 IT professionals. Already an area of 20 lakhs sq. ft has been built up at Infopark in a short span of three and a half years. Considering the growth potential and pressing demand, Infopark is acquiring for its Phase II expansion another 160 acres. Infopark's total investment as on 31.3.2008 is approximately. Rs. 600 crores and the software export has touched Rs. 368 crores. Construction of approximately 22 lakhs sq. ft IT building is in progress. It is expected that within the next 3 years there will be a total built up area of 42 lakh sq. ft. to employ more than 40,000 IT professionals. Major activities of Infopark are given below.

i) Construction of 5.5 lakhs sq. ft IT building at Infopark

21.19 Infopark is constructing a new IT building complex having a total of 5.5 lakhs sq. fts built up area. This new building will have facilities such as incubation centres, training centres etc. The total estimated cost of the complex is Rs. 91.30 crores. An extent of 22,000 sq. ft is earmarked for incubators to promote small and medium local entrepreneurs. NABARD has sanctioned a loan of Rs. 50 crores for this project. The work is in progress

ii) Construction 4 lane road from Airport Seaport road to Infopark

21.20 Infopark is constructing a 4 lane road from Airport Seaport road to Infopark having a length of 2.37 km. The road has a carriage way of 19 m with 4 lanes for 4 wheelers and 2 lanes for 2/3 wheelers. The road is expected to be ready by March 2009.

Iii)Acquisition of 160 acres of land

21.21 Considering the large demand for built up space and land by IT companies and developers, Infopark is acquiring another 160 acres of land in Kunnathunad / Puthencruz villages of Kunnathunad Taluk as its Phase II expan sion scheme. This land is approximately 2 km away from Infopark's present campus and on the banks of Kadamparayar River. The acquisition of land is progressing. An IT/ BPO centre of about 12 lakhs sq. ft. is planned by Infopark in a plot in this land and the remaining area will be leased to co-developers and IT companies apart from land for providing common facilities like power, water, access and connectivity. The employment potential for the Phase II expansion is 50,000

iv) Smart City Project

21.22 Infopark has acquired an extent of 131 acres of land for Smart City Project as per Fast Tract Procedures on the basis of negotiated purchase and through LA Act and transferred to Government for transfer to Smart City. Lease Agreement has been executed on 15th November, 2007 between Government and Smart City and foundation stone laid on 16th November 2007. Additionally 115 acres of land was transferred from KSEB / KINFRA and leased for Smart City Project making a total of 246 acres. On completion by 2016, the Smart City will be employing about 90,000 IT professionals.

V) Infrastructure development of co-developers and IT Companies

- 21.23 Of the 100.86 acres, the park has leased out 58.90 acres of land to major IT companies on 90 years lease for developing IT buildings in their own campuses
 - a) Leela Infopark The first building of 1.30 lakh sq. ft. in 6.35 acres leased to them has been rented out to M/s OPI Global, a US company and IBS. Leela's second phase expansion of approximately 3.5 lakh sq. ft. building is ready for occupancy. This has a potential of employing about 4500 IT professionals
 - b) Wipro Ltd 25.18 acres of land has been leased to WIPRO for a built area of 10 lakh sq. fit campus comprising of 4 software blocks, utility substations, training centre, guest house, gate house etc. have been completed and in operation. The facility has a capacity to accommodate approximately 8000 IT professionals
 - c) L& T Tech Park Ltd An extent of 7.44 acres of land has been leased out to L& T for their campus development. Phase I building of 3.50 lakh sq. ft with utility is functional. Piling for Phase II expansion of 5 lakhs sq.ft building has been completed. It is expected that: L & T campus will have an employment potential of approximately 8000 IT professionals on completion of the second phase.
 - d) Tata Consultancy Services Ltd TCS has commenced construction activities in their campus in 15.72 acres of land. The software development blocks will have built up area of 5 lakhs sq. fit. On completion the campus will have approximately 5000 professionals
 - e) **IBS Software Services** 4.21 acres of land has also been be ased to IBS Software Services for setting up their campus for constructing 4 lakhs sq. ft with an employment of potential of 4000.
 - f) **Brigade Enterprises** 5 acres of land has been leased to Brigade Enterprises for construction of 5.5 lakhs sq. ft and construction has commenced. This will have an employment potential of about 5000 professionals.

VI Infopark Phase II Expansion Programme

- 21.24 Government has decided to establish IT Parks in various districts including Alappuzha and Thrissur. Infopark has been entrusted with the responsibility for infrastructure development, power licensee and management of the following parks
 - a) Infopark Ambalapuzha 100 acres
 - b) Infopark Cherthala 60 acres

- c) Infopark Thrissur 42 acres
- 21.25 These will be established as sector specific Special Economic Zone. Employment potential in the above 3 parks is about 30,000. Cherthala Park will be a Green Park with maximum energy conservation and minimum carbon emission. Ambalapuzha Park will be unique in its development with independent islands connected by bridges. The work has commenced for Cherthala Infopark

E- Governance

21.26 All the project activities and Park management is fully computerized by both the developer and co-developers / IT companies

A	actual as or	1			Estimate as on			
Description	31.3.05	31.3.06	31.3.07	31.3.08	31.3.09	31.3.10	31.3.11	31.3.12
1. Extent of land (acres)	80	97	101	101	114	114	114	114
Phase I Infopark Kochi								
Phase II - do-					150	150	150	150
Infopark Cherthala,					210	210	210	210
Ambalapuzha & Thrissur								
Total	80	97	101	101	474	474	474	474
Built up space – Phase I	1.35	3.85	5.35	20.00	22.00	34.00	60.00	65.00
(lakhs sq. ft.)								
Employment Strength (No.)	300	3500	5000	5600	8000	17000	38000	60000
Software Export (Rs. crores)	10	67	195	369	525	1100	2500	4000

Infopark - Projections

Kerala State IT Mission

21.27 Many of the government services in the state have already been transformed into the emode and the contribution of the Kerala State IT Mission, in this regard, cannot be left unnoticed. The KSITM has envisaged a wider scope for the e-factors in the day – to – day lives of Malayalis and it is keen on implementing many citizen – friendly. IT – enabled projects. Ever since its inception, KSITM has undertaken a robust promotional campaign to hard sell Kerala as the emerging IT/ ITES destination in the country. This is achieved through the participation in IT events and road shows, business meets, release of advertisements and by publishing publicity materials.

AKSHAYA

- 21.28 Kerala is one of the first states in India which realized that people should be made computer-literate and they should have easy access to computers, is the benefits of ICT revolution have to reach them. Akshaya project of Government of Kerala was initiated with this objective in mind, targeting to make at least one member of every family computer literate within a minimum time frame.
- 21.29 The scope and scale of operation of Akshaya is multifaceted, which involves coordination of project activities in 1223 local boidies in fourteen districts, dealing with more than 3000 Akshaya e- centres and 64 lakh trainees in the State. Akshaya also ensure high level involvement of the local bodies at the grass root level.

21.30 Akshaya has been rolled out all over the state and the e-literacy training is being carried out successfully. The Akshaya e-centres also envisage to deliver several value – added G2C, B2C, C2B, C2G etc services to the people. E-payment, e-learning, and e-business etc are the priority sectors of services through Akshaya e-centres. It is envisaged to roll out all e-service delivery initiatives in all the districts during next financial year so to build up service delivery hubs of e-governance and e-commerce at the doorsteps of the citizens.

FRIENDS

- 21.31 FRIENDS 'Jan Sevana Kendrams' are established in 14 districts for providing service for different departments and agencies, important participating agencies include Motor Vehicle Department, Revenue, Civil Supplies, KSEB, KWA, University, Local Bodies, Electrical Inspectorate and BSNL in FRIENDS. In FRIENDS bills / dues to government are collected under a common roof. It is proposed to augment these centres by incorporating technological up-gradation and by introducing new services.
- 21.32 FRIENDS has over a period of five years become one of the most popular accepted egovernance project of the Government. It is felt that the centres need to be replicated right up to the Panchayath level, in accordance with our larger e-governance road map of the State wide Area Network, The software needs of Akshaya Project to be re-engineered incorporating all these changes and to develop- as a Centralized system with "Any Payment Any Centre" concept so that the centres would be able to function exceptionally well by incorporating latest technological advancements.

Local Language Computing

21.33 Availability of computing tools and digital content for Malayalam is essential to bring benefits of Information Technology to more people. Rightly undertaking this, the government has come forward with Malayalam Computing Campaign, which is an attempt to enrich the local language, Malayalam, in the cybersphere. It provides a platform for enabling the use of Malayalam on our operating systems with the help of Unicode. Started in February 2008, the campaign is active at present in five districts of Kerala – Kannr, Malappuram, Kollam, Pahtanamthitta and Kozhikode. The year – long campaign is expected to cover all the other nine districts of Kerala soon. Entegramam (my village) portal will also be introduced in eleven districts, which contain information related to local governance process, public institutions like hospitals and schools, local events, labour banks and the like. These portals can be a major step forward in ensuring transparency in governance process. It is also planned to have school-level competition for website creation and competition for web developers also. The initiatives will also cover skill development among non-web developers and websites for Grameena Libraries, arts and sports club and other social organizations.

ICT for Underprivileged

21.34 Kerala State IT Mission has been implementing special programmes for under - privileged sections in the society. These initiatives are in line with government policy of digital inclusion. Under this scheme Kerala State IT Mission was primarily focusing on helping visually challenged. Programmes for mentally challenged and backward communities have also started off. INSIGHT propgramme has been launched under this scheme to use ICT to help differently – abled persons in our society to participate in emerging Knowledge Society. INSIGHT centre

currently operating in Thiruvananthapuram has already provided training to 66 persons. Major achievements of this initiatives includes.

- 1. 50 entrepreneurs from 3 districts were trained on the technology
- 2. Malayalam Text to Speech and Optical character recognition work on progress
- 3. Audio Magazine created visually challenged people
- 4. Studio has been set up to create more audio content

Kerala State Wide Area Network (KSWAN)

- 21.35 Government of Kerala has initiated major e-Governance programmes in various departments. All these initiatives require networking of the various offices coming under these departments. Kerala State Wide Area Network (KSWAN) is envisaged to be the core common network infrastructure for e-Governance, over which all these applications would run.
- 21.36 The State Information Infrastructure (SII), connecting Thiruvananthapuram, Kochi and Kozhikode will act as its backbone. It is extended to all the 14 districts and to the 152 Block Headquarters. Further, the network will bring into its ambit about 1660 remote offices of Government Departments, and ultimately connecting all the Government offices in future. The Departments will be connected using point to Multipoint Wireless Systems.
- 21.37 An infrastructure like the State Wide Area Network supports integration of a large number of citizen services and with required applications in place, will enable services like G2G, G2C. etc.
- 21.38 United Telecoms Limited (UTL) with technical back-up from C-DAC is implementing KSWAN on BOOT basis, where the payment is done on quarterly guaranteed revenue basis. The project has both state share and Central Government share.

KSWAN – Secretariat Wide Area Network

21.39 Digitization of Secretariat & Directorate level activities by connecting the Secretariat, Public office and Vikas Bhavan under a WAN is the prime aim of the project. Secretariat being the main administrative centre, its computerization is the basic need for the state-level egovernance activities. So it is selected for pilot implementation. The functioning of the application software through the networked computer system will enable the electronic file flow. Majority of the activities and communications could be thus digitized. The digitized records can be stored and various reports can be generated from the data.

E-governance initiatives

Citizen Call Centre

21.40 The Citizens' Call Centre (CCC) is a single window IT-enabled facility of Government that enables citizens and Government to interact effectively. Call centre is envisaged to enable the Government to Ctizen (G2C) interface for the quick delivery of critical information, which is otherwise either inaccessible or difficult for the citizens to trace. CCC is providing all the services in a 24x7 fashion and working on all calendar days except national holidays. The calls are being answered by a team of Call Centre Executives, who are highly experienced and skilled professionals. Call Centre which is established in Thiruvananthapuram is functioning well. It is receiving more than 300 calls on a normal day and there is a knowledge bank data base of 18

Government departments. In addition to general enquiry, CCC is accepting complaints as part of Hon'ble Chief Minister's Sutharyakeralam programme and those complaints related to Taxes department and Civil Supplies department.

Sutharyakeralam

21.41 The Hon'ble Chief Minister of Kerla is promoting speedy redressal of complaints of the general public through the programme Sutharya Keralam. He will interact with selected complainants through video conferencing and give on the spot instructions to officers concerned for solving them. Complaints can be registered through Citizens Call Centre by dialing 155300 round the clock except on national holidays

Akshaya e-pay

21.42 Akshaya e-pay is an online system for collecting various utility bills from the citizens. It was introduced at 98 Akshaya centres in Malappuram district in August 2004 and was extended to seven more districts (Kollam, Pathanamthitta, Ernakulam, Thrissur, Kozhikode, Kannur and Kasaragod) in 2008. The project will be implemented all over Kerala shortly. Payments and bills due to KSEB, BSNL and Kerala Water Authority have been accepted at the e-pay centres. The centres in Malappuram district collect fees to be remitted at the Calicut University Counters too., The service of more departments such as Commercial Tax Department and Welfare Department are expected to be included in the e-pay platform soon. Akshaya e-centres all over Kerala (numbering 3000) will be e-pay enabled shortly, thus ensuring at least two e-pay centres in a grama panchayat in the future.

Video Conferencing (VC)

21.43 The Video Conferencing project is envisaged for connecting all District Collectorates, Kerala House New Delhi Secretariat, Public Office, Vikas Bhavan, Advocate General's Office and Kerala State IT Mission so as to organize immediate online conferences and discussion, minimising strain to participants, saving time and expenses and recording the conferences etc. Project started in 2004 and commissioned in Dec 2005. At present there are only 19 centres which are having VC facility.

CHAPTER 22

LOCAL GOVERNMENTS AND DECENTRALISED PLANNING IN KERALA

The 'Kerala Model' of democratic decentralization the "PEOPLE'S PLAN CAMPAIGN" with devolution of power, functions and resources to the Local Self Governments (LSGs) focusing on people's participation has been appreciated and accepted worldwide. National and international organizations applauded the unique and remarkable achievements of Kerala in decentralized participatory planning and implementation . In India, Kerala is a model to other states in decentralized system of development administration, fiscal decentralization, local governance system and is a destination to all those actively involved and interested in democratic decentralization.

22.2 The decentralised planning process initiated in the State during the IXth Five Year Plan has now completed more than a decade. The process started in a campaign mode with effective and active participation of people was named 'the People's Plan Campaign' during the IXth plan. Later, during the Xth plan it was titled as 'the Kerala Development Programme'. During the current financial year plan period, it has been again renamed as 'the People's Planning'. Though the whole process was started in a campaign mode it has been gradually and steadily brought to an institutionalized system of participatory planning process. During the past decade the planning process experimented many innovative ideas and the LSGs have initiated innovative grassroot level development projects with local participation and voluntary technical support. Now the major thrust has been focused on stabilizing the achievements so far made by completing the institutionalization, rectifying the defects and bottlenecks identified, plugging the loopholes and streamlining the methodology of participatory planning evolved at various stages, by revamping the Local Self Governance, making it more people friendly. The possibilities in information technology will be utilized to the maximum extent to increase the speed and efficiency. Some of the major landmarks in the whole process are;

- ?? Enabled the state to structure a systematic participatory planning methodology at various stages of developmental process planning, implementation and monitoring etc.
- ?? Initiated the transfer of around one third of the annual plan allocation in the state budget to the LSGs in the form of untied plan grant for implementing projects for local development according to the wishes of the people.
- ?? Enabled to transfer powers, functions, institutions and staff to LSGs.
- ?? Improved not only the capacity of the local public but also capability of the elected representatives in understanding and identifying local level planning.
- ?? Introduced a transparent method in the selection of individual beneficiaries of the schemes based on some fixed criteria.
- ?? Laid foundation for wide range of reforms like right to information, a good practice in giving benefits, enhanced accountability mechanisms, outsourcing of technical support, improved management system and simplified planning process.
- ?? Motivated to improve accountability and introduced good governance features in the administrative set up.
- ?? Made local governance more practical, responsive and transparent.
- ?? Created a positive effect on reducing poverty to some extent by providing provisions to meet the basic needs of the weaker sections of the society especially by introducing Ashraya concept.

22.3 The four major objectives of decentralized planning in the XIth Five Year Plan are Local Economic Development, bringing Social Justice, Enhancement of Quality of Public Service & Good Governance. For achieving these objectives through local Evel plans of LSGs, the XIth Five Year Plan has given priority to the revival of Agriculture, Traditional Industries, Programmes on Poverty Reduction and Quality Service to public in service sectors.

Grant-in-Aid to LSGs

22.4 The most important aspect of the decentralization in Kerala is that the Government of Kerala empowered the Local Self Governments by devolving powers as well as resources. A noteworthy feature in the devolution of Grant-in-Aid (Development Fund) to Local Self Governments in the last decade of decentralization in the state is the steady and significant increase of the amount from Rs.4614 Crore in the IXth Plan to Rs.6784 Crore in the Xth Plan. The grant-in-aid as a percentage of state plan outlay shows considerable variations from year to year during the IXth and Xth plan periods. The aggregate grant-in-aid received by Local Self Governments as a percentage of state plan outlay declined from 29% in IXth Plan to 27% in the Xth Plan. There was 61% increase in the state plan outlay during the Xth plan compared to that in the IXth Plan. But the corresponding increase in grant-in-aid to Local Self Governments was only 47% in the corresponding period. Though the proportionate increase in direct government plan assistance to LSGs is less compared to the increase in state plan outlay, it may be noted that majority of the state plan schemes are implemented with their direct involvement.

22.5 Compared to previous year, the increase in the allocation of grant-in-aid during the year 2006-07 was only 1.82%. But during 2007-08, the first year of the XIth Five Year Plan it has increased substantially by 10%. It is steady in the succeeding financial year. The table below reveals that as the state plan size increases in the two five year plans and in the first two Annual Plans of the XIth Five Year Plan, the corresponding proportionate increase in the share of LSGs was not taken place. A salient feature to be noticed in the devolution of grant-in-aid to LSGs is that though the state faces difficulties in resource mobilisation to support the annual plans, the mandatory provision of grant-in-aid recommended by 3rd State Finance Commission to LSGs has been adhered to. The state plan outlay and share of LSGs is given in Table 22.1.

Table No. 22.1
State Plan Outlay & Share of LSGs in the State Plan

(Rs.in crore)

	Oı	ıtlay	(RS.III CI OI C)	
Year	State Plan	Share of LSGs (Grant-in-Aid)	%	
IXth Plan				
1997-98	2855.00	749.00	26.23	
1998-99	3100.00	950.00	30.65	
	(8.58)	(26.84)	30.03	
1999-00	3250.00	1020.00	31.38	
1999-00	(4.84)	(7.37)	31.36	
2000-01	3535.00	1045.00	29.56	
2000-01	(8.77)	(2.45)	29.30	
2001-02	3015.00	850.00	28.19	
2001-02	(-14.71)	(-18.66)	20.19	
Total	15755.00	4614.00	29.29	

	Oı	ıtlay		
Year	State Plan	Share of LSGs (Grant-in-Aid)	%	
Xth Plan	4026.00	1342.00	33.33	
2002-03	(33.53)	(57.88)	33.33	
2003-04	4430.25	1317.00	29.73	
2003-04	(10.03)	(-1.86)	29.13	
2004-05	4800.00	1350.00	28.13	
2004-03	(8.35)	(2.51)	20.13	
2005-06	5369.81	1375.00	25.61	
2003-00	(11.85)	(1.85)	23.01	
2006-07	6680.62	1400.00	20.96	
2000-07	(24.42)	(1.82)	20.70	
Total	25306.68	6784.00	26.81	
Total	(60.62)	(47.03)	20.01	
IXth & Xth				
Plan Total	41061.68	11398.00	27.76	
XI the Plan	6950.00	1540.00	22.16	
2007-08	(4.03)	(10)	22.10	
2008-09	7700.47	1694.00	22.00	
2000-07	(10.80)	(10)	22.00	

Bracketed figure shows the percentage increase over the previous year Source: Budget documents

XIth Five Year Plan - Performance of LSGs during 2007-08

22.6 There was an increase of 10% during 2007-08 over the previous year in the allocation of Development Fund given to LSGs and the same proportion was maintained in the three categories viz General Sector, SCP and TSP also. But there is a marginal decrease in utilization of development funds compared to 2006-07. While the percentage of utilization during 2006-07 was 88, it is 80 in 2007-08. Among the rural local bodies, the performance of Block panchyats is better at 85% compared to 80% of Grama panchayats and 78% of District panchayats. In the urban local bodies, the Corporations performed well by spending 82% of the development funds. Category-wise analysis reveals that the Block panchayats achieved the highest expenditure in all the three categories among the rural local bodies and Corporations and Municipalities in General Sector & SCP respectively among urban boal bodies. There is decline in performance during 2007-08 (80%) in the case of Grama panchayats compared to 2006-07(88%). All LSGs especially urban local bodies did not attain the level of performance of General Sector in SCP & TSP during the last two Annual Plans. One of the major reasons for this is that the Urban Local Bodies faced shortage of eligible beneficiaries for the schemes benefiting SCs and STs. Moreover, the urban local bodies faced difficulties to identify land and purchase it as per the existing government norms and rules especially for the rehabilitation of the landless and houseless families on account of high land value. Due to the short fall of expenditure in the SCP/TSP sector in every Annual Plans the LSGs are forced to provide their General Sector funds as compensation to SCP/TSP resulting in paucity of funds in the General Sector even to make mandatory provisions. The detailed figures of category-wise outlay and expenditure for 2007-08 is given in Table 22.2 and that of 2006-07 in Appendix 22.1.

Table No. 22.2

Development Funds to LSGs - Category-wise Outlay & Expenditure during 2007-08

(Rs. in lakh)

		Genera	al			SCI	P	
Type of	Oı	Outlay		%	Ou	ıtlay	Expendi-	%
LSGs	Budgeted	Formulated	Expendi- ture	w.r.t Col.3 Budgeted Formulate		Formulated	ture	w.r.t Col.7
1	2	3	4	5	6	7	8	9
District Pts	12825.37	12144.36	9780.89	80.54	7841.98	10495.53	7860.26	74.89
Block Pts	12775.37	12533.04	10850.84	86.58	7841.98	9639.29	8006.82	83.06
Grama Pts	59616.71	59584.59	50003.79	83.92	23525.93	31740.50	22832.18	71.93
Corporations	7755.09	7885.48	7186.34	91.13	2363.52	4255.61	2759.91	64.85
Municipalities	9707.46	10056.39	8594.20	85.46	2756.59	3864.34	2757.42	71.36
Total	102680.00	102203.86	86416.06	84.55	44330.00	59995.27	44216.59	73.70

(Rs. in lakh)

		TSP	1		Total				
Type of	Out	lay		%	Ou	tlay		%	
LSGs	Budgeted	Formu- lated	Expendi- ture	w.r.t Col.11	Budgeted	Formulated	Expen- diture	w.r.t Col.15	
	10	11	12	13	14	15	16	17	
District Pts	1973.77	2721.59	2125.31	78.09	22641.12	25361.48	19766.46	77.94	
Block Pts	1315.85	1708.64	1447.01	84.69	21933.20	23880.97	20304.67	85.02	
Grama Pts	3289.64	4519.00	3437.40	76.07	86432.28	95844.09	76273.37	79.58	
Corporations	0.00	0.00	0.00	0.00	10118.61	12141.09	9946.25	81.92	
Municipalities	75.74	168.36	107.02	63.56	12539.79	14089.09	11458.64	81.33	
Total	6655.00	9117.59	7116.74	78.06	*153665.00	171316.72	137749.39	80.41	

^{*} Budgeted outlay excluding undistributed amount of Rs.335 lakh provided for giving incentives to best LSGs. The outlay under formulation includes the budgeted outlay, O.B and compensation in the case of SCP/TSP.

Source IKM

Sector-wise performance

22.7 The sector-wise analysis reveals that during 2007-08 the LSGs earmarked 20% of the total plan grant in productive sector, 50% in service sector, 12% in infrastructure sector and 18% for items excluded from sectoral ceilings. In 2006-07, these figures were 19%, 56%, 18% and 7% respectively. Though the allocation in productive sector during 2007-08 increased compared to 2006-07 the expenditure decreased to 74% from 81%. All tiers of LSGs except Corporations showed a decreasing trend in their spending in productive sector. On the other hand it can be noted that they have a tendency for allocating in service and infrastructure sectors than in

productive sector. The sector-wise allocation and expenditure during 2007-08 are given in Table 22.3 and that of 2006-07 is given in Appendix 22.2.

Table No. 22.3

Development Funds to LSGs – Sector- wise Allocation & Expenditure during 2007-08

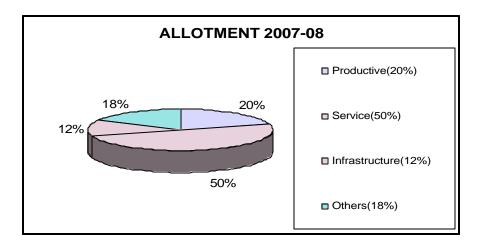
(Rs. in lakh)

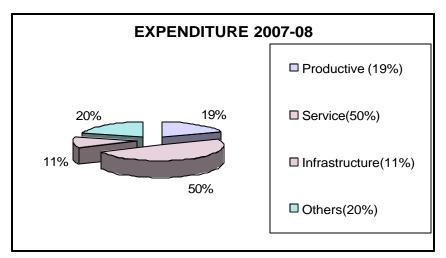
Type of	Productive				Service			Infrastructure		
LSGs	Allocati on	Expendi ture	%	Allocati on	Expendi ture	%	Allocati on	Expendi ture	%	
1	2	3	4	5	6	7	8	9	10	
District Pts	5527.11	4248.66	76.87	14900.62	11507.93	77.23	2637.68	1770.25	67.11	
Block Pts	4275.76	3142.01	73.48	9824.22	8115.57	82.61	2587.13	2106.50	81.42	
Grama Pts	22774.70	16855.87	74.01	46413.43	36447.47	78.53	10105.70	7721.43	76.41	
Corporations	774.36	542.18	70.02	7503.39	5958.30	79.41	1850.48	1440.75	77.86	
Municipalities	1233.97	914.71	74.13	7600.33	6012.04	79.10	3304.28	2736.66	82.82	
Total	34585.90	25703.43	74.32	86241.99	68041.31	78.90	20485.27	15775.59	77.01	

(Rs. In lakh)

Type of		Others		Total			
LSGs	Allocation	Expenditure	%	Allocation	Expenditure	%	
	11	12	13	14	15	16	
District Pts	2296.07	2239.62	97.54	25361.48	19766.46	77.94	
Block Pts	7193.86	6940.59	96.48	23880.97	20304.67	85.02	
Grama Pts	16550.26	15248.60	92.14	95844.09	76273.37	79.58	
Corporations	2012.86	2005.02	99.61	12141.09	9946.25	81.92	
Municipalities	1950.51	1795.23	92.04	14089.09	11458.64	81.33	
Total	30003.56	28229.06	94.09	171316.72	137749.39	80.41	

Source : IKM





Performance under Productive Sector

22.8 The increased allotment in productive sector including Agriculture and Allied Sectors, Soil and Water Conservation including Irrigation, Industries and Environment during 2007-08 compared to 2006-07 can be considered as a promising trend. During the period 2007-08, all LSGs except Block panchayats have given more weightage to the revival of Agriculture and Allied Sectors by earmarking 56% of the allotment in Productive Sector. This was only 54% in 2006-07. The increase in the allotment in Agriculture & allied Sectors in 2007-08 compared to 2006-07 is 35%. During 2007-8, about 22% of the fund earmarked to Agriculture and Allied Sector has been earmarked for the cultivation of paddy and 24% for other food crops. There is significant increase in the allocation of Grama panchayats in Agriculture and Allied Sectors showing 37% increase is a very encouraging aspect in the context of the severe problem of Food Security of the State. In the Industries Sector, all LSGs have given emphasis on the revival of Small Scale Industries. About 57% of total fund earmarked to Industries Sector during 2007-08 was earmarked for revival of Small Scale Industries. In utilizing the earmarked funds under productive sector, the performance of District panchayats was better by spending 77%. The highest achievement under Agriculture and Allied Sectors was that of District panchayats and Block panchayats with 82% and 84% respectively. The details of allocation and expenditure

during 2007-08 are given in Table 22.4 and that of 2006-07 in Appendix 22.3. The sub sectorwise details of 2007-08 are also given in Appendix 22.4

BOX No. 22.1 Adat - the Best Grama Panchayat of the State

The Swaraj Trophy of the State Government for the best Grama Panchayat during the year 2005-06 was awarded to Adat Grama Panchayat of Puzhackal Block in Trissur district. Some of the salient features of the administrative and developmental activities which enabled the grama panchayat to secure the award are detailed below.

- ?? Grama Sabhas were conducted thrice in every ward during the year
- ?? The financial achievement in the case of the Central Scheme funds was 96% and that of the State funds for development purpose 95.26%
- ?? During the period, the panchayat achieved hundred percent revenue collection.
- ?? Took lead role to propagate and implement the concept of Bio-village programme.
- ?? Ensured drinking water in every part of the panchayat including cole fields
- ?? Installed iron removal plant in water tanks for ensuring iron free drinking water
- ?? Attention was given for water conservation by constructing bunds and ponds
- ?? Won the First Health Security Panchayat Award
- ?? Measures taken to uplift traditional industry by implementing innovative schemes.
- ?? At the district level the panchayat was selected as the best second panchayat in 2001-02 and 2002-03 and achieved third place in 2003-04 and 2004-05.

Source: Panchayat Raj Magazine, March 2008

Table No. 22.4

Development Funds to LSGs - Productive Sector - Allocation & Expenditure during 2007-08

(Rs. In Lakh)

Development	District Pts			Block Pts			Grama Pts		
Sector	Allocation	Ехр.	%	Allocation	Ехр.	%	Allocation	Exp.	%
Agriculture and Allied sectors	2067.03	1693.66	81.94	1571.15	1317.15	83.83	14314.23	11203.81	78.27
Soil and water conservation, Irrigation	1781.21	1117.88	62.76	1864.59	1278.96	68.59	4460.89	2714.23	60.85
Industries	1640.19	1423.80	86.81	814.92	531.35	65.20	3898.86	2871.52	73.65
Environment	38.68	13.32	34.41	25.10	14.55	57.97	100.72	66.31	65.84
Total	5527.11	4248.66	76.87	4275.76	3142.01	73.48	22774.70	16855.87	74.01

Development Sector	Cor	porations		Mun	icipalities				
	Allocation	Exp.	%	Allocation	Ехр.	%	Allocation	Ехр.	%
Agriculture and Allied sectors	482.30	354.80	73.56	779.05	600.68	77.10	19213.76	15170.10	78.95
Soil and water conservation, Irrigation	103.80	50.30	48.46	172.23	110.03	63.89	8382.72	5271.40	62.88
Industries	140.29	90.93	64.82	275.98	197.83	71.68	6770.24	5115.44	75.56
Environment	47.97	46.15	96.21	6.71	6.17	91.95	219.18	146.49	66.84
Total	774.36	542.18	70.02	1233.97	914.71	74.13	34585.90	25703.43	74.32

Source: IKM

Performance under Service Sector

22.9 Under this sector, all the LSGs have given more weightage for taking projects under Social Welfare by earmarking 50% of their total Development Fund during 2007-08, showing an increase of 31% than in 2006-07. The other areas like Education & Allied Services, Health, Women Development there has seen slight decrease in allocation and expenditure during 2007-08 compared to 2006-07 showing 18% decrease in allocation and 23% in expenditure. While the District panchayats and Municipalities gave second preference to Education & Allied Services, the Block panchayats, Corporations and Grama panchayats gave it to Health & Allied Services. The Grama panchayats showed fairly good performance during 2007-08 in Pre-primary Education and Primary Education with 87% achievement. In the health and allied services, the allocation under drinking water and sanitation is remarkably high earmarking 80% of funds to the total allocation made under this sector with an achievement of 75%. Under social welfare, both rural and urban local bodies gave attention for the implementation of housing scheme by earmarking 18% of the funds earmarked in social welfare with an achievement of 86%. For the development of SCs the LSGs earmarked 48% of funds under social welfare and achieved 71% expenditure. For STs this percentage are 9% and 76% respectively. Regarding overall performance under service sector, the Block panchayats attained remarkably high expenditure with 83% of achievement. Among the development sectors under service sector, high expenditure is observed in the case of education and allied services showing 89% of achievement. The percentage of Grama panchayats in this category is high among all tiers of LSGs with 91%. The allocation and expenditure of service sector for 2007-08 is given in Table 22.5 and for 2006-07 is given in Appendix 22.5. The sub sector-wise details of 2007-08 are also given in Appendix 22.6.

Table No. 22.5

Development Funds to LSGs - Service Sector - Allocation & Expenditure during 2007-08

(Rs. in lakh)

	ъ	*-4*-4 D4		Block Pts				Grama Pts			
Development Sector	District Pts Allocation Exp. %			Allocation Exp. %			0/2	Allocation Exp. %			
Education, Culture, Arts, Youth Welfare & Sports	2671.37	2330.64	87.25	437		335.73	76.80	3868.41	3525.84	91.14	
Health & Allied Services	2378.00	1720.53	72.35	1546	5.14	1173.76	75.92	4547.95	3401.56	74.79	
Social Welfare	9439.77	7201.20	76.29	7091	.50	6061.12	85.47	34802.86	26986.22	77.54	
Women & Children Development	294.75	180.86	61.36	379	.89	249.08	65.57	1767.61	1340.02	75.81	
Labour & Labour Welfare	33.67	24.76	73.54	31	.27	25.14	80.40	213.76	173.96	81.38	
General Economic Services	83.06	49.94	60.13	338	3.26	270.74	80.04	1212.84	1019.87	84.09	
Total	14900.62	11507.93	77.23	9824	.22	8115.57	82.61	46413.43	36447.47	78.53	
Development Sector	Со	Municipalities				Total					
20 (Cropinon Sector	Allocation	Exp.	%	Allocation	Exp		%	Allocation	Exp.	%	
Education, Culture, Arts, Youth Welfare & Sports	810.93	731.28	90.18	855.39		741.91	86.73	8643.26	7665.40	88.7	
Health & Allied Services	931.37	880.19	94.50	830.66	(678.52	81.68	10234.12	7854.56	76.7	
Social Welfare	5206.80	3813.20	73.24	5040.63	38	825.69	75.90	61581.59	47887.46	77.8	
Women Development and Children	331.59	321.35	96.91	316.22	2	246.47	77.94	3090.06	2337.78	75.7	
Labour & Labour Welfare	3.95	3.88	98.23	7.61		5.48	72.01	290.26	233.22	80.3	
General Economic Services	218.75	208.40	95.27	549.82	4	513.97	93.48	2402.70	2062.89	85.9	
Total	7503.39	5958.30	79.41	7600.33	60	012.04	79.10	86241.99	68041.31	78.9	

Source: IKM

Performance under Infrastructure Sector

22.10. During the financial year 2007-08, the LSGs earmarked 12% of their total available development funds in infrastructure sector and the corresponding expenditure is 77%. These figures in 2006-07 were 18.% and 92% respectively. This shows that there is a declining trend in the tendency of LSGs to earmark more funds in the infrastructure sector. The table below reveals that during 2007-08, all type of LSGs have given more priority to strengthen their transportation facilities especially to road. About 84% of funds in Infrastructure Sector has been utilized for

arranging transportation facilities in the LSGs. Out of this, the allocation under road is 73%. Regarding expenditure in the Infrastructure Sector, the Municipalities achieved best with 83%. The detailed figures on allotment and expenditure for 2007-08 is given in Table 22.6 and for 2006-07 is given Appendix 22.7. The sub sector-wise details of 2007-08 are also given in Appendix 22.8.

 $Table\ No.\ 22.6$ Development Funds to LSGs - Infrastructure Sector - Allocation & Expenditure during 2007 - 08

(Rs. in lakh)

Development Sector	Di	istrict Pts		Bl	ock Pts		Gı	rama Pts		
	Allocation	Exp.	%	Allocation	Ехр.	%	Allocation	Exp.	%	
Energy	36.33	22.71	62.51	48.40	41.74	86.24	579.94	520.34	89.72	
Transportation	2470.02	1636.72	66.26	2347.56	1927.45	82.10	8905.78	6728.89	75.56	
Public Building	131.33	110.82	84.38	191.17	137.31	71.83	619.98	472.20	76.16	
Total	2637.68	1770.25	67.11	2587.13	2106.50	81.42	10105.70	7721.43	76.41	
Development	Со	rporations		Mur	nicipalities	1	Total			
Sector	Allocation	Exp.	%	Allocation	Ехр.	%	Allocation	Exp.	%	
Energy	571.98	534.08	93.37	298.13	250.99	84.19	1534.78	1369.86	89.3	
Transportation	1094.12	762.14	69.66	2465.36	2005.87	81.36	17282.84	13061.07	75.6	
Public Building	184.38	144.53	78.39	540.79	479.80	88.72	1667.65	1344.66	80.6	
Total	1850.48	1440.75	77.86	3304.28	2736.66	82.82	20485.27	15775.59	77	

Source IKM

Performance under Specific Sector Plans & Projects

22.11 For Women Component Plan and Plan for Disadvantaged Group (i.e. Aged, Children and Disabled) the LSGs have earmarked 13% and 9% respectively to their total available Development Fund. The ceiling prescribed by the government for the above two categories were, 10% for Women Component Plan and 5% for Disadvantaged Groups. During 2007-08, the LSGs adhered the above ceiling. The ceiling of 10% to the total outlay of plan grant for Slum Development in the case of urban local bodies was also maintained. The table below reveals that both allocation and expenditure pattern of all tiers of LSGs under Specific Sector Plans had achieved a satisfactory level especially on implementing the Antipoverty Sub Plan, Nutrition Programme and Asraya. The details of allotment and expenditure of Specific Sector Plans during 2007-08 is given Table 22.7.

Table No. 22.7

Development Funds to LSGs-Specific Sector Plans & Projects-Allocation & Expenditure during 2007-08

(Rs. in lakh)

Sectors	I	District Pts		I	Block Pts		Grama Pts				
	Allocation	Exp.	%	Allocation	Exp.	%	Allocation	Exp.	%		
Women Component Plan	3085.37	2418.50	78.39	4761.35	4209.40	88.41	11937.96	9144.52	76.60		
Aged	473.38	282.70	59.72	651.19	523.76	80.43	2569.33	2142.74	83.40		
Children	352.22	220.26	62.53	1560.78	1453.61	93.13	4535.03	4203.98	92.70		
Disabled	440.54	373.04	84.68	322.81	268.82	83.27	1771.63	1374.68	77.59		
Anti Poverty Sub Plan	7922.75	6328.08	79.87	9652.97	8580.92	88.89	32288.92	25488.21	78.94		
Ashraya	435.62	418.68	96.11	160.50	146.70	91.40	2490.31	2033.33	81.65		
Solid Waste Management	39.71	0.00	0.00	93.81	43.47	46.34	1214.08	101.74	47.52		
Slum Development	0.00	0.00	0.00	0.00	0.00	0.00	265.20	199.13	75.09		
Akshaya	33.63	33.63	100.00	124.79	124.55	99.81	929.75	911.01	97.98		
Nutrition Programme	0.00	0.00	0.00	2932.93	2914.06	99.36	8084.68	8017.13	99.16		
Total	12783.22	10074.89	78.81	20261.13	18265.29	90.15	66086.89	53616.47	82.38		

Sectors	Corporations			Mu	nicipalities		Total			
	Allocation	Exp.	%	Allocation	Exp.	%	Allocation	Exp.	%	
Women Component Plan	904.99	711.79	78.65	1400.04	1019.03	72.79	22089.71	17503.24	79.24	
Aged	27.92	21.22	76.00	291.51	254.20	87.20	4013.33	3224.62	80.35	
Children	732.29	718.89	98.17	787.36	737.36	93.65	7967.68	7334.10	92.05	
Disabled	180.30	172.23	95.52	212.87	177.82	83.53	2928.15	2366.59	80.82	
Anti Poverty Sub Plan	3551.78	2483.28	69.92	2621.30	1952.21	36.33	56037.68	43832.70	78.22	
Ashraya	308.76	304.16	98.51	270.57	225.52	83.35	3665.76	3128.39	85.34	
Solid Waste Management	886.94	736.25	83.01	484.65	239.38	49.39	1719.19	1120.84	65.2	
Slum Development	1388.63	1113.36	8.16	766.22	645.81	0.00	2420.05	958.30	39.6	
Akshaya	62.00	61.29	98.85	131.39	130.81	99.56	1281.56	1261.29	98.42	
Nutrition Programme	523.88	520.39	99.33	852.43	833.81	97.82	12393.92	12285.39	99.12	
Total	8567.49	6842.86	68.20	7818.34	5215.95	66.71	114517.03	93015.46	81.22	

Source IKM

Box 22.2 Kerala Nearing to "Nirmal State Puraskar"

In Kerala, 600 Grama Panchayats, 84 Block Panchayats and 4 District Panchayats won the "Nirmal Puraskar" award for 2008. This award has been instituted by GOI on 2005 to honour and facilitate those LSGs which have attained remarkable achievements on Total Sanitation. 826 Grama Panchayats, 90 Block Panchayats and 4 District Panchayats in Kerala already received the Puraskar. A reward of Rs.5 lakh would be given to the selected Nirmal Grama Panchayats and Rs.20 lakh & Rs.50 lakh respectively to each Block and District Panchayats. All the LSGs which won the Nirmal Puraskar so far earned the State an amount of Rs.6130 lakh. The criteria evolved for awarding this Puraskar to grama panchayat are as follows;

- ?? All the houses, schools and Anganwadies in the panchayat area shall be provided with toilet facilities.
- ?? Hygienic and clean environment shall be maintained in the panchayat area
- ?? To make open spaces free from human excreta

Consequent to the winning of the Puraskar by all the Grama Panchayats in a Block/District/State the respective Block/District/State would also be honored by this award. In 2008, the State of Sikkim was honored by the first Nirmal State Puraskar in India. The first recipient of this award in Kerala was Peelicode grama panchayat of Kasargode district in 2005. The state will get the Nirmal State Puraskar as and when the remaining 173 grama panchayats are honored by Nirmal Puraskar.

Box 22.3 State Level Resource Group

During the XIth Five Year Plan, Government have set up a 'Resource Group' at the state level under LSGD to provide Organisational Support to the smooth and efficient implementation of People's Planning. This group consist of officials from Government, Public Sector/Autonomous agencies under government representing different development areas as well as cross-cutting areas like gender, poverty etc. Retired senior grade officers from different development areas are also included in this group. The State Level Co-ordination of the 'People's Planning' is the main function of the resource group. The review and monitoring of the planning process is another function. It also functions as the Secretariat of the State Level Technical Advisory Group which is responsible for the vetting of projects of District panchayats and Corporations at the state level. The expenses towards its functioning is met from the plan fund provided through KILA.

Box No.22.4

Cheriyanad "the first Law literate & Petition less Panchayat" of the Nation

The Cheriyand Grama Panchayat in Alappuzha district has been declared as "the first Law literate and Petition less Panchayat." of the Nation. The concept of "Village Court" was introduced in the Panchayat in 1988 by constituting a sub committee in the form of a court consisting of the President, Vice President of the panchayat and concerned ward member in the sub committee. The sub committee settled petitions received in the presence of the petitioners on a time bound manner. In keeping view with the previous experiences, the prestigious idea of "Village Court" was established in the panchayat on 2000. The organizational structure of the Village Court is as follows. The panchayat President acts as Chairman of the village court. Vice President, Welfare Standing Committee Chair Person, ward member concerned and five other social workers are acting as members of the court. The grama panchayat secretary shall be the exofficio secretary of the village court.

Functioning of Village Court:

The court will be convened twice in a month. The petitioner should first of all register the petition at the concerned section of the panchayat. By fixing the date in advance, notices will be sent to the petitioners by post. Counseling methods are adopted if necessary for the redressel of petitions. After hearing, the court declared the decision and settle the petitions. The decision taken by the court should be minuted and both parties should sign in the minute book. There is no appeal for such settlement. The village court thus functioning in the panchayat could settle 676 cases through pre-litigation procedures. The Taluk Legal Service Authority was able to settle 725 cases through adalat in liaison with the Panchayat Remmyatha Committee and the Village Court.

Law Literacy:

To introduce law literacy in the panchayat, steps were taken to distribute legal books to all families of the panchayat in co-operation with Legal Services Authority, Bar Association and Grama panchayat. Awareness classes and seminars were conducted to the public in various locations with the help of Advocates, NSS volunteers and NGOs. They also conducted examination and valued the paper and the marks was minuted. Besides, on every saturday, Legal Aid Clinics were organized and the services of an advocate were arranged to give legal advice to the public. The clinic helped to settle the petitions through adalat conducted by legal services authority.

CHAPTER 23

SCIENTIFIC SERVICES AND RESEARCH

The Kerala State Council for Science, Technology and Environment (KSCSTE) was constituted as an autonomous body of the Govt. of Kerala by restructuring the erstwhile State Committee on Science, Technology and Environment. The Council became administratively and financially operational since April 2003. The primary objective of the Council is to implement Science and Technology Programmes to enhance the socioeconomic development as well as quality of life and environment of the State. The setting up of the State Council for Science, Technology and Environment is a significant pro-active step taken by the Government to revamp and streamline the science and technology programmes to make them more responsive to the development needs of the State, in the context of emerging new world order.

23.2 There are seven Research & Development Centres functioning under the umbrella of the Council viz., Centre for Earth Science Studies (CESS), Centre for Water Resource Management and Development (CWRDM), Kerala Forest Research Institute (KFRI), National Transportation Planning and Research Centre (NATPAC), Tropical Botanic Garden and Research Institute (TBGRI), Kerala School of Mathematics (KSM) and Rajiv Gandhi Centre for Biotechnology (RGCB). The council also undertakes, co-ordinates and oversee many research programmes of the Headquarters.

1. Achievements of KSCSTE Headquarters

1.1 Science Research Scheme (SRS)

23.3 Science Research Scheme (SRS) is the flagship activity under the Science and Technology Promotion (STP) Programme of the Council. SRS aims towards promotion of Research & Development activities in the state both in fundamental and applied research. Under the scheme, research projects in emerging areas of science and engineering are supported by providing financial support for implementation. Research projects are supported in university departments, colleges and Research & Development institutions. An expert committee called 'Research Council for Science and Engineering' (RCSE) has been constituted to review and recommend projects for funding. The maximum grant for each project has been raised to Rs. 15 lakh for three years, with the host institution eligible for overhead expenses up to 10 % of the total project cost

1.2 Selective Augmentation of Research & Development Activities (SARD)

23.4 Selective Augmentation of Research and Development Activities (SARD) is a scheme initiated by the Council with a view to strengthen science and technology infrastructure primarily in the university departments, colleges and R&D institutions. SARD envisages modernization of laboratories by way of acquisition of essential equipments and upgradation of existing facilities for teaching as well as R&D activities. An expert committee has been constituted for the purpose of evaluation and review of projects under SARD. The scheme is some what akin to the FIST programme of the DST, Government of India. During 2007-08, 13 SARD projects were sanctioned - 2 new projects and 11 ongoing projects and funds was released.

1.3 Engineering & Technology Programmes (ETP)

23.5 Engineering and Technology Programme is envisaged to encourage talents in the field of engineering and technology in Kerala. It mainly aims to promote highly qualitative research projects in the emerging areas of engineering and technology. Project proposals received from the faculty of Engineering Colleges, Research Institutes/Centres etc will be evaluated by experts in the respective field. Based on evaluation reports and as per the recommendations of Research Council for Engineering and Technology Programmes (RCETP) financial grant upto Rs. 10 lakhs was sanctioned for a project. The maximum duration of the project shall be three years. During the period 33 proposals were received and after evaluation financial grant was released to eight projects.

1.4 Rural Technology Programme (RTP)

- 23.6 With a view to promote grass root level innovations and to provide a helping hand to grass root innovators so as to perfect the technology and to translate their innovations to enterprise level, Rural Technology Programmes (RTP) was initiated. The programme aims in particular to promote and support the traditional rural technologies and upgrade them, so that it could be perfected for wider applications and employment generations.
- 23.7 The major achievements under this programme are given below:
 - ?? 15 proposals were evaluated, 10 were provisionally approved and financial grant was released to 5 project proposals
 - ?? 20 new proposals were received and after evaluation, the Technical Committee recommended to support 8 proposals.

1.5 Environment and Ecology Programmes (E&E)

- 23.8 The Council has identified five new R & D projects and financial assistance was provided. These projects are
 - ?? Soil Quality Monitoring in Vilappilsala Panchayat of Thiruvananthapuram District.
 - ?? Soil Monitoring of Cheruvannur Nallalam Panchayat Kozhikode District.
 - ?? Impact of Industrial activities on soil and water qualities in Koratty Panchayat area.
 - ?? Environmental Management Plan for Alappuzha Sherthalai Canal and Kanjikuzhy Gramapanchayat.
 - ?? Water quality monitoring programme for Kerala State –II Phase.

1.6 Science Popularization Programmes (SPP)

- 23.9 The Scheme is launched with the objective of providing technical and financial support for the implementation of projects/ programmes aimed at popularizing the principles and practices of Science and Technology.
- 23.10 The activities under Science Popularization are as follows:
 - ?? National Science Day 2008
 - ?? National Technology Day -2007
 - ?? Ozone Day -2007
 - ?? World Environment Day 2007
 - ?? World Wetland Day
 - ?? Science Literature Award
 - ?? Scheme for Promoting S&T Seminar/Symposia/Workshop
 - ?? Science Popularization Programme

1.7 Patent Information Centre - Kerala (PIC)

23.11 KSCSTE has established Patent Information Centre Kerala (PIC) functioning as the Satellite Centre for Patent Facilitating Centre for Technology Information Forecasting and Assessment Council (TIFAC), Government of India. It aims to promote the intellectual property output and to protect the traditional knowledge output of the State. The major objectives of PIC are to generate awareness among public on Intellectual Property Rights (IPR) through seminar, workshop, exhibition, etc, to facilitate patent database search and access to patent related documents and to offer technical, legal and financial assistance to institutions for filling patent.

The following are the major activities done under this programme.

- ?? Organized 24 Workshops/Seminars/Exhibition on IPR, in different parts of the State.
- ?? Received 35 applications for patent filing. After verification, five out of these were sent to Patent Facilitating Centre, TIFAC for further procedures.
- ?? Printed and Published 10000 copies of PIC Leaflets and also modified and reprinted 5000 copies of PIC Brochures.
- ?? Organized an Interactive Phone in programme on IPR through All India Radio.
- ?? Launch of the Website for PIC- Kerala and Published the quarterly KSCSTE PIC Bulletin.
- ?? Organized a two day National Seminar on IPR in association with Patent Office, Chennai & NIIPM, Nagpur.
- ?? Organized a two day National Seminar on Grassroot Innovators and IPR in association with Patent Office, Chennai & NIIPM, Nagpur.
- ?? Organized workshop on Geographical Indications at RARS, Ambalavayal, Wayanad, targeting the farmers, tribals and grassroot innovators in association with Kerala Agricultural University.

1.8 Sastraposhini

- 23.12 Sastraposhini is a scheme launched by the Council to establish model science laboratories in the selected government high schools in the states. By this programmes model laboratories in Physics, Chemistry and Biology were established in 108 Govt. High Schools in the state. This include establishment of Teachers Training Centers one in each Revenue District. For establishing the model science laboratories, Council had supplied 117 items of consumables, 112 items of equipments, 73 items of perishable and 87 biological items.
- 23.13 Sastraposhini laboratory manuals were prepared by experienced teachers in Physics, Chemistry and Biology and distributed to all Sastraposhini Schools. During this year Council has selected six more Government High Schools in the State for establishing Sastraposhini Model Science laboratories.

1.9 KSCSTE Research Fellowship

23.14 KSCSTE had started Research Fellowship Programme in the year 2002, to promote research work leading to Ph.D. among the rank holders in M.Sc/ M.Tech courses from Universities in Kerala. This programme was initiated with four fellowships and a total of 25 fellowships were offered in eleven disciplines. On account of the increased response from the rank holders towards fellowship programme and since many of the rank holders cannot avail the scheme, the KSCSTE Research Fellowship Committee has recommended to increase the number of fellowships in each discipline. During the year 2007-08, 47 fellowships were sanctioned.

1.10 National Green Corps (NGC)

23.15 National Green Corps (NGC) populary known as 'A Programme of Eco-clubs', is an Environment Educational Programme initiated nation-wide by the Ministry of Environment and Forest in the year 2001-02, is a unique programme targeted on school students of the country. Three thousand five hundred schools are covered under this programme in the state during 2007-08. As part of the expansion of the programme, additional 1400 schools were given funds in the state. For the participation of NGC students in 20th Kerala Science Congress 2008 organized by Kerala State Council for Science Technology and Environment (KSCSTE) talent search examination was conducted in all districts. 190 students representing 38 educational districts participated in the Kerala Science Congress.

1.11 Environment Information System (ENVIS) Centre

23.16 Two Newsletters and a hand book on waterborne diseases were published. Total of 973 queries were received from the public regarding Coastal Regulation Zone notification and related issues and also on other environmental information pertaining to the State. ENVIS center developed and maintains a website on state of the Environment and related issues of Kerala State. Environment related data on forest resources, land use, agriculture, climate and demography were uploaded to the Indian State-Level Basic Environmental Information Database (ISBEID) system of the Ministry of Environment and Forest, Government of India.

1.12 State of Environment Report

23.17 Published four volumes of State of Environment Report.

Volume 1. Land Environment, Wetlands of Kerala and

Environmental Health

Volume 2. Natural Hazards

Volume 3. Corporate Environment Management

Volume 4. Environmental Indicators (Biodiversity, Water and Coastal and Marine)

1.13 Kerala Science Congress (KSC)

23.18 Kerala Science Congress (KSC) is conducted by KSCSTE every year for revitalization of R & D in the State and shifting the focus towards solving the developmental problems of Kerala. The Science Congress encourages effective participation of fresh talents and inculcates scientific temper for advancement of scientific research in the State. Scientists from various parts of the country, students and teachers from university and members of the National Green Corps attended the Science Congress. The Kerala Science Congress had sessions in which selected general papers, contest papers, posters in the identified subject areas were presented. Young Scientist Awards were presented to the winners of the contest paper. The presentations by Children Scientist was another attraction of the congress. Young budding children got an opportunity to meet, present their findings and interacted with senior scientists.

2. Research and Development Institutions

2.1 Centre for Earth Science Studies(CESS)

23.19 CESS has been instituted as a Centre of Excellence in Earth Sciences by the Government of Kerala in 1978 and amalgamated under Kerala State Council for Science, Technology and Environment with the objective to promote modern scientific and technological research and development studies in the domain of Earth Sciences. CESS pursues multidisciplinary approach in problems related to land, sea and atmosphere, Research

and Development activities in basic and applied fields, user training and academic programmes, consultancy, science popularization etc. CESS is mandated to study earth sciences for the improved knowledge of earth's processes and for the utilization of earth resources in a sustainable manner and for the mitigation of natural hazards. CESS is striving to provide necessary balancing mechanisms between developmental activities, resource utilization and environmental conservation. Major programmes / projects undertaken by CESS are in the following area.

- ?? Natural Hazards Management
- ?? Natural Resources Management
- ?? Environmental Management
- ?? Coastal Zone Management
- ?? Earth System Studies
- 23.20 CESS has been investigating the natural hazards such as earthquakes,landslides, coastal erosion and lightning. CESS also looks into the annual floods, droughts and the infrequent thunder storms. One of the major programmes in CESS was to understand the pattern of recurrence of earthquakes. CESS has conducted some of the pioneering works on paleoseismology, results of which now provide a lead for similar studies in other regions of the country. A probabilistic hazard map of Kochi using response measurements was prepared. The broadband seismic observatory at Peechi continued its operations.
- 23.21 CESS conducted investigations on landslide occurance in Palakkad, Wayanad and Kozhikode Districts. The Tsunami inundation mapping of entire Kerala and Kolachal coast was completed. Bathymetric Servey of Kollam- Harippad coast and topographic survey of Alappad-Arattupuzha for simulation of the inundation were taken up and the data was used in the models of the tsunami warning system. Six general maps for the natural hazard zoning of the state were prepared. Under coastal zone management a shoreline management plan for Munambam-Kayamkulam coast was completed.
- 23.22 Natural resources management studies continued as one of the thrust areas. Natural resources evaluation at the level of natural regions like river basins, coastal zone, hill tracts and administrative units like districts, blocks and panchayats, studies on population resource relationships, resource potential and infrastructure, spatial pattern of development, etc were taken up. City base maps for the five municipal corporations of Kerala for KSUDP were completed. Environmental resources data for the whole Kerala using satellite data of spatial and non spatial data in conformity with NSDI frame work was taken up.
- 23.23 CESS provided consultancy services to various public and private undertakings on environmental impact assessment, preparation of environmental management plans, risk analysis and preparation of emergency preparedness plan. Mining process in rivers was examined for minimizing the negative environmental effects of sand extraction. CESS also took active role in the preparation of the state of the environment report.
- 23.24 Under the geodynamic study programmes, the Indo-French project 'Paleointencity and reunion/marion plume activity in India', Petrological studies related to gramilite terrain and laterilization process were continued.

2.2 Centre for Water Resources Development and Management (CWRDM)

23.25 Centre for Water Resources Development and Management, functions with eight divisions and six units/sections and four sub centres carrying out research, development and extension activities on various aspects of water resources, development and management. The major programmes of CWRDM are mainly concerned with Surface Water Hydrology,

Ground Water Hydrology, Land and Water Management and Environment and Water Quality Management.

The major achievements during the period are:

- ?? Studies were undertaken to understand the interconnection between surface and groundwater as well as between aquifers in Chaliyar River Basin using stable isotope technique.
- ?? A project intended to find out the level of tritium, oxygen-18 and deuterium present in rainwater received during different rainy seasons and to study the distribution of them in surface and groundwater sources was attempted.
- ?? Hydrological studies of Kadalundi wetland in relation to the drainage basis was carried out. Bathymetric survey of the Kadalundi Wetland has been completed and maps prepared.
- ?? Prepared Water Resource Development Plan for river Basins of Kerala
- ?? Updating the Water Atlas of Kerala was done to bring out a State of the Art publication in book form, "Water Atlas of Kerala"
- ?? Bathymetric survey of Vembanad Wetland System was done.
- ?? Studies were carried out on the river basin surface erosion using satellite data .
- ?? Application of Isotopes in coastal processes related studies were done to understand the process of movements along the coastal waters and their source.
- ?? Studies were carried out to determine geochemical characteristics of groundwater and their interrelationships in the multi aquifer system along Alappuzha coast through isotope techniques.

CWRDM also conducted Seminars/ Workshops/ Training during this period.

- ?? Workshop on Watershed Development Programme Initiatives for Peringolam Watershed for the stakeholders.
- ?? Training course on Irrigation Water Management was conducted at CWRDM, Kozhikode.
- ?? Training course on Environment and Water Management for the Degree students of Maharaja's College, Ernakulam.
- ?? Training on 'Isotope tracer techniques for water resources development and
- ?? Training courses conducted under Water Resources Management Training Programme (WRMTP) are Operation and Maintenance of Irrigation Systems, Water Quality Monitoring Techniques, Remote Snsing and GIS in Water Resources Management and Water Resources Management Legislation and Policy.

During the period under report the centre has 4 consultancy projects. Also, the centre has published 12 Research Papers and 9 Reports.

2. 3 Kerala Forest Research Institute (KFRI)

23.26 The Kerala Forest Research Institute was established under the Science and Technology Policy adopted by the Government of Kerala as an autonomous institution to undertake research in areas like forestry, biodiversity etc. Kerala Forest Research Institute (KFRI), one among the Research & Development centers of the Kerala State Council for Science and Technology (KSCSTE), is a premier institution concentrating on forestry and environment related issues of the State.

The following are the research initiatives and achievements of KFRI during the period.

- ?? Livelihood improvement of rural people
- ?? Studies on important forestry tree species.
- ?? Model Watershed
- ?? Ecology and linkages of a Sacred Grove
- ?? Economic potential of ecotourism
- ?? Livelihood conditions of the bamboo dependents.
- ?? Identification of sandal from its adulterant
- ?? Teak Planner
- ?? Moisture content of bamboo
- ?? Modelling the growth of teak
- ?? Population estimation of wild elephants
- ?? Indicators on forests and biodiversity
- ?? Wild Macrofungal biodiversity
- ?? Rattan conservation
- ?? Biodiversity of the Myristica swamps
- ?? An arboretum and palmetum
- ?? Herbarium
- ?? Stream flow in relation to plantations and forests
- ?? Protection of bamboo from insect borers
- ?? Handbook of Lesser Known Timbers
- ?? DNA bar coding of rosewood
- ?? Propagation of medicinal plants
- ?? Invent NTFP, a software for processing NTFP data
- ?? Marketing of Non-Wood Forest Products
- ?? Climate change and related issues
- ?? Wildlife wealth of the Nelliampathy
- ?? Ecology and behaviour of forest owls
- ?? Studies on rare and threatened trees

2.4 National Transportation Planning and Research Centre(NATPAC)

- 23.27 NATPAC undertakes Research & Development, Project Planning and Extension activities in the area of Traffic and Transportation. It has the unique distinction of working in multi-modal system of transportation covering road, rail, water, seaport and airport. It offers technical advice and implementable solutions to traffic and transportation problems of different regions. It has a Regional Centre at Kozhikode, which undertakes R&D programmes and extension activities in the northern parts of Kerala.
- 23.28 Broad area of activities of NATPAC include: Rural and Regional Transportation, Transportation Planning and Road Safety, Highway Engineering, Traffic Engineering and Management, Inland Water Transport, Project Planning, Training and Extension programmes. 15 plan programmes and 7 sponsored projects have been completed.

Some of the important projects undertaken by NATPAC during the period are:

Road Safety

- ?? Safe Road to School A Proactive Programme for School Children
- ?? Safe community programme for selected panchayat in Kerala
- ?? Strategies for Safe Transportation of Dangerous Goods A Status Report
- ?? Road safety Cell

Transport Infrastructure Planning

- ?? Road Development Programmes for Hilly regions of Kerala a case study of Wayanad district
- ?? Accident Abatement measures for urban areas in Kerala case study of Alappuzha district
- ?? Road safety auditing and related community road safety programmes in Northern Kerala
- ?? Traffic Engineering and Management study for selected towns in Kerala State

New materials for Road construction

- ?? Pavement Maintenance Management System for selected roads in Kerala-Phase IV
- ?? Use of waste plastics for road construction in Kerala and demonstration Project.
- ?? Study on overloading of trucks and its effects on pavement deterioration
- ?? Resource mapping of road construction materials in Kerala A case study of Kollom District

Public Transportation System

?? Public Transportation – Operational efficiency of KSRTC moffusil bus services – a case study of Kollam district

Inland Water Transport System

- ?? Study on Navigability of Feeder Canals in Kerala Improvement of canals in Kochi Region.
- ?? Effects of Speedboat movement on Bank Erosion in Canals A case study of Kuttanadu Region.

2.5. Tropical Botanic Garden and Research Institute (TBGRI)

23.29 Tropical Botanic Garden and Research Institute (TBGRI) was established in 1979 with the objective of establishing a Conservatory Botanic Garden of tropical plant resources in general and of the country and the Kerala state in particular. It also undertakes research programmes for the sustainable utilization of bio-resources. TBGRI is the only organization in India, which maintains a 300 acre conservatory garden for the wild tropical plant genetic resources of the country, besides a well integrated multidisciplinary R& D system dealing with conservation, management and sustainable utilization of tropical plant resources. It also functions as the National Gene Bank for medicinal and aromatic plants of peninsular India.

23.30 The major achievements of TBGRI during the period are given below:-

Research and Development

- ?? Database on 220 plant species of the Western Ghats developed and a manuscript in Ethnobotany was revised.
- ?? More than 1200 collections of lower Fungi organized, common fungal pathogens of 22 Vanilla Plantations were collected from different parts of Kerala.
- ?? Prevalence of infections was found maximum in Wayanad district, a bio-control agent is being developed.
- ?? About 140 Macro-lichens and 100 micro lichens were collected, 37 species were found to be new records.
- ?? Pollination and seed cryobanking of two horticultural important orchids were developed.
- ?? Insect repellent property of certain plants of the Andaman islands was analyzed

- and development of Bee and Mosquito repellent formulation is in progress.
- ?? Potential molecules having flavorings, fragrant and anti-oxidant properties isolated from selected plants.
- ?? The antidiabetic property of Pilea microphylla and the wound healing property of Glycosmis pentaphylla has been confirmed in animal models.
- ?? 1600 herbarium specimens were processed and 90 species of plants were collected and taxonomically identified.
- ?? 932 collections were added to mushroom herbarium.

Panchayath and people participatory projects

- ?? Draft of the Children's Handbook on Medicinal and Food Plants prepared.
- ?? Herbs for all and health for all: awareness and training programmes completed in the Vithura Gramapanchayath.
- ?? Remote village collections of banana germplasm organized through people support.
- ?? Multiplied high value medicinal plants, distributed to beneficiaries and imparted training in nursery practices and cultivation at Kanjikuzhy Panchayat, Alappuzha district.
- ?? A biodiversity awareness workshop organized for 30 delegates from Kollam Corporation; training on plant propogation imparted to 75 Plus Two students during National Technology day.
- ?? Three popular varieties of banana (Nenthran, Robusta, Grand Naine) and ornamentals multiplied and distributed .

2.6 Kerala School of Mathematics (KSM)

23.31 The Kerala School of Mathematics has been setup at Kozhikode as a joint venture of KSCSTE and National Board of Higher Mathematics (NBHM), under the Department of Atomic Energy, Government of India. The main objective of the institute is to promote Mathematical research in the country and particularly in Kerala. The School will be the meeting ground for Mathematicians from home and abroad with a core group specializing in selected areas. The main activities will be focusing on Research leading to doctoral and post doctoral degrees in Mathematics with advanced level thematic workshops. The first phase of the construction work was over. Hon'ble Chief Minister of Kerala inaugurated the KSM building at Kozhikode. The Academic programmes are expected to commence soon.

3. Kerala State Pollution Control Board

- 23.32 Kerala State Pollution Control Board was established in 1974 and is the statutory authority for planning, supervising and implementing a comprehensive programme for the prevention and control of pollution in the state of Kerala. The policy of the Board is to ensure sustainable development of the State through judicious implementation of the statutes which envisage control and minimize pollution from activities, industrial and otherwise, which are all earned to make our lives more comfortable. The objective of the Board is to strengthen all its offices and to bring all hospitals, industries and municipalities in Kerala under the concerned regime.
- 23.33 The main achievements of the Kerala State Pollution Control Board during the reporting period are as follows:
 - ?? Special thrust was given to modernize the head office and sub offices of the Board by purchasing computers, office equipments, laboratory equipments and consumables and purchase of books.

- ?? Investigation and survey of water and air quality apart from the regular monitoring was conducted
- ?? State Pollution Control Awards were distributed.
- ?? Conducted 12 two day residential camp with the theme "Nadin Suchithwam Veedukaliloode"
- ?? Strengthening the administrative frame work of the Board's Office and District Offices

4. Regional Cancer Centre, Thiruvananthapuram

- 23.34 Regional Cancer Centre, Thiruvananthapuram was established in the year 1981 as a tertiary referral centre for the diagnosis and treatment of cancer. RCC rated amongst the top three of the 26 Regional Cancer Centres in the Country. It is the only comprehensive, dedicated centre for diagnosis, treatment and control of cancer in Kerala. In average 32,000 new patients occur every year in the state and out of this more than one third comes to RCC for treatment. Patients from all over the state and from adjoining areas are referred to Regional Cancer Centre for treatment.
- 23.35 Eventhough RCC is located in the city of Thiruvananthapuram, it runs 5 peripheral early cancer detection centres in the rural areas of Thiruvananthapuram, Kollam, Pathanamthitta, Eranakulam and Palakkad districts. RCC, Thiruvananthapuram is a nodal centre for the implementation of the District Cancer Control Programme of Government of India in the District of Thiruvananthapuram, Kollam and Pathanamthitta.
- 23.36 Major Achievements of RCC during the period are given below.

New Services

- ?? Opened a Micro Biology Lab
- ?? MRI scanner has been installed

Academic Achievements

- ?? Diploma of the National Board Course in six disciplines- Radiation Oncology, Anesthesia, Pathology, Radio diagnosis, Surgical Oncology & Medical Oncology.
- ?? Courses in Cytopathology, Pathology, Cytotechnician Course & Nursing Assistant Training Course.

Community Oriented Programmes

- ?? Conducting District Cancer Control Programmes.
- ?? Started the study about the role of curcumin (Manjal) in preventing pre cancer of oral cavity from turning cancer.
- ?? Giving training to Ayurvedic and Homeopathic Doctors.
- ?? Giving training on Colposcopy to Gynaec .

APPENDIX TABLES

LIST OF APPENDIX TABLES

Appendix No.	Title	Page No.						
	Chapter - 3 Income and Population							
3.1	Gross Domestic Product at Factor Cost - All India 1999-2000 to 2007-08	<u>S 1</u>						
3.2	Net Domestic Product at Factor Cost - Ali India 1999-2000 to 2007-08	5 1						
3.3	Gross National Product at Factor - Ali India	5 2						
3.4	Net National Product at Factor Cost - Ali India	\$2						
3.5	Gross State Domestic Product (Kerala) at Factor Cost by Industry of Origin from 2000-2001to 2007-08 (at Current Prices)							
3.6	Gross State Domestic Product (Kerala) at Factor Cost by Industry of Origin for the years from 2000-2001 to 2007-08(at Constant Prices)							
3.7	Net State Domestic Product (Keraia) at Factor Cost by Industry of Origin for the years from 2000-2001 to 2007-08 (at Current Prices)	5 5						
3.8	Net Domestic Product (Kerala) at Factor Cost by Industry of Origin for the years from 2000-2001 to 2007-08 (at Constant Prices)	S 6						
3.9	District-wise Distribution of Gross State Domestic Product and Per capita Income of Kerala at Factor Cost by Industry of Origin for the year 2005-06 (at Current Prices)	S 7						
3.10	District-wise Distribution of Gross State Domestic Product and Per capita Income of Kerala at Factor Cost by Industry of Origin for the year 2005-06 (at Constant Prices)	S 8						
3.11	District-wise Distribution of Gross State Domestic Product and Per capita Income of Kerala at Factor Cost by Industry of Origin for the year 2006-07 (at Current Prices) (Provisional)	59						
3.12	District-wise Distribution of Gross State Domestic Product and Per capita Income of Keraia at Factor Cost by Industry of Origin for the year 2006-07 (at Constant Prices) (Provisional)							
3.13	District-wise Distribution of Gross State Domestic Product and Per capita Income of Kerala at Factor Cost by Industry of Origin for the year 2007-08 (at Current Prices) (Quick estimate)							
3.14	District-wise Distribution of Gross State Domestic Product and Per capita Income of Kerala at Factor Cost by Industry of Origin for the year 2007-08 (at Constant Prices) (Quick estimate)							
3.15	Population of States/Union Territories by sex and Percentage Share of	S 13						
3.16	District-wise Population, Decadal Growth Rate, Sex-ratio and Population Density	S 14						
3.17	Age Group Population of Kerala 2001	S 14						
3.17	Chapter - 4 Agriculture							
4.1	Number of Operational Holdings and area Operated by Size Class in Kerala	S 15						
4.2	(2000-01) District-wise Number and Area of Individual Operational Holdings 2000-01	S 15						
4.3	Descentage Dietelbution of Main Workers in Kerala 1991-2001	S 15						
4.4	District-wise Actual and Normal Rainfall (mm) with Per centage Departure from Normal Rainfall for 2008	S 16						
4.5	Anna Deaduction & Deaductivity of Principal Crops	S.17						
4.6	Index of Area, Production & Productivity of Crops in Keraia – base – Average	S.18						
4.7	Season-wise Area, Production & Productivity of Rice in Kerala (2005-06 to 2007-08)	5.19						
4.8	Concentration Coverage of HYV of Rice in Kerala	S 19						
4.9	District wise Area Oroduction and Productivity of Rice in Kerala	<u>S 20</u>						
4.10	District-wise and season-wise Area, Production and Productivity of New 107	S 21						
4.11	Annual Description and Description of HVV of Rice (2005-0600 2007-08)	S 22 S 22						
4.12	Plantation Crops - Area, Production and Productivity (2003-04 to 2007-00)							
4.13	1 v	S 23 S 23						
4.14	Consumption of Buthber in Kerala and India (1994-95 to 2007-06)	5 23						
4.15	Production, Consumption, Export and Auction Price of Tea	, 323						

4.16	(Bangok) Market							
4.17	Price Trend of Rubber	S 24						
4.18	Monthly Average Farm Price of Important Agricultural Commodities	S 25						
4.19	Index number of Prices Received and Price paid by Farmers	S 25						
4.20	Consumption of Fertilisers/Ha. of Gross Cropped Area in Kerala (1995-96 to 2007-08)							
4.21	Selected Indicators of Agricultural Development in Kerala (2006-07 & 2007-08)	S 27						
4.22	Average Price of Agricultural Inputs (2006-07 & 2007-08)							
4.23	Composition of Cattle Population (1977 to 2003)							
4.24	Livestock and Poultry Population in India and Kerala – a Comparison	S 29						
4.25	Trend in Livestock Population of Kerala, Over the Census Periods 1966 to 2003	S 29						
4.26	Sex-wise Classification of Bovine Population and Trend over the Previous Census (1956 to 2003)	S 30						
4.27	Trend in Poultry Population over Census Periods from 1982 to 2003	S 30						
4.28	Distribution of Working Bullocks and Male Calves over the five Census Periods and Per centage Variation over Previous Census, from 1982 to 2003	S 31						
4.29	Trend in Distribution of Adult Female Cattle over the Census periods from 1982 to 2003, their Percentage Distribution and Percentage Variation over the Previous Census	· S 31						
4.30	Production of Milk and Egg in the Major States of India	S 32						
4.31	Per capita availability of Milk in Major States of India (grams/day) (2000-01 to 2007-08)	S 32						
4.32	Details of Milk Production in the State – Results of Integrated Sample Survey (1997-98 to 2006-07)	S 33						
4.33	Index of Milk and Egg Production in Kerala and India (1984-85 to 2007-08) (Base year 1984-85)	S 34						
4.34	Activities in the Animal Husbandry Sector (2003-04 to 2007-08)	S 34						
4.35	Production and Distribution of Frozen Semen in Kerala (1995-96 to 2007-08)							
4.36	Artificial Insemination Centres in the State, as on 31.3.2008	S 35 S 35						
4.37	Other Important Activities of KLD Board during 2006-07 and 2007-08							
4.38	Average Price of Livestock Products and Feeds in the State (2003-04 to 2007-08)	S 36						
.4.39	Dairy Co-operatives of India at a Glance	S 37						
4.40	Performance of Kerala Co-operative Milk Marketing Federation (2002-2008)	S 38						
4.41	Performance of the Dairies under Kerala Co-operative Milk Marketing Federation (2004-2008)	S 39						
4.42	Average Quantity of Milk Procured per day by APCOS (1997 to 2008)	S 40						
4.43	Price Revision Details of Milk (2000-01 onwards)	S 40						
4,44	Price Spread of Milk (1993-94 to 2007-08)	S 41						
4.45	Sale of Milk and Milk Products by KCMMF (2005-06 to 2007-08)	S 41						
4.46	Outbreaks, Attacks and Deaths due to Major Contagious Diseases	S 42						
4,47	District-wise Distribution of Fishermen Population in Kerala (2007-08)	S 42						
4.48	Species-wise Composition of Marine Fish Landings in Kerala (2005-06 to 2007-08)	S 43						
4.49	Species-wise Inland Fish Production in Kerala (2004-05- to 2007-08)	S 44						
4.50	District wise Fishing Crafts	S 44						
	Details on Fishery Harbours in Kerala	S 45						
4.51 4.52	Details of Revenue Collection In Various Fishing Harbours/Fish Landing	S 46						
4 52	Centres Welfare Activities of Fisheries Department (2005-06 to 2007-08)	5 46						
4.53 4.54	Details of Welfare Relief Schemes Implemented by the Kerala Fishermen's Welfare Fund Board 2007-08	S 47						
4 5-4	Activity-wise Cumulative Sanction/Release of Funds to Keraia by NCDC	S 48						
4.55	ACTIVITY-WISE CUMULATIVE SANCTION/Release of Funds to Kerala by INCDC							
4.56 4.57	NCDC Release of Fund for Kerala (2001-02 to 2007-08) Selected Indicators of Performance of the Primary Agricultural Credit							
4.58	Societies Selected Indicators of the Credit Operations of Primary Agricultural Credit Societies							

.

.

4.59	Important Activities of M. I.						
4.60	Important Activities of Major Co-operatives (2006-07 to 2007-08) District wise Flow of Credit (2004-05 to 2007-08)						
4.61		S 52 S 53					
4.62	Operations of the Kerala State Co-operative Bank Ltd (1998-99 to 2007-08) Purpose wise disbursed Loans in the Kerala State Co-operative Bank Ltd (1998-99 to 2007-08)	S 54					
	(1999-2000 to 2007-08)	S 54					
4.63	Operational Indicators of District Co-operative Bank during 2007-08	S 55					
4.64							
4.65		S 56					
	operative Agricultural and Rural Development Bank (2000 01th 2007 00)	S 57					
4.66	(2002-03 to 2007-08)	S 58					
4.67	Purpose wise Refinance by NABARD(2002-03 to 2007-08	S 58					
	Chapter – 5 Water Resources	0 00					
5.1	Water Resources Potential of the River Basins of India	S 59					
5.2	Central Loan Assistance Released under AIBP to States from 1997-98 to						
	2007-08	5 60					
5.3	Physical Achievements under Minor Irrigation Schemes	S 61					
5.4	Ground Water Resources of Kerala as on 31.3.2004 (GEC-1997 Methodology)	S 61					
5.5	Physical Achievements under Ground Water Development Schemes						
5.6	Physical Achievements under Command Area Development Programme	S_62					
	2004-05 to 2007-08	S 62					
5.7	Major Physical Cumulative Achievements under CAD Programme as on March 2008	S 62					
5.8	Storage Levels in Reservoirs of Completed Projects in Kerala	S 63					
5.9	District-wise Population Covered by Water Supply Scheme as on 1.4.2008	S 63					
5.10	Coverage of habitations under Bharat Nirman Rural Water Supply						
5.11	District-wise and Category-wise Number of Water Supply Scheme in Operation as on 31/3/2008						
5.12	District-wise details of Service Connections and Street Taps	S 65					
5.13	Water Tariff	S 66					
5.14	Details of Income from Water Charges (2000-01 to 2007-08)	S 66					
5.15	Receipts of Kerala Water Authority from Various Sources from 2000-01 to 2007-08	S 67					
5.16	Plan & Non Plan expenditure of Kerala Water Authority from 2002-03 to 2007-08	S 67					
5.17	District-wise and Category-wise Number of Water Supply Schemes under Implementation	S 68					
5.18	District-wise Distribution of KWA Water Supply Schemes Transferred to	C 60					
	Local Bodies	S 69					
5.19	District-wise Population covered by Water Supply Schemes Implemented by KRWSA	S 69					
_	Chapter – 6 Environment						
6.1	Water Quality of Medium and Minor Rivers-Kerala .	S 70					
6.2	Ground Water Quality Parameters of Metropolitan Cities -Kochi	S 71					
6.3	Access to Safe Drinking Water in Households in India	S 72					
6.4	Western Ghat Development Programme for Natural Resource Management	S 73					
6.5	Division Wise area of Forest in Kerala	S 74					
6.6	Species wise area under Forest Plantation	S 75 S 76					
6.7	Production of Major Forest produce Sanctuaries, National Parks, Biosphere Reserves and Other Protected Areas						
6.8	in Kerala	S 77					
	Chapter – 7 Energy Development S						
7.1	Growth of Kerala Power System at a Glance - 2007 & 2008	S 78					
7.2	Profile of Ongoing Power Projects in the State	S <u>79</u>					
7.3	Power Projects and Power Generation as on 31.3.2008	S 80					
7.4	Average Realisation Rate from Tariff	S 81					
7.5	Average Realisation from Sale of Power	S 81					

7.6	0 11 11 12 2007 00	T 7.00					
7.6	Pattern of Power Consumption and Revenue Collected during 2007-08	S 82 S 82					
7.7							
	Chapter – 8 Industry and Mining						
8.1	Index of Industrial Production 2004-05, 2005-06 & 2006-07	S 83					
8.2	Growth of Working Factories and Average Dally Employment in Kerala – 2001 to 2007	S 83					
8.3	District-wise Distribution of Registered Working Factories in Kerala from 2001 to 2007	S 84					
8.4	District-wise Distribution of Employment in Kerala – 2001 to 2007	S 84					
8.5	Industrial Disputes Arose, Handled, Settled etc. in Kerala	S 85					
8.6	Central Sector Investment in Kerala	\$ 86					
8.7	Central Sector Investment in Selected States as on 31.3.2007	S 86					
8.8	Capital Investment and Employment in respect of Government of India Companies functioning in Kerala	S 87					
8.9	Performance of Government of India Companies in Kerala in Terms of Value of Production and Sales Turnover	S 87					
8.10	Production and Capacity Utilization in Government of India Companies Functioning in Kerala	S 88					
8.11	District-wise Investment in KSIDC Units	S 89					
8.12	Units Assisted by KSIDC as on 31.3.2008	S 89					
8.13	Capital Invested and Employment in Respect of Govt. owned Companies in Kerala	S 90					
8.14	Performance of Government owned Companies in Kerala in Terms of Value of Production and Sales Turn Over	S 90					
8.15	Production and Capacity Utilisation of Government Owned Companies in Kerala During 2006– 07and 2007-08.	S 91					
8.16	Capital Invested and Employment in respect of Government Majority Companies in Kerala	S 92					
8.17	Performance of Government Majority Companies in Kerala in Terms of value of Production and Sales Turn Over.						
8.18	Production and Capacity Utilisation of Government Majority Companies in Kerala During 2006 – 07 and 2007-08	S 93					
8.19	Details of Joint Stock Companies Working in Kerala	S 94					
8.20	District-wise Details of Small Scale Industrial Units Registered in Kerala as on 31st March	S 95					
8.21	District-wise Details of Working Small Scale Industrial Units Registered in Kerala as on 31.3.2008	S 95					
8.22	Working Status of Small Scale Units as on 31.3.2008	S 96					
8.23	Achievement under Self Employment Programme During 2007-08 (PMRY)	\$ 97					
8.24	Working Industrial Co-operative Societies in Kerala as on 30.6.2008	S 97					
8.25	Outstanding Advances to Various Sectors by Commercial Banks in Kerala	S 98					
8.26	District-wise Number of Handloom Co-operative Societies in the State	S 98					
8.27	Production and Productivity under Handloom Industry in Kerala	S 99					
8.28	Working Results of Handloom Apex Society (HANTEX)	S 100					
8.29	Working Results of Kerala State Handloom Development Corporation (HANVEEV)	S 101					
8.30	Production and Productivity under Powerloom Industry	S 101					
8.31	Coir Co-operative Societies in Kerala	S 102					
8.32	Activities of Coir Co-operative Societies	S 103					
8.33	District-wise Details of Coir Co-operative Societies	S 103					
8.34	Exports of Coir and Coir Products from India During 2006-07& 2007-08	S 104					
8.35	Foreign Exchange Earnings of India from Cashew Industry	S 104					
8.36	Import of Raw Cashew Nuts	S 104					
8.37	Kerala Khadi & Village Industries Board – Production, Sales, Employment and Wages paid during 2006-07and 2007-08	S 105					
8.38	District-wise Number of Sales Outlets and Sales under KVI Board during 2007-08	S 106					
8.39	Physical Achievement under Sericulture for the year 2006-07 and 2007-08	S 106					
8.40	Kerala State Industrial Development Corporation Physical & Financial Performance 2007-08	S 107					
	1 G174 Highlic 2007-00						

	Kerala Financial Corporation: Loan Operations as on 2007-08	\$.107
8.42	District-wise Details of Disbursariant of Load by RFC - 2807-08	S FOR
8.43	Industry-wise Classification of Load Sandhaned and Disturged by the KFC as on 31.3.07	S 109
8.44	Progress of the Working of Kerala Financial Corporation at a Glance	S 109
8.45	Selected Indicators of the Activities of SIDCO	\$ 110
8.46	Micro Small and Medium Enterprises Development Institute, Thrissur (Formerly Small Industries Service Institutes): Achievement during 2007-08	·· 6 111
8.47	Small Industries Development Bank of India's Assistance to Small Scale Industries	\$ 111
8.48	DA/DP under DIC as on 31st March 2008	S 112
8.49	Mini Industrial Estates under DIC as en 31st March 2008	\$ 113
8.50	Major Industrial Estates under SIDCO as on 31 March 2008	S 113
8.51	Mini Industrial Estates under SIDCO as on 31st March 2008	8 114
8,52	Total Area Covered by Mining Leases	S 115
8.53	Production and Sale of Major Minerals Other than Mineral Sand in Kerala	8 115
	during 2007-08	
8.54	Production and Sale of Mineral Sand in Kerala - 2007-08	\$ 115
	Chapter - 9 Tourism	
9.1	Growth of Foreign Tourist Arrivals in India and Kerala (2003-07)	\$ 116
9,2	Flow of Domestic Tourist in Kerala ~ (2003-07)	S 116
9.3	District wise Foreign and Domestic Tourist Arrivals during 2006 & 2007	S 116
9.4	Earnings from Tourism (2003-2007)	S 117
9.5	State Plan Allocation for Tourism - 2004-2009	S 117
9.6	Central Financial Assistance for Tourism (2004-2009)	\$117
. 9.7	Details of Availability of Accommodation Facility in Classified Hotels - 2006 & 2007	S 117
9,8	Kerala Tourism Development Corporation Limited - Performance for the year 2007-08	S 118
	Chapter - 10 Infrastructure	
10.1	Growth of Transport and Communications in Kerala since 2000 compared to 1975	\$ 119
10.2	District-wise and Category-wise Length of Roads maintained by PWD (R&B) as on 31.3.2008	S 119
10.3	District-wise, Surface-wise and Category-wise Length of Roads Maintained by Kerala PWD as on 31.3.2008	S 120
10.3	Kerala PWD as on 31.3.2008	S 120
	Kerala PWD as on 31.3.2008 Surface-wise and Category-wise Length of PWD Roads added during 2007-08 District-wise and Surface-wise Length of Roads Maintained by PWD as on	
10.4	Kerala PWD as on 31.3.2008. Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08	S 120 S 121
10.4 10.5	Kerala PWD as on 31.3.2008. Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007	\$ 120 \$ 121 \$ 121
10.4 10.5 10.6 10.7	Kerala PWD as on 31.3.2008 Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Cuiverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008	\$ 120 \$ 121 \$ 121 \$ 122
10.4 10.5	Kerala PWD as on 31.3.2008 Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index	S 120 S 121
10.4 10.5 10.6 10.7 10.8 10.9	Kerala PWD as on 31.3.2008 Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100)	\$ 120 \$ 121 \$ 121 \$ 122 \$ 122 \$ 123 \$ 124
10.4 10.5 10.6 10.7 10.8	Kerala PWD as on 31.3.2008 Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Cuiverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123
10.4 10.5 10.6 10.7 10.8 10.9	Kerala PWD as on 31.3.2008 Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123 \$ 124 \$ 125
10.4 10.5 10.6 10.7 10.8 10.9 10.10	Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125
10.4 10.5 10.6 10.7 10.8 10.9 10.10 10.11 10.12	Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala during 2008	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125 \$ 126
10.4 10.5 10.6 10.7 10.8 10.9 10.10 10.11 10.12	Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala during 2008 Motor Vehicle Accidents by time of day during 2008	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125 \$ 126 \$ 126
10.4 10.5 10.6 10.7 10.8 10.9 10.10 10.11 10.12 10.13	Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala during 2008 Motor Vehicle Accidents by time of day during 2008 Age-wise details of Vehicles owned by RSKIC as on 31.3.2008	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125 \$ 126 \$ 126
10.4 10.5 10.6 10.7 10.8 10.9 10.10 10.11 10.12 10.13 10.14 10.15 10.16	Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Culverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Frimary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala during 2008 Motor Vehicle Accidents by time of day during 2008 Age-wise details of Vehicles owned by KSKIC as on 31.3.2008 Major Indicators Showing Operational Efficiency of KSKIC	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125 \$ 126 \$ 126 \$ 127 \$ 127
10.4 10.5 10.6 10.7 10.8 10.9 10.10 10.11 10.12 10.13 10.14 10.15 10.16 10.17	Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Cuiverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala during 2008 Motor Vehicle Accidents by time of day during 2008 Age-wise details of Vehicles owned by RSRIC as on 31.3.2008 Major Indicators Showing Operational Efficiency of KSRIC	\$ 120 \$ 121 \$ 121 \$ 122 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125 \$ 126 \$ 126 \$ 127 \$ 127 \$ 127
10.4 10.5 10.6 10.7 10.8 10.9 10.10 10.11 10.12 10.13 10.14 10.15 10.16 10.17 10.18	Kerala PWD as on 31.3.2008. Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Cuiverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala during 2008 Motor Vehicle Accidents by time of day during 2008 Age-wise details of Vehicles owned by KSKIC as on 31.3.2008 Major Indicators Showing Operational Efficiency of KSKIC KSRTC Operational Statistics (hydrog 2008-00) Fare Structure of KSRTC during 2008-	\$ 120 \$ 121 \$ 121 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125 \$ 126 \$ 126 \$ 127 \$ 127 \$ 127 \$ 128 \$ 130
10.4 10.5 10.6 10.7 10.8 10.9 10.10 10.11 10.12 10.13 10.14 10.15 10.16 10.17	Surface-wise and Category-wise Length of PWD Roads added during 2007-08- District-wise and Surface-wise Length of Roads Maintained by PWD as on 31-3-08 Number of Bridges and Cuiverts in PWD Roads as on 31.3.2007 Number of Motor Vehicles having Valid Registration as on 31.3.2008 Newly Registered Vehicles for the year 2007-08 District-wise Growth of Motor Vehicles in Kerala and their Index (Base 1990-91=100) Category-wise Growth of Motor Vehicles in Kerala since 2000 to 2008 District-wise Road Accidents in Kerala in which Number of Persons held during 2006-07, 2007-08 Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008 Type-wise Details of Motor Vehicles Involved in Road Accidents in Kerala during 2008 Motor Vehicle Accidents by time of day during 2008 Age-wise details of Vehicles owned by RSRIC as on 31.3.2008 Major Indicators Showing Operational Efficiency of KSRIC	\$ 120 \$ 121 \$ 121 \$ 122 \$ 122 \$ 123 \$ 124 \$ 125 \$ 125 \$ 126 \$ 126 \$ 127 \$ 127 \$ 127

		0.104				
10.22	Commodity-wise Cargo Handled at the Inter mediate and Minor Ports of Kerala during 2007-08	S 134				
10.23	Number and Tonnage of Steamers and Sailing Vessels which called at the	S 135				
10.24	Number of Harbour a Crafts registered at the Inter Mediate and Minor Ports					
10.25	Category-wise breakup of Revenue Collected at the Intermediate and Minor	S 136				
10.26	Ports of Kerala during 2007-08 Operational Statistics of Inland Water Transport Agencies in Kerala	S 136				
10.26 10.27(A)	Details of Flights Operated by Various Agencies from Thiruvananthapuram	S 137				
10.27(A)	International Airport	\$ 137				
10.27 (B)	Details of Flights Operated by Various Agencies from Kozhikode Air Port					
10.27 (C)	Details of Flights Operated by Various Agencies from Cochin International Air Port	S 138				
10.28	Number of Passport Issued from the Passport Offices in Kerala from 2000-01 to 2007-08	S 139				
10.29	Growth of Post Offices in Kerala During the last Nine years	S 139				
10.30	Category-wise Offices in Postal and Other Postal Services in Kerala	S 140				
10.31	Division-wise and Category-wise Post Offices under Kerala Circle as on 31.3.2008	S 141				
10.32	Urban /Rural Split of Post Offices as on 31.3.2008	S 142				
10.33	District-wise Details of Area and Population served by one Post Office during 2007-08	S 143				
10.34	District-wise Details of Telephone Network during 2007-08	S 143				
10.35	Details of Slum Population of Kerala	S 144 S 144				
10.36	Details of Major Projects undertaken by Capital Region Development Programme -2007-2008					
10.37	Details of Major Projects undertaken by Greater Cochin Development Authority	S 145				
10.38	Details of Major Projects undertaken by KSUDP	S 146				
	Chapter - 11 Education					
11.1	Literacy Rate-Kerala 1951-2001	S 147				
11.2	Literacy Rate by Sex for State and Districts 1991 and 2001 - Kerala	S 147				
11.3	District-wise/Management-wise Number of Schools in Kerala – 2007-08	S 148				
11.4	District-wise Number of Schools (other than state syllabus) in Kerala 2008- 09	S 149				
11.5	District-wise Details of Government Schools having Building Facilities - Kerala 2007-08	S 149				
11.6	District-wise Details of Government Schools having Drinking Water/Latrines/Urinals Facilities in Kerala -2008	S 150				
11.7	Management-wise/ Standard-wise Enrolment of students in Schools :Kerala 2008-09	S 151				
11.8	Enrolment of Students in Schools – District-wise and Stage-wise 2008-09	S 151				
11.9	standard wise Strength of SC/ST students in Kerala 2008-09	S 152				
11.10	District wise/Stage-wise Drop out Ratio In Schools 2006-07	S 152				
11.11	Stage-wise and Management-wise number of Teachers in Schools in Kerala 2007-08	S 153				
11.12	Protected Teachers in Keraia – 2007-08	S 153				
11.13	Uneconomic Schools during the year 2007-08	S 154				
11.14	SSLC Examination Result –2006 to 2008	S 154				
11.15	District-wise/Management-wise Number of Higher Secondary Schools in Kerala 2008	S 155				
11.16 (a)	No. of Students Appeared and Passed in Higher Secondary Examinations	S 155				
(b)	No. of SC Students Appeared and Passed in Higher Secondary Examinations	S 155				
(c)	No. of ST Students Appeared and Passed in Higher Secondary Examinations	S 155				
11.17	District-wise Details of VHSE Schools and Courses: 2008-09	S 156				
11.18	No .of Students Appeared and Passed in VHSE Examination: 2000 to 2008	S 156				
11.19 11.20	District-wise / Management-wise Arts and Science Colleges in Kerala 2008	S 157				
77,50	Details of BA Degree Enrolment in Colleges: 2007-08	S 158				

11.21	Details of B.Sc. Degree Enrolment In Colleges: 2007-08	S 158 S 159						
11.22	Details of B.Com Degree Enrolment in the Colleges of Kerala : 2007-08							
11.23	Details of M.A. Degree Enrolment in Colleges: 2007-08	S 159 S 159						
11.24	Details of M.Sc Degree Enrolment in Colleges: 2007-08							
11.25	Details of M Com Degree Enrolment in the Colleges of Kerala							
11.26	University-wise Teachers in Arts and Science Colleges in Kerala: 2005-06 to 2007-08	S 160						
11.27	Details of SC/ST students in Arts and Science Colleges in 2007-08							
11.28	Number of Teachers having PhD Degree in Arts and Science Colleges in 2008	S 161						
11.29	Number of Guest Lecturers appointed in Arts & Science Colleges in 2008	S 161						
11.30	District-wise and Management wise details of Engineering Colleges in Kerala 2008	S 161						
11.31	Branch-wise Distribution of Seats in Engineering Colleges 2007-08	S 162						
11.32(a)	Course-wise Annual Intake of Students in Govt. and Aided Engineering Colleges at Graduate Level 2007-08 to 2008-09	S 163						
11.32(b)	Course-wise Annual Intake of Students in Govt. and Alded Engineering Colleges at Post Graduate Level 2007-08 to 2008-09	S 163						
11.33(a)	Annual intake and Students strength in Govt. Polytechnic in Kerala	S 164						
11.33(b)	Annual intake and Students strength in Pvt. Aided Polytechnic in Kerala	S 164						
11.34	Trade-wise Annual Intake of Students in Polytechnics-2008-09	S 164						
11.35	No. Students and Teachers in Polytechnic 2007 & 2008	S 165						
11.36	No. of SC/ST Students and Sc/St Teachers in Polytechnic	S 165						
11.37	No. of Students and Teachers in Technical High Schools	S 165						
11.38(a)	No. of SC Students and Teachers in Technical High Schools	S 166						
11.38(b)	No. of SC Students and Teachers in Technical High Schools	S 166						
11.39	Department wise details of courses in CUSAT 2008-09	S 167						
-	Chapter - 12 Health							
12.1	Medical Institutions and Beds in Kerala - Category wise - 2008	S 168						
12.2	District-wise details of IP, OP, major/minor operations conducted in hospitals/dispensaries under DHS (2006-07 and 2007-08)							
12.3	Details of Blood units collected in Blood Banks - Kerala	S 169						
12.4	Annual intake in different nursing courses 2008							
12.5	District-wise Details of Medical and Para-Medical Personnel under DHS - 2008							
12.6	Medical and Para-medical courses conducted in the Medical College with an annual intake of students	S 172						
12.7	Details of Personnel (Clinical/non-clinical) in Medical Colleges - 2000 - 2007)	S 174						
12.8	District-wise distribution of institutions, Beds and Patients treated under Ayurvedic system of Medicine in Kerala (2007 and 2008)	S 175						
12.9	Annual intake of students and courses in Ayurveda Colleges	S 176						
12.10	District-wise distribution of institutions, Beds and patients treated under Govt. Homoeopathy Directorate (2007 & 2008)	S 177						
12.11	Annual intake of students and courses in Homoeo Colleges	S 177						
		W 4 1 1						
	District Wise Details of Infrastructure under Co-operative Sector-2008							
12.12 12.13	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical	S 178 S 178						
12.12 12.13	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008	S 178 S 178						
12.12 12.13 12.14	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008	S 178						
12.12 12.13 12.14 12.15	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme	S 178 S 178 S 179						
12.12 12.13 12.14 12.15 12.16	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme District-wise details Dengue fever-2008	S 178 S 178 S 179 S 180						
12.12 12.13 12.14 12.15	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme District-wise details Dengue fever-2008 District-wise details of Leptospyrosis-2008 District-wise Patients treated and Death reported - Dengue-Fever and	S 178 S 178 S 179 S 180 S 181						
12.12 12.13 12.14 12.15 12.16 12.17 12.18	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme District-wise details Dengue fever-2008 District-wise details of Leptospyrosis-2008 District-wise Patients treated and Death reported - Dengue-Fever and Leptospirosis 2008	S 178 S 178 S 179 S 180 S 181 S 181 S 182						
12.12 12.13 12.14 12.15 12.16 12.17 12.18	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme District-wise details Dengue fever-2008 District-wise details of Leptospyrosis-2008 District-wise Patients treated and Death reported - Dengue-Fever and Leptospirosis 2008 District-wise Patients treated for Chikungunia and Viral Fever 2008	\$ 178 \$ 178 \$ 179 \$ 180 \$ 181 \$ 181 \$ 182						
12.12 12.13 12.14 12.15 12.16 12.17 12.18 12.19 12.20	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme District-wise details Dengue fever-2008 District-wise details of Leptospyrosis-2008 District-wise Patients treated and Death reported - Dengue-Fever and Leptospirosis 2008 District-wise Patients treated for Chikungunia and Viral Fever 2008 Achievement of Family Welfare Programme (2007-08) District-wise	S 178 S 178 S 179 S 180 S 181 S 181 S 182 S 182 S 183						
12.12 12.13 12.14 12.15 12.16 12.17 12.18 12.19 12.20 12.21	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme District-wise details Dengue fever-2008 District-wise details of Leptospyrosis-2008 District-wise Patients treated and Death reported - Dengue-Fever and Leptospirosis 2008 District-wise Patients treated for Chikungunia and Viral Fever 2008 Achievement of Family Welfare Programme (2007-08) District-wise District-wise Couple Protection Rate 2008	\$ 178 \$ 178 \$ 179 \$ 180 \$ 181 \$ 181 \$ 182 \$ 182 \$ 183 \$ 183						
12.12 12.13 12.14 12.15 12.16 12.17 12.18 12.19 12.20	District Wise Details of Infrastructure under Co-operative Sector-2008 Institution-wise Patients treated under Directorate of Insurance Medical Service -2008 No. of Attack and Death due to major principal diseases during 2007 & 2008 Target & Achievement of Immunization Programme District-wise details Dengue fever-2008 District-wise details of Leptospyrosis-2008 District-wise Patients treated and Death reported - Dengue-Fever and Leptospirosis 2008 District-wise Patients treated for Chikungunia and Viral Fever 2008 Achievement of Family Welfare Programme (2007-08) District-wise	S 178 S 178 S 179 S 180 S 181 S 181 S 182 S 182 S 183						

	Chapter - 13 Housing						
13.1	Achievements under Major Housing Schemes (Nos) by different housing agencies in Kerala	S 185					
13.2	Houses Assisted and Amount disbursed by Kerala State Co-operative Housing Federation Limited	S 185					
13.3	Interest Rates of Different Financial Institutions on Housing Loan as on 30.9.2008						
13.4	Fund Flow to Kerala State Co-operative Housing Federation	S 189					
	Chapter -14 Poverty and Special Programme for Weaker Sections	•					
14.1	Poverty Projection for 2007-08	\$ 190					
14.2	Community based organization Status in Rural Areas as on 31-10 -2008	S 191					
14.3	District-wise Details of Linkage Banking as on 31-10-2008	S 191					
14.4	District-wise details of Lease Land Farming as on 31-10 -2008	S 192					
14.5	District-wise details of Balasabha- Childrens NHG as on 31-10-2008	S 192					
14.6	District-wise details of Rural Micro Enterprises (RME) Programme- Status of Individual Enterprises as on 31-10-2008	S 193					
14.7	District-wise Details of Rural Micro Enterprises (RME) Programme- Status of Group Enterprises as on 31-10-2008	S 193					
14.8	Financial Achievement under SGSY, IAY, JGSY, EAS, SGR	S 194					
14.9	Employment Generation under NREGA during the year 2006-07 and 2007-08	S 195					
14.10	Employment Generation under NREGA during the year 2006-07 and 2007-08	S 196 S 197					
14.11	District-wise Distribution of Surplus Land as on 31-10-2008						
14.12	District-wise Urban Thrift and Credit Operation -as on 30.11.2008	S 198 S 198					
14.13	List of Micro Enterprises as on 30-11-2008	S 198 S 199					
14.14	List of Group Micro Enterprises in Urban Area	S 201					
14.15	Details of Projects under IHSDP						
14.16	Details of Approved Projects by Thiruvananthapuram Corporation under BSUP during 2006-07 (Phase I)	S 202					
14.17	Details of Approved Projects by Kochi Corporation under BSUP	S 202					
14.18	District wise number of Beneficiaries in Welfare Institutions 2008	\$ 203 \$ 204					
14.19	Major Pension schemes in Kerala through Revenue Department-District wise Beneficiaries -2008	S 205					
14.20	Details of Rates per person on Social Security Pension Schemes in Kerala - 2008						
14.21	Complaints Received by Kerala Women's Commission (January-December 2008)	S 209					
14.22	Major Welfare Measures in the Welfare Fund Boards in Kerala - 2007	S 210					
14.23	District-wise ICDS Beneficiaries in Kerala -2008	S 211					
14.24	ICDS Projects (General) 2007	S 212 S 216					
14.25 14.26	District-wise Details of SC/ST Population - 2001 Census Enrolment of Scheduled Castes/ Scheduled Tribe Students at School Level 2008-09	S 216					
14.27	Details of SC/ST Students in Art and Science college during 2007-08	S 217					
14.28	Details of SC/ST Employees in Government service	S 217					
14.29	SCP through Local Self Government Institutions – Kerala - Physical Achievements during 2002-03 to 2006-2007 (Provisional)	S 218					
14.30	TSP through Local Self Government Institutions - Kerala - Physical Achievements during 2002-03 to 2006-2007 (Provisional)	S 219					
14.31	Scheme wise Outlay and Expenditure of welfare of SCs & OBCs for 2007-08 and 2008-09	S 220					
14.32	Physical Achievement of Schemes for Scheduled caste Development for 2007- 08 and 2008-09	S 222					
14.33	Details of Lump sum grant, Stipends, Scholarships etc to SC Students during (2007-08)	S 223					
14.34	Details of Lump sum grant, stipends, scholarships etc. to Scheduled Castes students during 2008-09 (up to 31/10/08)	S 224					
14.35	Model Residential Schools under SCDD	S 225					
14.36	Number of houses constructed by the SC Development Dept.	S 225					

	Arbitor ments under major Housing Schemes to SC Population by different	S 226				
14.38	Housing Agencies in Kerala.	S 226				
14.50	Con-clidated Statement of two Agencies (KSHB & RESNIR)	S 227				
14.39	Number of SC Persons benefited under self Employment Schemes during 2008-09	5 221				
14.40	Scheme wise Outlay and Expenditure of welfare of Scheduled Tribes for 2007- 08 & 2008-09	S 228				
14.41	Physical Achievements of Schemes for Scheduled Tribes development Department for the period 2002-03 to 2008-09	S 230				
14.42(a)	Details of Lump sum grant, Stipends, Scholarships etc to ST Students during the year 2007-08	S 232				
 14.42(b)	Details of Lump Sum Grant, Stipend etc. to scheduled Tribe students during 2008-09	S 233				
14.43	Number of Houses Constructed by ST Development Department	S 234				
14.44	Statement showing land distributed to Landless Tribes by TRDM	S 235				
14.45	District wise distribution of surplus land to SC/ST on 31.10.2008	S 237				
14.46	Details of Schemes under Corpus Fund (2008-09) undertaken by St Development Department	S 238				
14.47	Kerala State Development Corporation for SCs/STs	S 241				
14.48	Kerala State Backward Classes Development Corporation Ltd, Physical and Financial Achievements-2007-08 and 2008-09					
14.49	Kerala State Development Corporation Christian converts from Sc's and the Recommended Communities Ltd., Kottayam	S 242				
	Chapter – 15 Prices and Food Security					
15.1	Month-wise Consumer Price Index (Cost of Living Index Numbers) for Agricultural and Industrial Workers - Kerala 2007 & 2008	S 243				
15.2	Month-end Average Retail Prices of Essential Commodities - 2007 & 2008	S 244				
15.3	Per 1000 Distribution of Persons in Rural Sector over 12 MPCE classes for	S 245				
15.4	Per 1000 Distribution of Persons in Urban Sector over 12 MPCE classes for	S246				
15.5	Month wise wholesale price index of Agricultural Commodities–Kerala 2007 and 2008	S247				
15.3	Food Distribution under PDS 2008	S248 S 249				
15.7	Monthly Distribution of Kerosene and Sugar in Kerala 2004 to 2008	3 249				
	Chapter - 16 Export and Import	S 250				
16.1	Merchandise trade, world, by region and selected Country, 2007	S 251				
16.2	Export of Principal Commodities - India 2007-08	\$ 253				
16.3	Import of Principal Commodities-India 2007-08	S 255				
16.4	Commodity-wise Export through Kochi Port, 2003-04 to 2007-08	S 255				
16.5	Commodity-wise Import through Kochi Port, 2003-04to 2007-08	S 256				
16.6	Item-wise Export of Marine Products from India, 2003-04 to 2007-08	\$ 256				
16.7	Market-wise Export of Marine Products from India, 2003-04to 2007-08	S 257				
16.8	Kerala's share in the Export of Marine Products from India	S 258				
16.9	Item-wise Export of Spices from India, 2003-04to 2007-08	S 259				
16.10	Export of Spices through Cochin and Trivandrum Ports during 2002-03 to 2006-07 Export of Spices through Cochin and Trivandrum Ports during 2002-03 to 2006-07	S 260				
16.11	Market-wise Export of Cashew Kernels from India 2005-06 and 2007-08	S 261				
16.12	Low to the Control of Coffee from India 2003-04 to 2007-00	S 262				
16.13	Export of Coir and Coir Products from India 2004-05 to 2007-08	S 263				
16.14	Major Country wise Export of Coir Products from India 2008 Major Country wise Export of Coir Products from India 2008					
	Chapter - 17 Institutional and Bank Finance	S 264				
17.1	State-wise Financial Assistance disbursed by NABARD during 2007-08					

State-wise Cumulative Financial Assistance Disbursed by NABARD as at the end March 2008 State-wise distribution of Commercial Bank Branches and Population per Bank Office State-wise Deposits, Credits and Credit-Deposit ratio of Public Sector Banks Banking Statistics of Kerala - 1990-2008 District-wise Distribution of Number of Branches, Aggregate Deposits, Gross Bank Credit and CD Ratio of Scheduled Commercial Banks - Kerala, March 2008 Bank-wise Performance 2007-08 - Kerala Chapter - 19 Labour and Employment	S 264 S 265 S 266 S 267 S 269					
Bank Office State-wise Deposits, Credits and Credit-Deposit ratio of Public Sector Banks Banking Statistics of Kerala - 1990-2008 District-wise Distribution of Number of Branches, Aggregate Deposits, Gross Bank Credit and CD Ratio of Scheduled Commercial Banks - Kerala, March 2008 Bank-wise Performance 2007-08 - Kerala Chapter - 19 Labour and Employment	S 266 S 267					
Banking Statistics of Kerala - 1990-2008 District-wise Distribution of Number of Branches, Aggregate Deposits, Gross Bank Credit and CD Ratio of Scheduled Commercial Banks - Kerala, March 2008 Bank-wise Performance 2007-08 - Kerala Chapter - 19 Labour and Employment	S 267					
District-wise Distribution of Number of Branches, Aggregate Deposits, Gross Bank Credit and CD Ratio of Scheduled Commercial Banks - Kerala, March 2008 Bank-wise Performance 2007-08 - Kerala Chapter - 19 Labour and Employment						
Credit and CD Ratio of Scheduled Commercial Banks - Kerala, March 2008 Bank-wise Performance 2007-08 - Kerala Chapter - 19 Labour and Employment	S 269					
Bank-wise Performance 2007-08 - Kerala Chapter - 19 Labour and Employment	i .					
	S 270					
ITI wise details of Seat strength and enrolment in Govt. ITIs	S 271					
	S 272					
Trade wise Intake and Outturn in Govt. ITIs during 2007-08 as on 30-9-08 (1						
Trade wise Intake and Outturn in Govt. ITIs during 2006-08 as on 30-9-08 (2 year course)	S 274					
New trades introduced during the last 2 years	S 275					
Institution wise details of Apprentices under Industrial Training Department	S 275					
Total Work Seekers in Kerala	S 276					
Distribution of Work Seekers in Kerala by Educational Level	S 276					
Number of Professional and Technical Work Seekers	S 276					
District-wise Distribution of Work Seekers (As on 31.3.2008)	S 277					
Unemployment Assistance and Self Employment Scheme	S 277					
Employment in Organized Public and Private Sectors - Ali India	S 277					
Employment in the Public and Private sectors in Kerala	S 278					
District -wise Employment both in Public and Private sectors in Kerala as on	S 278					
	S 279					
Employment In the Public Sector by Industry – All India	S 280					
and number of employers using employment exchanges in Kerala	S 280					
	S 281					
Crime Heads	S 281					
Number of Cases Reported under Atrocities against Women during 2007	S 281					
	S 282					
District-wise Suicides in Kerala	S 282					
Per 1000 distribution of households by food availability status	S 283					
National Status of Women by State	S 284					
Prevalence of Anemia in Children by State	S 284					
Chapter - 22 Local Self Government						
Development Funds to LSGs-Category-wise Outlay and Expenditure for 2006-07	S 285					
Development Funds to LSGs-Sector wise Allocation and Expenditure for	S 285					
Development Funds to LSGs- Productive Sector - Allocation and Expenditure	S 286					
Development Funds to LSGs- Productive Sector Sub-Sector wise Allocation	S 287					
Development Funds to LSGs-Service Sector Allocation and Expenditure for	S 288					
Development Funds to LSGs- Service Sector-Sub-Sector wise Allocation and	S 289					
Development Funds to LSGs- Infrastructure Sector- Allocation and	S 291					
Development Funds to LSGs- Infrastructure Sector-SubSector-wise Allocation	S 292					
	Trade wise Intake and Outturn in Govt. ITIs during 2006-08 as on 30-9-08 (2 year course) New trades introduced during the last 2 years Institution wise details of Apprentices under Industrial Training Department Total Work Seekers in Kerala Distribution of Work Seekers in Kerala by Educational Level Number of Professional and Technical Work Seekers District-wise Distribution of Work Seekers (As on 31.3.2008) Jinemployment Assistance and Self Employment Scheme Employment in Organized Public and Private Sectors - Ali India Employment in the Public and Private sectors in Kerala as on 11st March 2008 District-wise Employment both in Public and Private sectors in Kerala as on 11st March 2008 District-wise Employment in Public Sector by Industry - All India Implement in the Public Sector by Industry - All India Implement of placement through Employment Exchanges and monthly average and number of employers using employment exchanges in Kerala Chapter 20 Human Development Late of Crime under IPC and SLL-District-wise Immber of Cases Reported under Atrocities against Women under different traine Heads Lumber of Cases Reported under Atrocities against Women during 2007 District-wise Suicides in Kerala Let 1000 distribution of households by food availability status Lational Status of Women by State Chapter - 22 Local Self Government Development Funds to LSGs-Category-wise Outlay and Expenditure for 2006-07 Development Funds to LSGs-Sector wise Allocation and Expenditure for 2006-07 Development Funds to LSGs-Productive Sector - Allocation and Expenditure for 2006-07 Development Funds to LSGs-Service Sector Sub-Sector wise Allocation and Expenditure for 2006-07 Development Funds to LSGs-Service Sector-Sub-Sector wise Allocation and Expenditure for 2006-07 Development Funds to LSGs-Service Sector-Sub-Sector wise Allocation and Expenditure for 2007-08 Levelopment Funds to LSGs-Service Sector-Sub-Sector Allocation and Expenditure for 2006-07 Development Funds to LSGs-Service Sector-Sub-Sector Allocation and Expendit					

Appendix 3.1

Gross Domestic Product (GDP) at Factor Cost - All India

	At Current Prices			At Constant (1999-2000) Price		
Year	GDP (Rs. Crore)	% change	Per capita GDP (Rs.)	GDP (Rs. Crore)	% change	Per capita GDP (Rs.)
1999-2000	1792292		17905	1792292		17905
2000-01	1930184	7.7	18942	1870387	4.4	18355
2001-02	2097446	8.7	20207	1978055	5.8	19056
2002-03	2255574	7.5	21380	2052586	3.8	19456
2003-04	2543396	12.8	23704	2226041	8.5	20746
2004-05	2855933	12.3	26201	2389660	7.4	21923
2005-06	3275670	13.8	29617	2612847	9.4	23624
2006-07*	3790063	15.7	33779	2864310	9.6	25529
2007-08**	4303654	13.6	37818	3122862	9.0	27442

^{*-} Quick Estimates

Source: - Central Statistical Organisation

Appendix 3.2

Net Domestic Product (NDP) at Factor Cost - All India

	At Current Prices			At Constant (1999-2000) Price		
Year	NDP (Rs. Crore)	% change	Per Capita NDP (Rs)	NDP (Rs. Crore)	% change	Per Capita NDP (Rs)
1999-2000	1605643		16040	1675643		16040
2000-01	1727452	7.6	16952	1675632	4.4	16444
2001-02	1876285	8.6	18076	1775951	6.0	17109
2002-03	2019972	7.7	19147	1841931	3.7	17459
2003-04	2286826	13.2	21312	2004703	8.8	18683
2004-05	2523442	10.4	23151	2125299	6.0	19498
2005-06	2896866	14.8	26192	2326581	9.5	21036
2006-07*	3355595	15.8	29907	2549649	9.6	22724
2007-08**	3811341	13.6	33492	2781182	9.1	24439

^{*-} Quick Estimates

Source: - Central Statistical Organisation

^{** -} Revised Estimate

^{** -} Revised Estimate

Appendix 3.10

District wise Distribution of Gross State Domestic Product and Per Capita Income of Kerala at Factor Cost by Industry of Origin for the year 2005-06 (at Constant Prices)

Base Year 1999-00 (Rs.in Lakh)

SI.No	Industry of Origin	TVM	KLM	PTA	ALPA	KTM	IDK	EKM	TSR	PLKD	MLPM	KKD	WYD	KNR	KSD	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Agriculture & Allied															
1	Activities	98186	117367	84748	41524	154246	136840	110151	82929	114518	144035	83457	93797	115477	80932	1458214
2	Forestry and Logging	5862	9574	18248	0	957	30673	955	12182	16019	12158	4866	9263	5729	661	127147
3	Fishing	9769	29013	353	28000	1072	50	18348	18392	2159	7561	24915	12	6596	663	146902
4	Mining and Quarrying	2599	2406	1034	1613	1739	575	4893	3512	2787	5304	8642	710	9448	3043	48305
	Sub Total: Primary	116416	158360	104382	71137	158014	168138	134354	1E+05	135484	169058	121878	1E+05	137251	85299	1780568
5	Manufacturing	101248	36942	9578	47888	35574	19155	259962	76620	102617	35574	39678	6841	31469	2736	805882
5.1	Registered	52056	18994	4924	24621	18290	9848	133658	39394	52760	18290	20400	3517	16180	1407	414340
5.2	Unregistered	49192	17948	4653	23267	17284	9307	126304	37226	49857	17284	19278	3324	15289	1330	391542
6	Electricity, Gas & Water															
	Supply	33215	18188	9359	16142	17299	15441	22983	17493	12227	6813	14030	1323	6202	2789	193502
6.1	Electricity	27070	17321	8739	14762	15981	15250	20350	16137	11611	5814	12308	1166	5222	2350	174082
6.2	Gas	324	271	137	231	210	120	313	301	253	297	277	69	239	105	3145
6.3	Water Supply	5822	596	483	1149	1108	72	2319	1055	363	701	1445	88	741	334	16275
7	Construction	160244	95429	45549	89605	84975	28226	280912	2E+05	82437	116487	165769	17324	123207	44653	1493418
	Sub total : Secondary	294707	150559	64486	153635	137848	62822	563856	3E+05	197280	158873	219478	25488	160878	50178	2492802
8	Transport,Storage &															
	Communication	161313	93220	57580	82533	101127	22249	202607	1E+05	75939	84694	99846	14964	72787	35181	1236632
8.1	Railways	5059	4828	413	3770	3356	0	5291	3913	8233	5660	4921	0	4784	4883	55110
8.2	Transport by other															
	means	97821	53951	30454	48410	56719	10719	117911	75460	43303	55158	58565	8874	36914	15617	709880
8.3	Communication	57927	33880	26657	29733	39985	14418	78619	52987	23954	23534	36304	5872	30618	14540	466028
8.4	Storage	505	561	56	618	1067	112	786	230	449	342	56	219	472	140	5614
9	Trade, Hotel &															
	Restaurants	195789	152836	61301	146581	141368	48999	265013	2E+05	159925	167640	222686	32944	183278	74854	2085076
10	Banking and Insurance	54787	33224	30455	36898	42062	17730	77150	57024	41317	33011	41902	11820	36365	18688	532433
11	Real estate ownership,															
	business & legal	101758	80680	42611	66779	59692	38432	91673	86040	73320	78590	75319	22260	61146	30255	908556
12	Public Administration															
13	Other Services	116764 69343	41624 56162	21770 35971	33368 48905	36219 48764	8158 33646	53026 74326	38135 74016	32385 57500	26636 91180	38627 71767	5750 18825	31796 70610	7175 29542	491432 780557
	Sub Total:Tertiary	699755	457746	249689	415064	429232	169215	763794	6E+05	440387	481751	550147		455981	2E+05	6034686
	GSDP	1110878	766665	418558	639836	725094	400175	1462005	1E+06	773151	809683	891504	2E+05	754110	3E+05	1E+07
	Mid year		-													
	Population('000)	3371	2667	1253	2156	2013	1153	3240	3084	2729	3899	3001	839	2479	1270	33154
	Per capita Income (Rs.)	32954	28746	33404	29677	36021	34707	45124	32082	28331	20766	29707	28109	30420	26077	31091
	(110.)	32334	20140	33404	23077	3002 I	34707	40124	32002	20001	20100	23101	20109	30420	20011	31031

Population are based on CSO.

Appendix 3.10

District wise Distribution of Gross State Domestic Product and Per Capita Income of Kerala at Factor Cost by Industry of Origin for the year 2005-06 (at Constant Prices)

Base Year 1999-00 (Rs.in Lakh)

															•	
SI.No	Industry of Origin	TVM	KLM	PTA	ALPA	KTM	IDK	EKM	TSR	PLKD	MLPM	KKD	WYD	KNR	KSD	Total
1	Agriculture & Allied	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Activities	98186	117367	84748	41524	154246	136840	110151	82929	114518	144035	83457	93797	115477	80932	1458214
2	Forestry and Logging	5862	9574	18248	0	957	30673	955	12182	16019	12158	4866	9263	5729	661	127147
3	Fishing	9769	29013	353	28000	1072	50	18348	18392	2159	7561	24915	12	6596	663	146902
4	Mining and Quarrying	2599	2406	1034	1613	1739	575	4893	3512	2787	5304	8642	710	9448	3043	48305
	Sub Total: Primary	116416	158360	104382	71137	158014	168138	134354	1E+05	135484	169058	121878	1E+05	137251	85299	1780568
5	Manufacturing	101248	36942	9578	47888	35574	19155	259962	76620	102617	35574	39678	6841	31469	2736	805882
5.1	Registered	52056	18994	4924	24621	18290	9848	133658	39394	52760	18290	20400	3517	16180	1407	414340
5.2	Unregistered	49192	17948	4653	23267	17284	9307	126304	37226	49857	17284	19278	3324	15289	1330	391542
6	Electricity, Gas & Water															
	Supply	33215	18188	9359	16142	17299	15441	22983	17493	12227	6813	14030	1323	6202	2789	193502
6.1	Electricity	27070	17321	8739	14762	15981	15250	20350	16137	11611	5814	12308	1166	5222	2350	174082
6.2	Gas	324	271	137	231	210	120	313	301	253	297	277	69	239	105	3145
6.3	Water Supply	5822	596	483	1149	1108	72	2319	1055	363	701	1445	88	741	334	16275
7	Construction	160244	95429	45549	89605	84975	28226	280912	2E+05	82437	116487	165769	17324	123207	44653	1493418
	Sub total : Secondary	294707	150559	64486	153635	137848	62822	563856	3E+05	197280	158873	219478	25488	160878	50178	2492802
8	Transport,Storage &															
	Communication	161313	93220	57580	82533	101127	22249	202607	1E+05	75939	84694	99846	14964	72787	35181	1236632
8.1	Railways	5059	4828	413	3770	3356	0	5291	3913	8233	5660	4921	0	4784	4883	55110
8.2	Transport by other means	97821	53951	30454	48410	56719	10719	117911	75460	43303	55158	58565	8874	36914	15617	709880
8.3	Communication	57927	33880	26657	29733	39985	14418	78619	52987	23954	23534	36304	5872	30618	14540	466028
8.4	Storage	505	561	56	618	1067	112	786	230	449	342	56	219	472	140	5614
	Total O Destaurants															
9	Trade, Hotel & Restaurants	195789	152836	61301	146581	141368	48999	265013	2E+05	159925	167640	222686	32944	183278	74854	2085076
10	Banking and Insurance	54787	33224	30455	36898	42062	17730	77150	57024	41317	33011	41902	11820	36365	18688	532433
11	Real estate ownership,															
	business & legal	101758	80680	42611	66779	59692	38432	91673	86040	73320	78590	75319	22260	61146	30255	908556
12	Public Administration	116764	41624	21770	33368	36219	8158	53026	38135	32385	26636	38627	5750	31796	7175	491432
13	Other Services	69343	56162	35971	48905	48764	33646	74326	74016	57500	91180	71767	18825	70610	29542	780557
	Sub Total:Tertiary	699755	457746	249689	415064	429232	169215	763794	6E+05	440387	481751	550147	1E+05	455981	2E+05	6034686
	GSDP	1110878	766665	418558	639836	725094	400175	1462005	1E+06	773151	809683	891504	2E+05	754110	3E+05	1E+07
	Mid year Population('000)	3371	2667	1253	2156	2013	1153	3240	3084	2729	3899	3001	839	2479	1270	33154
	Per capita Income							- 10								
	(Rs.)	32954	28746	33404	29677	36021	34707	45124	32082	28331	20766	29707	28109	30420	26077	31091

Population are based on CSO.

Appendix 3.12

District wise Distribution of Gross State Domestic Product and Per Capita Income of Kerala at Factor Cost by Industry of Origin for the Year 2006-07 (at constant prices) (Provisional)

Base Year 1999-00 (Rs. In lakhs) SI. **Industry of Origin** TVM **KLM** PTA **ALPA KTM** IKI EKM TSR **PLKD** MLPM KKD WYD **KNR** KSD **Total** No Agriculture & Allied Activities Forestry and Logging 3 Fishina 4 Mining and Quarrying **Sub Total: Primary** 5 Manufacturing 5.1 Registered 5.2 Unregistered Electricity, Gas & Water VlaguZ 6.1 Electricity 6.2 Gas 6.3 Water Supply 7 Construction Sub total: Secondary 29660 188157 Transport, Storage & Communication 8.1 Railways Transport by other 8.2 means 8.3 Communication 8.4 Storage Trade, Hotel & Restaurants 10 Banking & Insurance Real estate ownership, business & legal 12 Public Administration 13 Other Services Sub Total:Tertiary 611324 118436 505923 433657 1644718 364254 11452086 **GDDP** 1E+06 Mid yearPopulation('000) Per capita Income(Rs.)

Estimated Populations are provisional.

Appendix 3.13

District-wise Distribution of Gross State Domestic Product and Per Capita Income of Kerala at Factor Cost by Industry of Origin for the Year 2007-08 at Current Prices (Quick Estimate)

(Rs. Lakh)

SI.No	Industry of Origin	TVM	KLM	PTA	ALPA	KTM	IKI	EKM	TSR	PLKD	MLPM	KKD	WYD	KNR	KSKD	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Agriculture & Allied	-		-	-		_	-						-	-	
1	Activities	145792	174274	125839	61657	229032	203188	163569	123137	170043	213871	123921	139275	171467	120173	2165238
2	Forestry and Logging	8572	14001	26685	0	1400	44856	1397	17814	23426	17780	7115	13545	8378	967	185936
3	Fishing	18151	53906	655	52023	1992	93	34090	34172	4012	14048	46291	22	12255	1231	272942
4	Mining and Quarrying	6159	5701	2450	3824	4121	1362	11597	8323	6606	12570	20481	1683	22393	7212	114483
	Sub Total: Primary	178674	247882	155629	117504	236546	249499	210653	183447	204086	258270	197808	154525	214494	129583	2738599
5	Manufacturing	172436	62916	16311	81557	60586	32623	442740	130492	174766	60586	67576	11651	53595	4660	1372495
5.1	Registered	88174	32172	8341	41704	30980	16682	226392	66726	89365	30980	34555	5958	27405	2383	701816
5.2 6	Unregistered Electricity, Gas & Water	84262	30744	7971	39854	29606	15941	216348	63766	85401	29606	33022	5693	26190	2277	670679
	Supply	49180	26225	13545	23450	25078	22087	33578	25383	17653	10054	20548	1943	9167	4121	282014
6.1	Electricity	38586	24690	12457	21042	22779	21737	29007	23002	16551	8288	17543	1663	7444	3350	248139
6.2	Gas	615	515	260	438	399	228	595	573	480	564	527	130	454	200	5976
6.3	Water Supply	9979	1021	829	1970	1900	123	3976	1808	622	1202	2477	151	1269	572	27899
7	Construction	282016	167948	80163	157698	149550	49675	494382	279125	145082	205007	291741	30488	216834	78586	2628294
	Sub total : Secondary	503632	257089	110020	262705	235213	104385	970701	435000	337501	275647	379865	44083	279596	87368	4282803
8	Transport,Storage &															
	Communication	210746	121134	70665	107518	129042	26421	260137	168981	100946	115691	129848	19198	91088	43855	1595272
8.1	Railways	7322	6987	598	5456	4857	0	7657	5663	11916	8191	7122	0	6923	7067	79759
8.2	Transport by other means	156447	86284	48705	77429	90712	17143	188576	120684	69254	88214	93664	14191	59036	24977	1135316
8.3	Communication	46242	27046	21280	23735	31919	9114	62760	42299	19122	18787	28980	4687	24442	11607	372020
8.4	Storage	736	818	82	899	1554	164	1145	335	654	499	82	319	687	204	8177
9	Trade, Hotel & Restaurants	312278	243769	97774	233792	225478	78153	422689	369811	255077	267381	355178	52545	292324	119390	3325639
10	Banking and Insurance	82401	49969	45805	55495	63263	26666	116035	85765	62141	49649	63022	17778	54694	28108	800792
11	Real estate ownership, business & legal	181614	143994	76051	119184	106536	68592	163615	153561	130860	140265	134427	39728	109131	53998	1621557
12	Public Administration	186002	66306	34680	53155	57695	12995	84468	60748	51589	42430	61531	9159	50649	11429	782836
13	Other Services	97188	78713	50415	68543	68344	47157	104171	103736	80588	127793	100584	26383	98962	41404	1093981
	Sub Total:Tertiary	1070229	703887	375389	637687	650359	259984	1151115	9425603	681201	743209	844590	164791	696848	298184	9220077
	GSDP	1752535	1208858	641038	1017896	1122118	613868	2332468	1561049	1222788	1277125	1422263	363399	1190938	515135	16241479
	Mid yearPopulation ('000)	3427	2701	1259	2175	2037	1161	3297	3130	2775	4016	3052	860	2508	1296	33694
	Per capita Income (Rs.)	51139	44754	50916	46800	55087	52874	70745	49874	44064	31801	46601	42256	47486	39748	48209

Estimated Populations are provisional.

Appendix 3.14

District wise Distribution of Gross State Domestic Product and Per Capita Income of Kerala at Factor Cost by Industry of Origin for the Year 2007-08 (at constant prices) (Quick Estimate)

Base Year 1999-00 (Rs. In lakhs)

T	base fear 1999-00															s. in lakns)
SI.N o	Industry of Origin	TVM	KLM	PTA	ALPA	KTM	IKI	EKM	TSR	PLKD	MLPM	KKD	WYD	KNR	KSD	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Agriculture & Allied	-						-								
'	Activities	102221	122190	88231	43230	160584	142464	114685	86337	119224	149954	86886	97651	120223	84258	1518138
2	Forestry and Logging	6730	10992	20951	0	1099	35217	1096	13986	18392	13959	5586	10635	6578	759	145981
3	Fishing	10408	30910	376	29830	1142	53	19547	19594	2301	8055	26543	13	7027	706	156504
4	Mining and Quarrying	3840	3555	1528	2384	2570	849	7231	5189	4119	7838	12770	1049	13962	4497	71380
	Sub Total: Primary	123199	167647	111085	75444	165395	178583	142559	125107	144035	179806	131785		147790	90220	1892003
5	Manufacturing	127449	46502	12056	60280	44779	24112	327234	96448	129171	44779	49946	8611	39612	3445	1014424
5.1	Registered	65170	23778	6165	30824	22898	12329	167329	49318	66051	22898	25540	4403	20256	1761	518719
5.2	Unregistered	62279	22723	5891	29456	21882	11782	159905	47130	63120	21882	24407	4208	19357	1683	495705
6	Electricity, Gas & Water															
"	Supply	36372	19388	10014	17338	18541	16327	24828	18766	13050	7435	15194	1437	6779	3048	208517
6.1	Electricity	28521	18250	9207	15553	16837	16067	21441	17002	12234	6126	12967	1229	5502	2476	183413
6.2	Gas	456	381	193	325	295	169	441	424	356	418	391	97	336	148	4429
6.3	Water Supply	7395	757	614	1460	1408	91	2946	1340	461	891	1836	112	941	424	20675
7	Construction	231956	138136	65933	129705	123004	40857	406626	229578	119329	168617	239954	25076	178345	64636	2161752
	Sub total :															
	Secondary	395777	204025	88003	207323	186324	81296	758687	344792	261550	220831	305095	35125	224736	71129	3384693
8	Transport,Storage &															
0	Communication	210965	121844	76559	107837	132849	29795	266144	174482	98303	109247	130598	19670	95879	46155	1620328
8.1	Railways	5983	5710	489	4458	3969	0	6257	4628	9738	6694	5820	0	5657	5775	65178
8.2	Transport by other															
0.2	means	121351	66928	37779	60059	70362	13298	146273	93611	53718	68425	72652	11008	45793	19374	880630
8.3	Communication	83075	48588	38229	42640	57344	16374	112749	75990	34353	33751	52064	8421	43910	20852	668342
8.4	Storage	556	618	62	680	1174	124	865	253	494	377	62	241	519	154	6178
9	Trade, Hotel &															
	Restaurants	234848	183327	73531	175823	169571	58775	317883	278116	191830	201084	267112	39517	219842	89788	2501045
10	Banking & Insurance	68772	41705	38229	46316	52799	22256	96843	71579	51863	41437	52599	14837	45648	23459	668342
11	Real estate ownership,															
1	business & legal	129816	102925	54360	85192	76151	49029	116950	109764	93537	100260	96087	28397	78005	38597	1159070
	Public Administration	140687	50152	26231	40205	43639	9829	63889	45948	39020	32093	46540	6928	38310	8645	592116
13	Other Services	73529	59552	38142	51857	51707	35677	78812	78484	60971	96684	7698	19961	74872	31325	827671
	Sub Total:Tertiary	858617	559505	307052	507230	526716	205361	940521	758374	535525	580804	669034		552556	237968	7368572
	GSDP	1377593	931177	506140	789997	878435		1841768		941110	981448	1105914	273782		399317	12645268
	Mid yearPopulation('000)	3427	2701	1259	2175	2037	1161	3297	3130	2775	4016	3052	860	2508	1296	33694
	Per capita Income(Rs.)	40198	34475	40202	36322	43124	40072	55862	39242	33914	24438	36236	31835	38885	30812	37530

Estimated Populations are provisional.

Appendix 3.15
Population of States/Union Territories by sex and percentage share of population in total population - 2001

		То	tal population		Percentage	Population
SI.No.	India/State/Union Territory	Persons	Males	Females	share in total population	Population density (per sq.km.)
1	2	3	4	5	6	7
	INDIA	1027015247	531277078	495738169	100	324
1	Andaman & Nicobar Islands	356,265	192,985	163,280	0.03	43
2	Andhra Pradesh	75,727,541	38,286,811	37,440,730	7.37	275
3	Arunachal Pradesh	1,091,117	573,951	517,166	0.11	13
4	Assam	26,638,407	13,787,799	12,850,608	2.59	340
5	Bihar	82,878,796	43,153,964	39,724,832	8.07	880
6	Chandigarh	900,914	508,224	392,690	0.09	7903
7	Chatisgarh	20,795,956	10,452,426	10,343,530	2.03	154
8	Dadra & Nagar Haveli	220,451	121,731	98,720	0.02	449
9	Daman & Diu	158,059	92,478	65,581	0.02	1411
10	Delhi	13,782,976	7,570,890	6,212,086	1.34	9294
11	Goa	1,343,998	685,617	658,381	0.13	363
12	Gujarat	50,596,992	26,344,053	24,252,939	4.93	258
13	Haryana	21,082,989	11,327,658	9,755,331	2.05	477
14	Himachal Pradesh	6,077,248	3,085,256	2,991,992	0.59	109
15	Jammu & Kashmir	10,069,917	5,300,574	4,769,343	0.98	99
16	Jharkhand	26,909,428	13,861,277	13,048,151	2.62	338
17	Karnataka	52,733,958	26,856,343	25,877,615	5.14	275
18	Kerala	31,838,619	15,468,664	16,369,955	3.1	819
19	Lakshadweep	60,595	31,118	29,477	0.01	1894
20	Madhya Pradesh	60,385,118	31,456,873	28,928,245	5.88	196
21	Maharashtra	96,752,247	50,334,270	46,417,977	9.42	314
22	Manipur	2,388,634	1,207,338	1,181,296	0.23	107
23	Meghalaya	2,306,069	1,167,840	1,138,229	0.22	103
24	Mizoram	891,058	459,783	431,275	0.09	42
25	Naagaland	1,988,636	1,041,686	946,950	0.19	120
26	Orissa	36,706,920	18,612,340	18,094,580	3.57	236
27	Pondicherry	973,829	486,705	487,124	0.09	2029
28	Punjab	24,289,296	12,963,362	11,325,934	2.37	482
29	Rajasthan	56,473,122	29,381,657	27,091,465	5.5	165
30	Sikkim	540,493	288,217	252,276	0.05	76
31	Tamil Nadu	62,110,839	31,268,654	30,842,185	6.05	478
32	Tripura	3,191,168	1,636,138	1,555,030	0.31	304
33	Uttar Pradesh	1,66,052,859	87,466,301	78,586,558	16.17	689
34	Uttaranchal	8,479,562	4,316,401	4,163,161	0.83	159
35	West Bengal	80,221,171	41,487,694	38,733,477	7.81	904

Source: Census of India - 2001

Appendix 3.16
District-wise Population, Decadal Growth Rate, Sex-ratio and Population Density

	_					ntage	Sex-	ratio	Popul	ation
SI.	State/District	Ро	pulation 20	001	decadal	growth	•	o.of	densi	ty per
No.	Glate/District					te		es per	sq.l	
		Persons	Males	Females	1981-91	1991-01	1991	2001	1991	2001
1	2	3	4	5	6	7	8	9	10	11
	Kerala	31838619	15468664	16367955	14.32	9.42	1036	1058	749	819
1	Kasaragod	1203342	587763	615579	22.78	12.3	1026	1047	538	604
2	Kannur	2412365	1154144	1258221	16.63	7.13	1049	1090	759	813
3	Wayanad	786627	393397	393230	21.32	17.04	966	1000	315	369
4	Kozhikode	2878498	1398674	1479824	16.69	9.87	1027	1058	1118	1228
5	Malappuram	3629640	1759479	1870101	28.87	17.22	1053	1063	872	1022
6	Palakkad	2617072	1265794	1351278	16.52	9.86	1061	1068	532	584
7	Thrissur	2975440	1422047	1553393	12.2	8.7	1085	1092	903	981
8	Ernakulam	3098378	1535881	1562497	11.42	9.09	1000	1017	963	1050
9	ldukki	1128605	566405	562200	10.45	6.96	975	999	236	252
10	Kottayam	1952901	964433	988468	7.71	6.76	1003	1025	828	884
11	Alappuzha	2105349	1012572	1092777	7.28	5.21	1051	1079	1415	1489
12	Pathanamthitta	1231577	588035	643542	5.6	3.72	1062	1094	450	467
13	Kollam	2584118	1248616	1335502	10.68	7.33	1035	1070	967	1038
14	Thiruvananthapuram	3234707	1571424	1663283	13.5	9.78	1036	1058	1344	1476

Source: Census of India - 2001

Appendix 3.17
Age Group Population of Kerala 2001.

SI. No.	Age Group		opulation In Lakhs)		Pei	centag	е	All India Percent age
	-	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9
1	0-4	27.65	14.09	13.56	8.7	9.1	8.3	12.2
2	5-9	25.44	12.96	12.49	8	8.4	7.6	13.3
3	10-14	29.87	15.24	14.63	9.4	0.9	8.9	11.8
4	15-19	29.85	14.85	14.99	9.4	9.6	9.2	9.4
5	20-24	29.84	14.4	15.44	9.4	9.3	9.4	8.9
6	25-29	27.86	12.97	14.89	8.7	8.4	9.1	8.3
7	30-34	25.16	11.86	13.31	7.9	7.7	8.1	7
8	35-39	24.66	11.55	13.12	7.7	7.5	8	6.2
9	40-44	19.51	9.6	9.9	6.1	6.2	6	5.1
10	45-49	19.26	9.52	9.74	6.1	6.1	5.9	4.3
11	50-54	14.38	7.25	7.13	4.5	4.7	4.4	3.7
12	55-59	11.3	5.42	5.8	3.6	3.5	3.6	2.7
13	60-64	10.32	4.8	5.52	3.2	3.1	3.4	2.6
14	65-69	9.02	3.99	5.02	2.8	2.6	3.1	1.5
15	70-74	6.13	2.73	3.4	1.9	1.7	2.1	1.3
16	75-79	3.99	1.74	2.26	1.3	1.1	1.4	0.5
17	80+	3.89	1.57	232	1.2	1	1.4	0.8
18	Age not stated	0.26	0.14	0.12	0.1	0.1	0.1	0.4
	All Ages	318.41	154.68	163.73	100	100	100	

Sources: Senses of India 2001

Appendix 3.3

Gross National Product (GNP) at Factor Cost - All India

	At	Current Pric	es	At Const	tant (1999-20	00) Prices
Year -	GNP		Per Capita	GNP (Rs.		Per Capita GNP
	(Rs.Crore)	% change	GNP (Rs.)	Crore)	% Change	(Rs.)
1999-2000	1776861		17751	1776861		17751
2000-01	1907451	7.3	18718	1847842	4.1	18134
2001-02	2077378	8.9	20014	1957384	5.9	18857
2002-03	2238884	7.8	21221	2033781	3.9	19278
2003-04	2525146	12.8	23533	2208196	8.6	20580
2004-05	2833558	12.2	25996	2367711	7.2	21722
2005-06	3249554	14.7	29381	2593160	9.5	23446
2006-07*	3760285	15.7	33514	2845156	9.7	25358
2007-08**	4281795	13.9	37626	3109361	9.3	27323

^{*} Quick Estimate

Source: Central Statistical Organisation

Appendix 3.4

Net National Product (NNP) at Factor Cost - All India

	At	Current Pric	es	At Const	ant (1999-20	00) Prices
Year	NNP		Per Capita	NNP (Rs.		Per Capita NNP
	(Rs.Crore)	% change	NNP (Rs.)	Crore)	% Change	(Rs.)
1999-2000	1589672		15881	1589672		15881
2000-01	1700467	7.0	16688	1647903	3.7	16172
2001-02	1849360	8.8	17782	1743466	5.8	16764
2002-03	1994248	7.8	18885	1805830	3.6	17101
2003-04	2239939	12.3	20895	1963544	8.7	18317
2004-05	2526408	12.8	23199	2104520	7.2	19325
2005-06	2870750	13.6	25956	2306894	9.6	20858
2006-07*	3325817	15.9	29642	2530495	9.7	22553
2007-08**	3789482	13.9	33299	2767682	9.4	24321

^{*} Quick Estimate

Source: Central Statistical Organisation

^{**} Revised Estimate

^{**} Revised Estimate

Appendix 3.5

Gross State Domestic Product (Kerala) at Factor Cost by Industry of Origin from 2000-01 to 2007-08

(At Current Prices)

(Rs. Lakh)

SI. No	Industry of Origin/Year	2000-01	2001-02	2002-03	2003-04	2004-05 -	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	Final 8	Prov. 9	Quick 10
-	Agriculture & Allied						-	9	
1	Activities	1142449	1196739	1323695	1414462	1510490	1699022	1956352	2165238
2	Forestry and Logging	124172	135847	129432	135112	133391	150031	168205	185936
3	Fishing	155234	161836	146996	149058	181422	248196	264409	272942
4	Mining and Quarrying	32871	35588	40919	46880	46624	70254	81902	114483
	Sub Total: Primary	1454726	1530010	1641042	1745512	1871927	2167503	2470868	2738599
5	Manufacturing	703280	683297	734352	818869	913059	1009504	1197663	1372495
5.1	Registered	406510	386443	408952	453147	471974	518883	614612	701816
5.2	Un-registered	296770	296854	325400	365722	441085	490621	583051	670679
6	Electricity, Gas & Water Supply	167338	187229	184752	219742	217727	242261	260109	282014
6.1	Electricity	155080	172896	167065	197711	198937	218005	231999	248139
6.2	Gas	1322	1542	1888	2238	3505	3928	4792	5976
6.3	Water Supply	10936	12791	15799	19793	15285	20328	23318	27899
7	Construction	703885	785806	902533	1038095	1413918	1735314	2119725	2628294
	Sub total : Secondary	1574503	1656332	1821637	2076706	2544704	2987079	3577497	4282803
8	Transport,Storage & Communication	685386	758289	830509	957616	1181077	1269059	1412412	1595272
8.1	Railways	37967	38151	45356	49330	55590	59994	70140	79759
8.2	Transport by other means	502254	532947	581492	654032	819804	886501	1005322	1135316
8.3	Communication	139960	182015	198408	248969	299198	315552	329486	372020
8.4	Storage	5205	5176	5253	5285	6485	7012	7464	8177
9	Trade, Hotel & Restaurants	1545630	1648911	1869796	2130962	2242872	2605153	2935496	3325639
10	Banking and Insurance	348730	428254	550743	596687	603276	601163	711724	800792
11	Real estate ownership, Business, legal	632479	723035	818727	927400	1068777	1245038	1412644	1621557
12	Public Administration	347612	349900	408175	432104	591671	612079	714603	782836
13	Other Services	676817	697644	748847	802816	921687	951868	1011760	1093981
	Sub Total:Tertiary	4236654	4606033	5226797	5847585	6609360	7284360	8198639	9220077
	Gross State Domestic Product	7265883	7792375	8689476	9669803	11025991	12438942	14247004	16241479
	Mid Year Population('000)	31757	31972	32303	32591	32875	33154	33426	33694
	Per capita Income (Rs.)	22880	24372	26900	29670	33539	37519	42623	48203

Subject to the change on receipt of final results.

Population figures are provided by RGI through CSO.

Appendix 3.6

Gross State Domestic Product (Kerala) at Factor Cost by Industry of Origin for the Years From 2000-2001 to 2007-08 (At Constant Prices)

Base year 1999-00

SI.N	Industry of Origin/Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
0.						_	Final	Provisional	Quick
1	2	3	4	5	6	7	8	9	10
1	Agriculture	1307022	1317752	1339972	1312119	1409171	1458214	1497575	1518138
2	Forestry and Logging	118329	124737	133489	137579	125111	127147	139430	145981
3	Fishing	149746	154723	153429	154532	153552	146902	154930	156504
4	Mining and Quarrying	22284	24900	28317	33031	33096	48305	54288	71380
	Sub Total: Primary	1597381	1622112	1655207	1637261	1720930	1780568	1846223	1892003
5	Manufacturing	680661	650026	680973	718858	753756	805882	914367	1014424
5.1	Registered	393493	367571	379226	397786	389628	414340	469231	518719
5.2	Un-registered Electricity, Gas & Water	287168	282455	301747	321072	364128	391542	445136	495705
6	Supply	161981	178077	171313	192865	179744	193502	198662	208517
6.1	Electricity	150114	164452	154921	173557	164228	174082	177122	183413
6.2	Gas	1280	1466	1750	1961	2894	3145	3672	4429
6.3	Water Supply	10587	12159	14642	17347	12622	16275	17868	20675
7	Construction	639438	713972	807732	924641	1219705	1493418	1770257	2161752
	Sub total : Secondary Sector	1482080	1542075	1660018	1836364	2153205	2492802	2883286	3384693
8	Transport,Storage & Communication	672839	746894	827604	948211	1127344	1236632	1397287	1620328
8.1	Railways	38946	40069	45698	48262	52987	55110	60076	65178
8.2	Transport by other means	480219	506129	532365	573766	680531	709880	787065	880630
8.3	Communication	148698	195816	244850	321683	388443	466028	544303	668342
8.4	Storage	4976	4880	4691	4500	5383	5614	5843	6178
9	Trade, Hotel & Restaurants	1477542	1554615	1669959	1814210	1861844	2085076	2298195	2501045
10	Banking and Insurance	341660	387224	478646	473923	503021	532433	638362	668342
11	Real estate ownership, Business, Legal	604692	684783	741891	802233	818118	908556	1023405	1159070
	Public Administration	332330	329664	364338	367288	486113	491432	561530	592116
13	Other Services	652361	663532	683245	706343	771490	780557	803798	827671
	Sub Total:Tertiary	4081424	4366712	4765683	5112208	5567930	6034686	6722577	7368572
	Gross State Domestic Product	7160885	7530899	8080908	8585833	9442065	10308056	11452086	12645268
	Population('000)	31757	31972	32303	32591	32875	33154	33426	33694
	Per capita Income (Rs.)	22549	23555	25016	26344	28721	31091	34261	37530

Subject to the change on receipt of final results.

Population figures are provided by RGI through CSO.

Appendix 3.7

Net State Domestic Product (Kerala) at Factor Cost by Industry of Origin for the Years from 2000-2001 to 2007- 08 (At Current Prices)

Rs. Lakhs

							RS. La		
SI.N	Industry of Origin/Year	2000- 01	2001- 02	2002- 03	2003- 04	2004-05 -	2005- 06	2006- 07	2007- 08
0							Final	Prov	Quick
1	2	3	4	5	6	7	8	9	10
1	Agriculture & Allied Activities	906201	952787	1073993	1157326	1248540	1420108	1635194	1809789
2	Forestry and Logging	119916	131211	124790	129950	128474	144918	162473	179599
3	Fishing	138667	141476	127141	126814	149533	216019	230130	237557
4	Mining and Quarrying	28920	31665	37568	43298	43522	65405	76249	106581
	Sub Total: Primary	1193704	1257139	1363492	1457388	1570069	1846450	2104046	2333526
5	Manufacturing	577131	542842	581421	645867	705185	762389	904506	1036636
5.1	Registered	334881	306240	322486	357760	360734	387584	459090	524277
	Un-registered	242250	236602	258935	288107	344451	374805	445416	512359
6	Electricity, Gas & Water Supply	91012	93659	101157	115968	107777	111962	120213	130338
6.1	Electricity	84345	86489	91473	104341	98476	100752	107219	114678
6.2	Gas	719	771	1034	1181	1735	1815	2214	2762
6.3	Water Supply	5948	6399	8650	10446	7566	9395	10780	12898
7	Construction	685637	763348	875606	1006745	1375358	1687591	2061430	2556013
	Sub total : Secondary	1353780	1399849	1558184	1768580	2188320	2561942	3086149	3722987
8	Transport,Storage & Communication	547333	597937	637280	754354	909154	946770	1054267	1190499
8.1	Railways	27947	28269	34322	37855	41725	45787	54934	62468
8.2	Transport by other means*	403266	419709	444645	514575	623136	647825	734867	829651
8.3	Communication	111290	145198	153509	197096	238399	246820	257719	290989
8.4	Storage	4830	4761	4804	4828	5894	6338	6747	7391
9	Trade, Hotel & Restaurants	1504625	1603496	1820671	2079435	2177701	2532875	2854604	3233364
	Banking and Insurance	337294	414837	535023	579822	585191	582639	691274	777783
11	Real estate ownership, Business, legal	506729	565042	634562	712166	804964	938052	1064637	1221275
12	Public Administration	286272	290479	318121	365440	440984	450041	525403	575593
13	Other Services	651597	667558	717964	754849	878841	899573	956175	1033879
	Sub Total:Tertiary	3833850	4139349	4663621	5246066	5796835	6349950	7146360	8032393
	Net State Domestic Product	6381334	6796337	7585297	8472034	9555224	10758342	12336555	14088906
	Population('000)	31757	31972	32303	32591	32875	33154	33426	33694
	Per capita Income (Rs.)	20094	21257	23482	25995	29065	32450	36907	41814

Subject to the change on receipt of final results.

Population figures are provided by RGI through CSO.

Appendix 3.8

Net State Domestic Product (Kerala) at Factor cost by Industry of Orgin for the years from 2000-01 to 2007-08 (At constant Prices)

Base Year 1990-2000 Rs. In Lakhs

	Dase Teal 1990-2000							III Lakiis	-	
SI.No.	Industry of Origin/	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	
							Final	Provl.	Quick	
1	Agriculture & Allied	1072501	1082832	1107554	1081358	1187700	1234515	1267838	1285294	
2	Forestry & Logging	114125	120367	129242	132994	121081	123156	135053	141398	
3	Fishing	133834	136300	135466	134967	127284	120893	127500	128795	
4	Mining & Quariying	18453	21308	25338	29947	30627	44663	50195	65998	
SUB TOTAL OF PRIMARY SECTOR		1338913	1360807	1397600	1379266	1466692	1523227	1580586	1621485	
5 Manufacturing		560539	522958	545158	571291	589701	621898	705646	782928	
5.1	Registered	325537	294951	302027	314970	299138	312813	354254	391616	
5.2	Un-registered	235002	228007	243131	256321	290563	309085	351392	391312	
6	Electricity, Gas & Water Supply	88150	92566	96916	103505	92109	95500	98046	103232	
6.1	Electricity	81692	85484	87643	93143	84158	85916	87416	90521	
6.2	Gas	697	762	990	1052	1483	1552	1812	2508	
6.3	Water Supply	5761	6320	8283	9310	6468	8032	8818	10203	
7	Construction	622145	693577	783534	897042	1187815	1455787	1725650	2107280	
SUB TOTAL OF SECONDARY										
SECTOR		1270834	1309101	1425608	1571838	1869625		2529342		
8	Transport, Storage & Commnication	541429	599471	652848	768789	900771	979712	1109989	1292769	
8.1	Railways	29243	30684	35570	39063	43636	46094	50608	54906	
8.2	Transport by other means	386438	401938	407546	447625	511775	513219	569021	636665	
8.3	Communication	121129	162344	205436	277986	340438	415284	485036	595569	
8.4	Storage	4619	4505	4296	4115	4922	5115	5324	5629	
9	Trade, Hotel & Restaurent	1438691	1513371	1625832	1769680	1809506	2029881	2237358	2434839	
10	Banking & Insurance	330804	375065	464623	459350	488432	518281	623445	652724	
11	Real estate Ownersgip, Business, legal	483732	543710	582301	623184	620351	691085	778444	881637	
12	Publ;ic Administration	272555	274634	283462	309251	364357	367363	419764	442628	
13	Other Services	628224	636099	655637	665385	737783	741649	763731	786415	
SUB TOTA	AL OF TERTIARY SECTOR	3695435	3942350	4264703	4595639	4921200	5327971	5932731	6491012	
NET STAT	E DOMESTIC PRODUCT	6305182	6612258	7087911	7546743	8257517	9024383	10042659	11105937	
Mid year Population (2000)		31757	31972	32303	32591	32875	33154	33426	33694	
Per capita Income (in Rs.)		19854	20681	21942	23156	25118	27220	30044	32961	

Subject to the change on receipt of final results. Population figures are Provided by RGI through CSO

Appendix 3.9

District wise Distribution of Gross State Domestic Product and Per Capita Income
of Kerala at Factor Cost by Industry of Origin for the year 2005- 06 (at Current Prices)

(Rs. In lakhs)

SI.No	Industry of Origin	TVM	KLM	PTA	ALPA	KTM	IDK	EKM	TSR	PLKD	MLPM	KKD	WYD	KNR	KSD	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Agriculture & Allied Activities	114400	136749	98744	48381	179717	159438	128349	96623	133429	167821	97238	109286	134547	94297	1699022
2	Forestry and Logging	6917	11297	21532	0	1129	36194	1127	14374	18902	14346	5741	10930	6761	780	150031
3	Fishing	16505	49019	596	47306	1812	84	31000	31074	3648	12775	42094	20	11144	1119	248196
4	Mining and Quarrying	3780	3499	1503	2346	2529	836	7117	5107	4054	7714	12568	1033	13742	4426	70254
	Sub Total: Primary	141602	200564	122375	98034	185188	196552	167592	147179	160034	202656	157642	121268	166193	100623	2167503
5	Manufacturing	126831	46276	11998	59988	44562	23995	325646	95980	128545	44562	49704	8570	39420	3428	1009504
5.1	Registered	65191	23786	6167	30833	22905	12333	167382	49334	66072	22905	25548	4405	20262	1762	518883
5.2	Unregistered	61640	22490	5831	29154	21657	11662	158265	46646	62473	21657	24156	4165	19158	1666	490621
6	Electricity, Gas & Water Supply	41575	22774	11718	20210	21659	19336	28773	21903	15310	8528	17565	1656	7763	3491	242261
6.1	Electricity	33900	21691	10944	18487	20013	19097	25485	20209	14541	7281	15413	1461	6540	2943	218005
6.2	Gas	404	338	171	288	262	150	391	376	315	371	346	86	298	131	3928
6.3	Water Supply	7271	744	604	1435	1384	89	2897	1317	453	876	1805	110	925	417	20328
7	Construction	186199	110887	52927	104119	98739	32797	326413	184290	95789	135354	192620	20130	143163	51886	1735314
	Sub total : Secondary	354605	179936	76643	184316	164961	76129	680832	302173	239644	188445	259888	30355	190347	58805	2987079
8	Transport,Storage & Communication	167521	96271	56601	85466	102892	21257	207223	134660	79820	91406	103145	15331	72626	34839	1269059
8.1	Railways	5507	5255	450	4104	3654	0	5759	4260	8963	6161	5357	0	5207	5315	59994
8.2	Transport by other means	122160	67374	38031	60459	70831	13386	147248	94235	54077	68881	73136	11081	46098	19503	886501
8.3	Communication	39223	22941	18050	20132	27074	7731	53234	35878	16219	15935	24582	3976	20732	9845	315552
8.4	Storage	631	701	70	771	1332	140	982	287	561	428	70	273	589	175	7012
9	Trade, Hotel & Restaurants	244624	190958	76591	183142	176629	61221	331115	289693	199815	209454	278230	41161	228993	93525	2605153
10	Banking and Insurance	61860	37513	34387	41661	47492	20019	87109	64385	46650	37272	47312	13346	41059	21101	601163
11	Real estate ownership, business & legal	139444	110559	58392	91510	81799	52665	125624	117905	100475	107696	103214	30503	83791	41460	1245038
12	Public Administration	145430	51843	27115	41560	45110	10161	66043	47497	40336	33175	48109	7161	39602	8936	612079
13	Other Services	84562	68488	43866	59639	59466	41031	90638	90261	70120	111192	87517	22956	86107	36025	951868
	Sub Total:Tertiary Sector	843442	555632	296952	502978	513388	206354	907752	744401	537216	590195		130459	552178	235886	
		1339649	936133	495969	785329	863537	479035	1756176	1193753	936893	981295	1E+06	282082	908718	395314	12438942
	GSDP	1333043	330133	733303	100029	303337	713033	1730170	1199733	330033	301233	12+00	202002	300710	333314	12430342
	Mid year Population('000)	3371	2667	1253	2156	2013	1153	3240	3084	2729	3899	3001	839	2479	1270	33154
	Per capita Income (Rs.)	39740	35101	39583	36425	42898	41547	54203	38708	34331	25168	36157	33621	36657	31127	37519

Populations are based on CSO.

Appendix 6.1 Water Quality of Medium and Minor Rivers –Kerala

Sl.No	Location	Mean Values				
		pН	BOD	Total	Faecal	
				Coliform/100 ml	Coliform/100 ml	
1	Periyar					
	Alwaye-Eloor	6.6	1.7	668	290	
	Kalady	6.8	0.8	738	200	
	Sewage Discharge point	6.8	1.0	804	230	
2	Chaliyar					
	Koolimadu	6.7	0.5	1242	688	
	Chungappally	6.9	0.5	813	391	
3	Kallada					
	Perumthottamkadavu, Punalur	7.2	1.1	641	327	
4	Moovattupuzha					
	Vettikkattumukku	6.8	1.5	556	173	
5	Chalakkudy					
	Pulikkalkadavu	6.6	2.0	635	148	
6	Karamana					
	Moonnattumukku	6.8	7.4	20733	14825	
7	Pampa					
	Chengannur	6.1	0.6	1975	1300	
	Thakazhi	6.2	0.5	1775	1100	
	Pampa down	6.2	1.1	2000	1275	
8	Meenachil					
· ·	Kidangoor	6.2	0.7	2100	1325	
9	Manimala					
	Kallooppara	6.2	0.6	1625	975	
	Thondra	6.2	0.7	1900	1375	
10	Achencoil					
	Thumpamon	6.3	0.6	1442	1033	
	Chennithala	6.2	0.7	1825	1250	
11	Vamanapuram	6.7	1.3	3050	1655	
12	Amaravila	7.0	1.4	5725	3850	
13	Ayur	7.1	1.0	1080	643	
14	Thirurangady	6.5	0.8	2550	1075	
15	Kuttiadi Estate	6.4	0.5	285	83	
16	Valayam	6.5	0.5	435	98	
17	Thaliparamba	6.9	0.7	963	338	
18	Hosdurg	7.2	0.3	550	68	
19	Kakkadavu	6.9	0.5	685	138	
20	Padiyathadka	6.8	0.3	725	160	
21	Irumpanam	6.6	0.3	645	263	
41	н ишранаш	0.0	0.5	0-13	203	

Source: Status of Water Quality in India, 2007, CPCB, July 2008

Appendix 6.2 Ground Water Quality Parameters of Metropolitan Cities-Kochi

Sl.No	Parameter	Range(mg/L)	% distribution of samples Kochi
1	TDS	0-500	80(72)*
		500-2000	20(28)
		>2000	-(-)
2	Alkalinity	0-200	88(76)
	·	200-600	12(24)
		>600	-(-)
3	Hardness	0-300	88(88)
		300-600	12(12)
		>600	-(-)
4	Calc ium	0-75	88(84)
		75-200	12(16)
		>200	-(-)
5	Magnesium	0-30	100(96)
	C	30-75	-(4)
		>75	-(-)
6	Chloride	0-250	92(92)
		250-1000	8(8)
		>1000	-(-)
7	Sulphate	0-200	100(100)
	1	200-400	-(-)
		>400	-(-)
8	Nitrate	0-45	92(96)
		45-100	4(4)
		>100	4(-)
9	Fluoride	0-1.0	96(100)
		1.0-1.5	4(-)
		>1.5	-(-)
	Percentage	Distribution of sample	s for metal ions
Sl.No	Parameter	Range μg/L	% distribution of samples Kochi
10	Iron	0-300	24(-)
		300-1000	44(52)
		>1000	32(48)
11	Manganese	0-100	76(40)
		100-300	16(48)
		>300	8(12)
12	Copper	0-50	100(96)
		50-1500	-(4)
		>1500	-(-)
13	Chromium	0-50	100(100)
		>50	-(-)
14	Lead	0-50	100(92)
		>50	-(8)
15	Cadmium	0-10	100(92)
		>10	-(8)
16	Zinc	0-5000	100(100)
		5000-15000	-(-)
		>15000	-(-)

*Figures in parenthesis represent post monsoon data

Source: Status of Ground Water Quality in India Part II, CPCB 2008

Appendix 6.3 ACCESS TO SAFE DRINKING WATER IN HOUSEHOLDS IN INDIA

Sl.	States/Union	Tap/Handpump/Tubewell									
No.	States/Union Territorries		1981			1991			2001		
110.		Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	
1	Jammu & Kashmir	40.3	28.0	86.7	NA	NA	NA	65.2	54.9	95.7	
2	Himachal Pradesh	44.5	39.6	89.6	77.3	75.5	91.9	88.6	87.5	97.0	
3	Punjab	84.6	81.8	91.1	92.7	92.1	94.2	97.6	96.9	98.9	
4	Chandigarh	99.1	94.4	99.4	97.7	98.1	97.7	99.8	99.9	99.8	
5	Uttranchal							86.7	83.0	97.8	
6	Haryana	55.1	42.9	90.7	74.3	67.1	93.2	86.1	81.1	97.3	
7	Delhi	93.0	62.3	94.9	95.8	91.0	96.2	97.2	90.1	97.7	
8	Rajasthan	27.1	13.0	78.7	59.0	50.6	86.5	68.2	60.4	93.5	
9	Uttar Pradesh	33.8	25.3	73.2	62.2	56.6	85.8	87.8	85.5	97.2	
10	Bihar	37.6	33.8	65.4	58.8	56.5	73.4	86.6	86.1	91.2	
11	Sikkim	30.3	21.7	71.9	73.1	70.8	92.8	70.7	67.0	97.1	
12	Arunachal Pradesh	43.9	40.2	87.9	70.0	66.9	88.2	77.5	73.7	90.7	
13	Nagaland	45.6	43.4	57.2	53.4	55.6	45.5	46.5	47.5	42.3	
14	Manipur	19.5	12.9	38.7	38.7	33.7	52.1	37.0	29.3	59.4	
15	Mizoram	4.9	3.6	8.8	16.2	12.9	19.9	36.0	23.8	47.8	
16	Tripura	27.3	22.2	67.9	37.2	30.6	71.1	52.5	45.0	85.8	
17	Meghalaya	25.1	14.3	74.4	36.2	26.8	75.4	39.0	29.5	73.5	
18	Assam	NA	NA	NA	45.9	43.3	64.1	58.8	56.8	70.4	
19	West Bengal	69.7	65.8	79.8	82.0	80.3	86.2	88.5	87.0	92.3	
20	Jharkhand							42.6	35.5	68.2	
21	Orissa	14.6	9.5	51.3	39.1	35.3	62.8	64.2	62.9	72.3	
22	Chhattisgarh							70.5	66.2	88.8	
23	Madhya Pradesh	20.2	8.1	66.7	53.4	45.6	79.4	68.4	61.5	88.6	
24	Gujarat	52.4	36.2	86.8	69.8	60.0	87.2	84.1	76.9	95.4	
25	Daman & Diu	54.5	46.4	67.0	71.4	56.9	86.8	96.3	94.9	98.9	
26	Dadra & Nagar Haveli	19.4	16.8	54.3	45.6	41.2	91.0	77.0	70.5	96.1	
27	Maharashtra	42.3	18.3	85.6	68.5	54.0	90.5	79.8	68.4	95.4	
28	Andhra Pradesh	25.9	15.1	63.3	55.1	49.0	73.8	80.1	76.9	90.2	
29	Karnataka	33.9	17.6	74.4	71.7	67.3	81.4	84.6	80.5	92.1	
30	Goa	22.5	8.6	52.3	43.4	30.5	61.7	70.1	58.3	82.1	
31	Lakshadweep	2.2	1.0	3.7	11.9	3.4	18.8	4.6	4.6	4.6	
32	Kerala	12.2	6.3	39.7	18.9	12.2	38.7	23.4	16.9	42.8	
33	Tamil Nadu	43.1	31.0	69.4	67.4	64.3	74.2	85.6	85.3	85.9	
34	Pondicherry	80.6	76.9	84.2	88.8	92.9	86.1	95.9	96.6	95.5	
35	Andaman & Nicobar	51.6	36.3	92.0	67.9	59.4	90.9	76.7	66.8	97.8	
	Islands										
	ALL INDIA	38.2	26.5	75.1	62.3	55.5	81.4	77.9	73.2	90.0	

 $[\]textit{N.A.}-\textit{Not available as no census was carried out in Assam during 1981 and in Jammu~\&~$ Kashmir during 1991.

Created in 2001. Uttaranchal Pradesh, Jharkhand and Chattisgath for 1981 and 1991 are included under Uttar Pradesh, Bihar and Madhya Pradesh respectively. Source: Economic Survey 2007-2008

Appendix 6.4

Western Ghat Development Programme for Natural Resource Management (Physicial and Financial Achievements, 2007-08)

SI. No.	Component	Expenditure (in lakh Rs.)
1	Integrated Development of Watershed	1667.54
2	Forestry Schemes	197.69
3	Other Schemes	160.46
	TOTAL	2025.69

SI. No	Component	Unit	Achievement
1	Soil Conservation	На.	4520
2	Distribution of Milk Cows	Nos	526
3	Fodder Development	На.	440
4	Construction of Wells/Ponds	Nos	190
5	Check Dams/Cross Bars/ Weirs/Foot slaps	Nos	2995
6	Foot Bridges	Nos	65

Source: Western Ghat Development Cell

Appendix 6.5

Division-wise Area of Forest in Kerala (as on 31- 03 - 2008) - Provisional

(Area in Sq.kms)

				(/-	rea in Sq.kms)
SI. No	Division	Reserve Forest	Proposed for Reserve Forest	Vested Forest	Total
1	2	3	4	5	6
1	Thiruvananthapuram	359.1240	5.8253	3.6510	368.6003
2	Thenmala	123.4320		7.7350	131.1670
3	Achenkovil	284.3298		0.2082	284.5380
4	Ranni	1050.3360	7.1600	1.5680	1059.0640
5	Punalur	280.0510		0.1690	280.2200
6	Konni	320.6430	11.0210		331.6640
7	Kothamangalam	316.8451		0.1576	317.0027
8	Munnar	371.3950		2.4500	373.8450
9	Kottayam	627.2870		31.9670	659.2540
10	Vazhachal	413.9440			413.9440
11	Chalakkudy	279.7098			279.7098
12	Malayattoor	617.2411	0.5248		617.7659
13	Thrissur	293.7430		4.3137	298.0567
14	Mannarkkad	150.7322		271.7213	422.4535
15	Nilambur North	57.9196	0.0171	340.7032	398.6399
16	Nilambur south	267.3894		57.8888	325.2782
17	Palakkad	73.4100		162.1896	235.5996
18	Nenmara	205.5173		150.2554	355.7727
19	Kozhikode	29.1043	22.9660	243.0856	295.1559
20	Wayanad North	134.0240	15.0640	65.8527	214.9407
21	Wayanad South	73.7947	6.8449	266.8633	347.5029
22	Kannur	207.3923		102.2342	309.6265
23	Mankulam	90.0600			90.0600
24	Thiruvananthapuram WL	181.0000			181.0000
25	Idukki	130.5240			130.5240
26	Periyar East	618.0000			618.0000
27	Periyar West	157.0000			157.0000
28	Agasthyavanam	31.0000			31.0000
29	Parambikulam	274.1408			274.1408
30	Wayanad	344.4400			344.4400
31	Silent Valley	148.7665		88.2329	236.9994
32	Sendurney	166.4200		4.5800	171.0000
33	Eravikulam	241.0770			241.0770
34	Peechi	122.0370			122.0370
35	Aralam	22.3572		32.6428	55.0000
36	Marayoor	13.9720	47.2600	0.0760	61.3080
	Total:	9078.1591	116.6831	1838.5453	11033.3875

Source : Forest Department

^{*} As per the reports from the DFO, Munnar an area of 244.37 sq.km has been excluded from the total area viz KDHP resumed area-97sq.km, Chinnakanal unreserve-47sq.km, Pallivasal unreserve - 79 sq.km and Revenue land 21.37 sq.km.

Appendix 6.6
Species-wise Area Under Forest Plantation

SI.No.	Species-wise Area Name of Species	2006-07	2007-08	% to total (2007-08)
1	2	3	4	5
1	Teak	75581.132	74183.295	
2	Rosewood	1015.507	970.507	
3	Mahagani	97.450	97.450	
4	Sandalwood	100.840	100.840	
5	Mangium	1304.267	1221.267	
6	Others	802.591	869.481	
O	Sub Total	78901.787	77442.840	42.76
II	SOFT WOOD	70301.707	77442.040	42.70
1	Eucalyptus	14525.234	13565.984	
2	Green villa Robusta Pine	802.940	802.940 124.576	
3 4	Albizzia	124.576 181.640	148.040	
5	Rubber	199.684	199.684	
6	Balsa	62.240	62.240	
7	Wattle	6389.490	6389.480	
8	Murukku	48.480	48.480	
9	Matti	444.160	444.160	
10	Others	11595.663	11378.373	
	Sub total	34374.107	33163.957	18.31
III	BAMBOO & REEDS			
1	Bamboo	2952.180	3888.350	
2	Reeds	469.770	479.770	
3	Cane	2325.084	2436.684	
	Sub Total	5747.034	6804.804	3.76
IV	PLANTATION CROPS			
1	Coffee	30.640		
2	Pepper	319.980	304.980	
3	Cinnamon	3.740	3.740	
4	Medicinal Plants	1497.583	1573.193	
	Sub Total	1851.943	1881.913	1.04
٧	MIXED PLANTATIONS			
1	Cashew	6487.549	6364.006	
2	Fuel wood	537.589	682.269	
3	Agavu	46.830	46.830	
4	Alnus	74.350	74.350	
5	Accacia	7079.717	7238.277	
6	Sesbania	21.070	21.070	
7	Casurina	121.442	121.442	
8	Kongograss	140.120	140.120	
9	Malbury	2.000	2.000	
10	Palm Trees	13.500	13.500	
11	Others	44282.418	47106.270	
• •	Sub Total	58806.585	61810.134	2/ 12
	GRAND TOTAL	179681.456	181103.648	34.13 100.00
	SKAND IOTAL	17 300 1.430	101103.040	100.00

Source : Forest Department

Appendix 6.7

Production of Major Forest Produce (1999-00 to 2007-08)

SI. No.	Item	Unit	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8	9	10	11	12
1	Timber(round logs)	Cum.	44519	31299	38915	62591	116280.850	45012.198	42705.69	26774.36	48627.829
2	Timber(round poles)	No.	455389	129349	245254	433670	753025	438611	377953	296013	352896
3	Timber(Swan & Squard)	Cum.	7	3	9	11	126.310	45.086	603.029	17.287	23.354
4	Fire wood	MT.	14191	8105	11182	19085	31575	10636	13955	12748.397	12676.413
5	Cardamom	Kg.	4249	4687	2911	3739	1145	11018	1808	2053	38
6	Honey	Kg.	41734	47976	57069	36310	40051	59464	56983	192835.55	224177.95
7	Reeds	No.	39576143	49047940	32610487	33076299	42945235	34190835	22901309	21403530	14352181
8	Bamboo	No.	627805	1390456	1305620	151722	946626	1272444	1824596	1237030	1551168
9	Jungle Wood Poles	No.		212	2397	7696	10464	14196	21131	21221	2044
10	Sandal wood	Kg.	97028	405	23968	10099	88817.238	54622.300	78555	3159.35	17537.1

Source : Forest Department

^{*} Provisional

Appendix 6.8

Santuaries, National Parks, Biosphere Reserves and other Protected Areas in Kerala

SI. No.	Name of National Park/ Wildlife Sanctuary/	Area In Sq. Km.	Year of Formation
	Biosphere Reserve		
National	Parks		
1	Eravikulam Wildlife Sanctuary	97	1978
2	Silent Valley National Park*	89.52	1984
3	Pambadum Shola National Park	1.318	2003
4	Mathikettan Shola National Park	12.817	2003
5	Anamudi Shola National Park	7.5	2003
Wildlife S	anctuaries		
6	Peryar Wildlife Sanctuary**		
	(Core area (350sq.km) has been declared as		
	Periyar National Park in 1982	777	1950
7	Wayanad Wildlife Sanctuary	344.44	1973
8	Parambikulam Wildlife Sanctuary	285	1973
9	Neyyar Wildlife Sanctuary	128	1958
10	Peechi-Vazhani Wildlife Sanctuary	125	1958
11	Shendurney Wildlife Sanctuary	171	1984
12	Chinnar Wildlife Sanctuary	90.44	1984
13	Idukki Wildlife Sanctuary	70	1976
14	Aralam Wildlife Sanctuary	55	1984
15	Peppara Wildlife Sanctuary	53	1983
16	Chimmony Wildlife Sanctuary	85	1984
17	Kurinjimala Wildlife Sanctuary	32	2006
18	Thattekkad Bird Sanctuary	25	1983
19	Mangalavanam Bird Sanctuary	0.0274	2004
20	Choolannur Pea Fowl Sanctuary	3.42	2007
Commun	ity Reserve		
21	Kadalundi-Vallikunnu Community Reserve	1.5	
	Total	2453.9824	

Note: * Another 148 sq.km Reserve Frest area has been added to Silent Valley National Park as its buffer zone in 2007.

^{** :} Another 148sq.km Reserve Forest from Ranni Forest Division is added to Periyar Tiger Reserve as critical tiger habitat during 2007.

Appendix 7.1

GROWTH OF KERALA POWER SYSTEM AT A GLANCE - 2007 AND 2008

SI No	Particulars/Year	POSITIO	N AS ON
31 NO	Particulars/ rear	31-03-2007	31-03-2008
	Installed Capacity -MW	2657.24	2662.24
2	Maximum Demand(System)-MW	2742	2745
3	Generation Per Annum-MU	7745.78	8703.55
4	Import Per Annum- MU	8149.84	8074.62
5	Export Per Annum-MU	1046.89	1346.76
6	Energy Sales Per Annum-MU	11331.00	12049.85
7	Percentage of energy losses to energy available for sales	23.43	21.63
8	Per Capita Consumption - kWh	465	477
9	220 kV Lines - CT Kms	2653	2654
10	110 kV Lines - CT Kms	3846	3905
11	66 kV Lines - CT Kms	2976	2987
12	33 kV Lines - CT Kms	742	878
13	22 kV Lines - CT Kms	157	157
14	11 kV Lines - CT Kms	37891	38227
15	LT Lines - CT Kms	223370	234252
16	Step Up Transformer capacity -MVA	2561	2561
17	No of EHT Substations		
а	400 kV	2	2
b	220 kV	14	15
С	110 kV	111	112
d	66 kV	86	89
е	33 kV	59	72
	Step down transformer capacity - MVA	12889.2	13300.7
19	Distribution Transformers		
а	Numbers	39872	42401
b	Capacity -MVA	5241.26	5510.513
	No of villages electrified	1384	1384
	No of consumers (Lakhs)	87.14	90.34
	Connected Load-MW	11465.69	12378.00
	No of Street Lights	999599	1049047
	No of irrigation pumps	435673	440958
25	Total revenue Per Annum (Rs Lakhs)	455840.28	522713.57
26	Revenue from Sale of Power Per Annum(Rs Lakhs)	400970.76	469695.48

Source: KSEB

Appendix 7.2
PROFILE OF ONGOING POWER PROJECTS IN THE STATE

SI. No	Name of Schemes	District	Energy Potential (MU)	Projects sanctioned on	Major works commenced on	estimated	Latest estimated cost (Rs in lakhs)	Expendit ure upto 3/08(Rs in lakhs)	Outlay for 2008- 09 (Rs in lakhs)	Expected year of commissioning
1	2	3	4	5	6	7	8	9	10	11
1	Kutiyadi Tail Race-3.75MW	Kozhikode	15.00	1989	19-10-2000	397.00	1494.00	433.00	125.00	2 Units commissioned on 26-6-2008 &Unit#3 expected to be commissioned on 31-12-2008
2	Kuttiyar Diversion	Idukki	37.00	18-08-90	1/5/2003	561.00	880.00	672.62	20.00	31-12-2008
3	Kuttiyadi Addl.Extension (100 MW)	Kozhikode	240.00	1998	17-4-2000	6200.00	22050.00	3630.20	6000.00	31-3-2009
4	Neriamangalam Extension Scheme(25MW)	Idukki	58.27	01-04-2001	4-7-2003	3506.18	3506.18	2006.34	200.00	Commissioned on 25-5-2008
5	Pallivasal Extension (60MW)	Idukki	153.90	20-01-2001	9/3/2007	17586.00	3506.18	4241.79	3775.00	1/3/2011
6	Adyanpara(3.75 MW)	Malappuram	9.01	16-11-2005	10/10/2007	1795.00	2132.00	181.66	1132.00	30-09-2009

source:KSEB

Appendix 7.3
POWER PROJECTS AND POWER GENERATION AS ON 31-03-2008

SI No	Name of Projects and District	Installed Capacity MW	Firm Power MW	Power Generated during 2007-08 (MU)
1	Pallivasal- Idukki	37.50	32.50	229.04
2	Sengulam-Idukki	48.00	20.80	164.77
3	Neriamangalam-Idukki	54.00	27.00	
4	Panniyar-Idukki	30.00	18.00	
5	Poringalkuthu-Thrissur	32.00	19.60	162.59
	Poringalkuthu LBE-Thrissur	16.00	9.80	59.94
6	Sabarigiri-Pathanamthitta	325.00	153.00	1541.35
7	Sholayar-Thrissur	54.00	20.6	254.68
8	Kuttiady-Kozhikode	75.00	30.60	
	Kuttiady Extension-Kozhikode	50.00	8.56	644.72
9	ldukki-ldukki	780.00	280.20	3316.02
10	Idamalayar-Ernakulam	75.00	43.30	474.63
11	Kallada-Mini-Kollam	15.00	6.05	73.03
12	Kanjikode Wind Farm-Palakkad	2.03	0.40	1.96
13	Peppara-TVPM	3.00	1.30	8.18
14	Lower Periyar-Idukki	180.00	56.30	677.97
15	Brahmapuram-Ernakulam	106.60	73.00	95.76
16	Madupetty-Idukki	2.00	0.70	6.91
17	Kakkad - Pathanamthitta	50.00	30.00	246.75
18	Kayamkulam(NTPC) - Alapuzha	359.58	0.00	1721.54
19	(KDPP) - Kozhikkode	128.00	102.40	278.38
20	KPCL.(IPP) -Kasargode	20.44	0.00	35.53
21	Maniyar(Private) - Pathanamthitta	12.00	3.70	38.82
22	Kuthungal (Hydro-Captive) -Idukki	21.00	9.02	62.88
23	BSES(IPP) - Ernakulam	157.00	0.00	355.18
24	Malampuzha - Palakkad	2.50	0.64	0
25	Urumi l&II - Kozhikode	6.15		13.77
26	Chempukadavu I&II - Kozhikode	6.45		9.28
27	Malankara	10.50		43.7
28	Lower Meenmutty	3.50		4.92
	Grand Total	2662.25	947.47	10917.51

source: KSEB

Appendix 7.4
AVERAGE REALISATION RATE FROM TARIFF

SI. No.	Consumer Category	Average Tariff (in Paise/Unit)			
		2006-07	2007-08		
1 Do	omestic	167	172		
2 C	ommercial	661	668		
3 Pt	ublic Lighting	187	190		
4 Irr	igation & Dewatering	102	105		
5 In	dustry(LT)	415			
6 In	dustry(HT & EHT)	394	401		
7 R	ailway Traction	335	359		
8 Bu	ılk Supply	276	287		
Α	verage	307	313		
9 Sa	ale to NVVN/PTC	499	966		
10 In	ter State TNEB	564	398		
O ¹	verall Average	324	351		

source:KSEB

Appendix 7.5

AVERAGE REALISATION FROM SALE OF POWER

SI No	Consumer Category	Average Realisation (in Paise/Unit)			
		2006-07	2007-08		
1 Do	omestic	181	186		
2 Cc	ommercial	715	724		
3 Pu	ıblic Lighting	187	190		
4 Irri	gation & Dewatering	111	114		
5 Inc	dustry(LT)	445	444		
6 Inc	dustry(HT & EHT)	403	410		
7 Ra	ailway Traction	335	359		
8 Bu	ılk Supply	276	287		
9 Sa	lle to NVVN/PTC	499	966		
10 Int	er State	564	398		
0\	verall Average	340	366		

source: KSEB

Appendix 7.6
PATTERN OF POWER CONSUMPTION AND REVENUE COLLECTED DURING 2007-08

SI.N o	Category	No of Consumers as on 31-03-2008	Connected Load (MW) as on 31-03-2008	Energy Sold(MU)	Consumption as Percentage to Total	Revenue Collected (Rs Lakhs)	Revenue as percentage to Total
1 Do	mestic						
a Pa	ying Group	7085652	7403.61	5595.12	41.77	96292.02	20.50
b No	n paying Group	52087	16.95	7.73	0.06	90292.02	20.50
2 Co	mmercial(LT & HT)	1327978	1734.87	1378.33	10.29	92100.01	19.61
3 Ind	dustrial						
a Lov	w & Medium	122449	1290.82	984.18	7.35	40818.87	8.69
b HT	&Extra high voltage	2289	836.13	3139.50	23.44	125969.57	26.82
4 Pul	blic Lighting	2325	118.54	248.56	1.86	4726.37	1.01
5 Ra	ilway Traction	7	43.12	109.26	0.82	3922.92	0.84
6 Ag	ricultural Pumping	440958	876.00	230.55	1.72	2431.15	0.52
7 Lic	ensees (Bulk Supply)	11	57.96	356.62	2.66	10222.51	2.18
8 Ou	itside Supply			1346.76	10.05	93212.06	19.85
To	tal	9033756	12378.00	13396.61	100.00	469695.48	100.00

Source: KSEB

Appendix 7.7
SOURCES OF FUNDING OF THE POWER PROGRAMMES
OF KSEB FOR THE YEAR 2007-08

SI.N	Rs in la	akhs
o Particulars	2006-07	2007-08
1 Loan from REC	3572.30	0.00
2 Borrowing under Section 65		
a) Loan from LIC of India	0.00	0.00
b) Assistance from IDBI	0.00	0.00
c) Loan from PFC	0.00	0.00
d) Loans from Banks through REC	0.00	0.00
e) Loan from SIDBI	0.00	0.00
f) Foreign Currency Loan	537.13	307.88
g) OECF	0.00	0.00
3 Non -SLR Bonds	0.00	0.00
Receipts under OYEC		
Schemes/Service connections		
Charges/ Contribution from		
4 Panchayats	21614.01	18646.94
5 Medium Term Loan	0.00	0.00
6 Borrowing and Reserves		
 a) Pension Fund/Provident Fund 	1114.30	11526.94
b) Deposit and other Debit Heads	0.00	0.00
7 Other Internal Resources	258567.00	121532.00
8 Loan from Kerala PFC	0.00	0.00
9 EDC Kuttiadi	0.00	0.00
10 EDC-PSP	0.00	0.00
11 Loan from State Govt. for APDRF	0.00	0.00
12 Loan from State Govt. for PMGY	0.00	0.00
Total	285404.74	152013.76

Source: KSEB

Appendix 8.1 Index of Industrial Production 2004-05, 2005-06 & 2006-07

Base Year 1993-94

SI. No.	Item	Weight		Index for	
31. 140.	nem	weight	2004-05	2005-06	2006-07*
1	2	3	4	5	6
1	Mining & Quarrying	0.51	169.13	169.129	169.129
2	Manufacture of food products	20.09	161.985	158.411	183.310
3	Manufacture of beverages, tobacco etc.	2.27	338.177	363.816	393.608
4	Manufacture of cotton textiles	5.88	125.581	135.251	189.025
5	Manufacture of wool, silk etc.	0.09	272.333	272.333	272.333
6	Manufacture of jute & other vegetable fibre textiles	0.62	103.91	110.058	74.437
7	Manufacture of textile products & fibres	0.16	230.945	249.521	383.553
8	Manufacture of wood and wood products	1.26	74.223	73.82	84.497
9	Manufacture of paper and paper products	5.6	234.584	235.172	253.274
10	Manufacture of basic chemicals and chemical products	17.9	257.735	248.855	302.235
11	Manufacture of rubber, plastic, petroleum etc.	27.86	211.796	215.13	276.151
12	Manufacture of non-metallic mineral products	3	257.055	259.533	306.425
13	Basic metals and alloys	2.47	194.668	212.206	300.236
14	Manufacture of metal products and parts	0.55	182.92	184.139	217.409
15	Manufacture of machinery and equipments	4.74	260.653	292.606	340.118
16	Other manufacturing industries	0.15	214.778	254.804	286.454
17	Electricity generation, transmission and distribution	6.85	165.022	172.966	208.589
	General Index	100.00	205.812	208.31	261.300

*Revised

Source: Directorate of Economics & Statistics, Tvpm.

Appendix 8.2

Growth of Working Factories and Average Daily Employment in Kerala 2001 - 2007

Year	No.	of Factor	ies	No.	of Employ	ment
i eai	Private	Public	Total	Private	Public	Total
1	2	3	4	5	6	7
2001	18001	553	18554	329230	107180	436410
2002	17727	535	18262	313260	95553	408813
2003	17711	528	18239	309938	94319	404257
2004	17790	529	18319	311147	94367	405514
2005*	17629	373	18002	542659	108338	650997
2006*	18029	382	382 18411		110866	666186
2007	18061	390	18451	555320	110866	666186

* Revised

Source: Directorate of Economics and Statistics, Thiruvananthapuram

Appendix 8.10
Production and Capacity Utilisation in Government of India Companies Functioning in Kerala

SI.	Name of Company	Name of Bradust	l lmi4	Installed cap	acity as on	Productio	n during	Capacity u	tilisation %
No.	Name of Company	Name of Product	Unit	31-03-2007	31-03-2008	31-03-2007	31-03-2008	31-03-2007	31-03-2008
1	2	3	4	5	6	7	8	9	10
1	Hindustan Organic	Phenol	M.T.	40000.00	40000.00	40733.00	41908.00	101.83	104.77
	Chemicals Ltd.	Acetone	M.T.	24640.00	24640.00	25463.00	26130.00	103.34	106.05
		H2O2(100%)	M.T.	5225.00	5225.00	4411.00	5889.00	84.42	112.71
		Propylene	MT			25587.00	27458.00		
		Cumene	MT	56000.00	56000.00	54329.00	57837.00	97.02	103.28
2	Hindustan News Print Ltd.	Newsprint	MT	100000.00	100000.00	112565.00	116111.00	112.56	116.11
3	Cochin Refineries Ltd.	Petroleum/Petrochemical Products- Crude, Thruput (MMT)	Million MT	7.5	7.5	7.75	8.20	103.33	109.33
		1.Condom	MPcs	1034	1316	1088.52	1047.62	105.27	79.61
		2.B.Bags	MPcs	5	5	5.51	6.04	110.20	120.80
4	Hindustan Latex Ltd.	3.Saheli(Non Steroiidal OCP)	M.Tab	30	30	18.19	24.20	60.63	80.67
		4.Mala-D/N (Steroidal OCP)	M.cycles	98.67	98.66	57.58	58.26	58.36	59.05
		5.CU.T	MPcs	5.5	5.5	2.78	2.78	50.55	49.09
5	HMT Ltd.	Machine Tools,Printing and cutting machines, accessories and spares	Nos.	408	382	206.00	230.00	50.49	60.21
6	CochinShipyard Ltd.	Ship (Building)	DWT	150000	150000	181395	175536	120.93	117.02
7	Kerala Lakshmi Mills	Yarn in different counts	KGs	41328	43824	2062014	149000		
8	Vijaya Mohini Mills	Core Yarn	MT	30476 spindles	30476 spindles	1239	1078.00		

*Revised

Source: Reports from Companies concerned

Appendix 8.11

District-wise Investment in KSIDC Units

SI.No.	Districts	No. of Units	Investment (Rs. lakh)	Employment (Nos.)
1	2	3	4	5
1	Alapuzha	32	30704	6627
2	Ernakulam	169	233653	27882
3	ldukki	14	6697	2223
4	Kannur	10	18039	2105
5	Kasaragod	2	265	121
6	Kollam	14	5890	2230
7	Kottayam	20	21476	2610
8	Kozhikode	19	6990	1982
9	Malappuram	21	6315	1787
10	Palakkad	83	118379	9693
11	Pathanamthitta	6	975	382
12	Thrissur	43	31192	5727
13	Thiruvananthapuram	50	45729	9340
14	Wayanad	6	1227	213
	Total	489	527531	72922

Source: Kerala State Industrial Developmet Corporation (KSIDC), Thiruvananthapuram

Appendix 8.12
Units Assisted by KSIDC as on 31-3-2008

		No. o	f Units	Project Cost (R:	s. Lakh)
SI.No.	Districts	Public Sector Private Sector		Public Sector	Private Sector
1	2	3	4	5	6
1	Thiruvananthapuram	9	42	14762	30819
2	Kollam	4	10	3069	2821
3	Pathanamthitta		6	•••	975
4	Alappuzha	3	31	2168	28538
5	Kottayam	1	19	644	20832
6	Idukki	•••	15	•••	6698
7	Ernakulam	4	167	20916	210207
8	Thrissur	4	41	2006	31637
9	Palakkad	1	80	1373	108960
10	Malappuram	•••	22	•••	6316
11	Kozhikode	3	16	1628	5362
12	Wayanad		6		1227
13	Kannur	1	9	148	17891
14	Kasaragod	1	1	87	178
	Total	31	465	46801	472461

Source : KSIDC, Thiruvananthapuram

Appendix 8.13
Capital Invested and Employment in Respect of Govt. Owned Companies in Kerala

SI.	Name of Company	•	nvested akh)	Employment (Nos.)		
No.	Name of Company	as on	as on	as on	as on	
		31-3-2007	31-3-2008	31-3-2007	31-3-2008	
1	2	3	4	5	6	
1	Kerala Electrical and Allied Engineering Co. Ltd, Kochi	10151.85	10488.13	1022.00	992.00	
2	Kerala State Electronics Development Corporation Ltd,	33752.08	35507.56	1426.00	1372.00	
	Thiruvananthapuram					
3	Malabar Cements Ltd, Palakkad	4954.36	4712.92	1033.00	1018.00	
4	Kerala Clays & Ceramics Products Ltd, Kannur	131.82	131.82	328.00	319.00	
5	Kerala Automobiles Ltd, Thiruvananthapuram	1878.38	1915.36	319.00	293.00	
6	Steel Industrials Kerala Ltd, Thrissur	8946.50	7956.26	225.00	203.00	
7	Kerala State Textile Corporation Ltd, Thiruvananthapuram	6349.00	6220.00	746.00	707.00	
8	Kerala Minerals and Metals Ltd, Kollam	3276.02	3318.00	1844.00	1772.00	
9	Steel and Industrial Forgings Ltd, Thrissur	1654.46	1561.76	259.00	258.00	
10	Foam Mattings India Ltd. Alappuzha	515.23	515.23	168.00	164.00	
11	Kerala Garments Limited	515.23	235.73	168.00		
12	Artisans Development Corporation	480.49	510.27	24.00		
13	Kerala State Coir Corporation	1222.66	1240.91	68.00	186.00	
14	Autocast Limited	6791.81	6792.00	326.00	308.00	
15	Kerala State Cashew Development Corporation	46674.00	48775.00	12411.00	18454.00	

^{*} Revised

Source:- Reports of Companies Concerned

Appendix 8.14
Performance of Govt. Owned Companies in Kerala in Terms of Value of Production and Sales
(Rs. Lakh)

					(NS. Lakii)	
SI.	Name of Company	Value of P	roduction	Sales Turnover		
No.	Name of Company	2006-07	2007-08	2006-07	2007-08	
1	2	3	4	5	6	
1	Kerala Electrical and Allied Engineering Co. Ltd, Kochi	7806.68	10392.90	8575.46	10103.36	
2	Kerala State Electronics Development Corporation Ltd, Thiruvananthapuram	6521.41	5746.34	13648.08	15269.21	
3	Malabar Cements Ltd, Palakkad	22597.50	25410.59	23969.71	25339.57	
4	Kerala Clays & Ceramics Products Ltd, Kannur	348.73	356.06	476.88	529.80	
5	Kerala Automobiles Ltd, Thiruvananthapuram	3560.06	1522.60	3972.02	2354.93	
6	Steel Industrials Kerala Ltd, Thrissur	127.30	104.52	1012.64	1557.27	
7	Kerala State Textile Corporation Ltd, Thiruvananthapuram	3756.00	3756.00	3695.00	3723.00	
8	Kerala Minerals and Metals Ltd, Kollam	32734.05	30787.24	29574.49	30748.69	
9	Steel and Industrial Forgings Ltd, Thrissur	4071.00	5159.00	4085.00	5045.00	
10	Foam Mattings India Ltd, Alappuzha	217.01	350.20	419.00	663.03	
11	Kerala Garments Limited	23.00		7.54	5.41	
12	Artisans Development Corporation	1.38		25.76	194.26	
13	Kerala State Coir Corporation			293.52	1349.34	
14	Autocast Limited	1311.00	1437.00	1311.00	1437.00	
15	Kerala State Cashew Development Corporation	6300.00	7185.00	6382.00	6117.55	

^{*} Revised

Source:- Reports of Companies Concerned

Appendix 8.15

Production and Capacity Utilisation of Government Owned Companies in Kerala during 2006-07 and 2007-08

		and Capacity Utilisation of G		Installed Canacity as on			on During	Capacity Utitlization (%)	
SI. No.	Name of Company	Name of products	Unit	31-3-2007	31-3-2008	31-3-2007	31-3-2008	31-3-2007	31-3-2008
1	2	3	4	5	6	7	8	9	10
	Kerala Electrical and Allied	Distribution of Transformers	KVA	500000	500000	239858	416467	4 7.97	83.29
		Steel Structures	Tonnes	1200	1200	320	251	26.67	20.92
		HRC Fuses	Nos	120000	1200	320	201	20.07	20.92
			Tonnes	1500		••	••		
		Cast Iron Specials	_		4500		766		
		Alternators (TL)	Nos	1500	1500	859			51.07
		Electrical & Wiring Accessories	Nos	133000	133000	26701	93948		70.64
_		Alternators(G.P) & D.G Sets	Nos	3000	3000	858	641	28.60	21.37
_	Kerala State Electronics Development Corporation Ltd, Thiruvananthapuram	Various Electronic Products			•			ms of quantity	
3	Malabar Cements Ltd, Palakkad	Portland Cement	M.Ts	620000	620000	621144	568962		100.18
4		ChinaClay	M.Ts	N.A	N.A	11090	9415		
	Products Ltd, Kannur	Fire Bricks	Nos	N.A	N.A	123510	102535		
		Laterite	M.Ts	N.A	N.A	31172	44720		
		Wirecut Bricks	Nos	N.A	N.A	109600	76100		
5	Kerala Automobiles Ltd, Thiruvananthapuram	Auto rickshaw	Nos	7200	7200	4798	2659	66.64	36.93
6	Steel Industrials Kerala Ltd,	Structural Steel Fabrication	M.Ts	3000.00	3000.00	147.00	176.00	4.90	5.87
		Cast Iron	M.Ts	1200.00	1200.00	318.20	218.00	26.52	18.17
7	Kerala State Textile Corporation Ltd, Thiruvananthapuram	Cotton/Blended Yarn	Spindles	74116	74116	18.43 LKG	18.43 LKG		
8	Kerala Minerals & Metals	Titanium Dioxide Pigment	M.Ts	40000.00	40000.00	34373.00	35220.00		88.05
	Ltd, Kollam	Ilmenite	M.Ts	51600.00	51600.00	52500.00	49225.00		95.40
	, i	Rutile	M.Ts	2400.00	3400.00	2676.00	2997.00		88.15
		Zircon	M.Ts	1500.00	2500.00	1764.00	2175.00		87.00
9	Steel and Industrial Forgings Ltd, Thrissur	Steel Forgings	M.Ts	5040.00	5040.00	3158.00	2827.00	62.66	56.09
10	Foam Mattings (India) Ltd,	Mattings plant	M2	523000	523000	103000	89000	19.69	17.02
	Alappuzha	Latex backing plant	M2	1200000	1200000	300000	6,12,000	250.00	510.00
		Dyeing Plant	M.Ts	840	840	7089	85.2	8.42	10.14
		Powerloom Plant	M2(Lac)	190000	190000	47000	64000	24.74	33.68
11	Kerala Garments Limited	Readymade Garments	Nos	120000	120000	33000	2.200	27.50	0.00
		Kernals	MTs / day	210	210	14452	16462.00		
13	Artisans Development Corporation	I on	+						
	Kerala State Coir Corporation	<u></u>		1		Trading	Activities		
		GI/SGI Castings	M.Ts	6000.00	6000.00	2279.00	2334.00	37.98	38.90
.0		SG Wind Mill Castings	M.Ts	5555.56	2300.00	647.00		37.30	00.00

* Revised

Source: Reports of the Companies Concerned

Appendix 8.16
Capital Invested and Employment in respect of Govt. Majority Companies in Kerala

SI.		Capital In	vested	Employ	ment
No	Name of Company	(Rs. Lakh	ı) as on	(Nos.) a	as on
140		2006-07	2007-08	2006-07	2007-08
1	2	3	4	5	6
1	Traco Cable Company Ltd, Kochi	4537.05	4895.55	618	587
2	Travancore Titanium Products Ltd,	1531.14	NA	1087	929
	Thiruvananthapuram				
3	The Travancore Cochin Chemicals Ltd, Kochi	8356.89	7339.70	755	783
4	The Travancore Cements Ltd, Kottayam	426.00	426.00	558	544
5	The Metal Industries Ltd, Shoranur	147.95	195.93	63	65.00
6	The Travancore Sugars and Chemicals Ltd.	166.12	165.64	118	118
7	Forest Industries (Travancore) Ltd, Aluva	438.44	466.80	108	105
8	Keltron Magnetics Ltd, Kannur	444.00	444.00	24	23
9	Transformers and Electricals Kerala Ltd.	8619.40	4296.73	951	870
10	Keltron Resisitors Ltd, Cannanore	327.58	320.12	42	42
11	Keltron Component Complex Ltd.	1618.97	2711.80	295	285
12	Kerala State Handloom Development Corporation	2783.75	2800.75	363	381
13	KAMCO	161.46	161.46		517

Source: Reports of the Companies Concerned

Appendix 8.17
Performance of Government Majority Companies in Kerala in Terms of Value of Production and Sales Turnover

(Rs.Lakh)

SI.	Name of Company	Value of Pr	oduction	Sales Tu	rnover
No.	Name of Company	2006-07	2007-08	2006-07	2007-08
1	2	3	4	5	6
1	Traco Cable Company Ltd, Kochi	5443.15	4475.88	5159.22	4073.95
2	Travancore Titanium Products Ltd, Thiruvananthapuram	11071.90		13688.24	9347.17
3	The Travancore Cochin Chemicals Ltd, Kochi	12520.00	10688.00	14467.00	12530.00
4	The Travancore Cements Ltd, Kottayam	2730.00	3110.00	2748.00	3109.00
5	The Metal Industries Ltd, Shoranur	144.00	165.55	212.50	225.18
6	The Travancore Sugars and Chemicals Ltd.	645.06	858.81	717.51	943.36
7	Forest Industries (Travancore) Ltd, Aluva	734.00	646.76	734.00	646.76
8	Keltron Magnetics Ltd, Kannur	337.45	480.52	460.82	606.34
9	Transformers and Electricals Kerala Ltd.	14581.71	18673.00	14537.00	18126.00
10	Keltron Resisters Ltd., Cannanore	113.51	119.10	182.53	181.05
11	Keltron Component Complex Ltd.	2170.12	2046.77	2382.50	2505.04
12	KAMCO	7629.87	8681.01	9121.74	10121.86
13	Kerala State Handloom Development Corporation	493.32	607.00	1500.91	1290.32

* Revised

Source: Reports of companies concerned

Appendix 8.18
Production and Capacity Utilisation of Government Majority Companies in Kerala during 2006-07 and 2007-08

SI.	Name of Company	Name of Draducts	l lmi4	Installed Ca	pacity as on	Quantity of	Production	Capacity U	tilization %
No.	Name of Company	Name of Products	Unit	31-3-2007	31-3-2008	31-3-2007	31-3-2008	31-3-2007	31-3-2008
1	2	3	4	5	6	7	8	9	10
1	Traco Cable Company Ltd,	1.AAC / ACSR	MT	3000.00	3000.00	2588.00	1885.94	86.20	62.86
	Kochi	2.PVC Covered Conductors	MCM	32.92	32.92	0.11	4.55	0.33	13.82
		3.JFTC (IBM)	LCKM	2.50	2.50	0.004	0.000	0.16	
		4.JFTC (TVLA)	LCKM	15.00	15.00	0.00	1706.00	0.05	11373.33
2	Travancore Titanium Products Ltd, Thiruvananthapuram	Titanium Dioxide	M.T	24500.00*	24500.00	12703.03	46870.59	51.85	191.31
3	The Travancore Cochin	1.Caustic Soda Lye	MT	55520.00	57750.00	57487.00	42298.00	103.54	73.24
	Chemicals Ltd, Kochi	2.Chlorine Products	MT	49190.00	51200.00	50933.00	36423.00	103.54	71.14
4	The Travancore Cements Ltd	1.White Cement	M.T	30000.00	30000.00	21474.00	23111.00	50.45	71.58
		2.Cement Paint	M.T	1050.00	1050.00	1130.00	1084.00	128.10	83.77
5	The Metal Industries Ltd, Shoranur	1.Mammatties 2.All Axes 3.Pick Axes 4.Crow Bar 5.Sledge Hammer 6.Others	MT MT MT MT MT MT	250.00	250	144.00	165.55	57.60	66.22
6	Travancore Sugars & Chemicals	1.Spirit	B.L			24000.00	25000.00		
	Ltd	2. I.M.F.L.(lakh)	B.L.	3600000.00	3600000.00	1901868.12	632.98	52.83	0.02
7	Forest Industries (Travancore) Ltd, Aluva	Wooden Furntiure and Joineries	m ³	1500.00	900.00	406.49	638.14	27.10	70.90
8	Keltron Magnetics Ltd, Kannur	1.MPPCAPS	'000 Nos.	1140.00	2000.00	2068.00	2706.00	181.40	135.30
9	Transformers and Electricals	1.Power Transformer	MVA	4500.00	4500.00	3648.00	4130.00	81.06	91.78
	Kerala Ltd, Ernakulam	2.Current and Potential Transformers 3. Others	No	1000.00	1000.00	261.00	289 778	26.10	28.90
10	Keltron Resistors Ltd., Cannanore	Carbon & Metal Film Resisitors	M.Nos	217.00	217.00	87.22	90.77	40.19	41.83
11	Keltron Component Complex Ltd.	Alu. Electrical Capacitors	M.Nos.	150.00	150.00	171.65	188.52	114.43	125.68
12	Kerala State Handloom Development Corporation	Handloom Fabrics	Lakh Metres	1200.00	1500.00	10.10 lakh meters	13.07 lakh meters		
13	Kerala Agro Machinery Corporation (KAMCO)	1. Power Tiller 2. Reaper	Nos Nos	6000.00	6000.00	7786 1001	8646 1113	129.76	144.10

* Revised

Source: Reports of the companies concerned

Appendix 8.19

Details of Joint Stock Companies Working in Kerala

SI.No	Particulars	Private	Public	Total
		Limited	Limited	
1	2	3	4	5
1	Number of Joint Stock Companies in Kerala as on 31.3.2007	13300	1590	14890
2	Number of Companies newly registered during 2007-08	1537	49	1586
3	Number of Companies transferred from other States during 2007-08	5	1	6
4	Number of Companies wound up dissolved / struck off/amalgamated during 2007-08	494	15	509
5	Number of Companies transferred to other States during 2007-08	5	1	6
6	Net addition to the total No.of Joint Stock Companies in Kerala during 2007-08 [(2+3)-(4+5)]	1043	34	1077
Α	No.of companies converted from public to private			2*
В	No.of companies converted from private to public			13*
7	Total No.of Joint Stock Companies in Kerala as on 31.3.2008 (Item 1+6)	14332	1635	15967
8	Total No.of Government Companies registered in Kerala as on 31-3-2007	58	51	109
9	Total No.of Government Companies registered in Kerala during 2007-08	1	Nil	1
10	No.of government Companies wound up during 2007-08	Nil	Nil	Nil
11	Net addition to the total No.of Government Companies in Kerala during 2007-08 (Item 9-10)	1	Nil	1
12	Total No.of Government Companies in Kerala as on 31.3.2008 (Item 8+11)	59	51	110
13	Name of Government Companies, newly registered in Kerala during 2007-08	Kerala Medi	cal Services n Limited	nCorporation
14	Name of Government Companies, wound up during 2007-08	Nil	Nil	Nil
15	No.of other major companies wound up during 2007-08	Nil	Nil	Nil
*Not sno				

*Not specified

Source: Registrar of Joint Stock Companies, Kochi.

Appendix 8.20

District-wise Details of Small Scale Industrial Units Registered in Kerala as on 31st

March 2008

SI.	District -	Number	of SSI units	promoted	d by	Investment	production	Employment
No	District —	SC/ST	Women	Others	Total	(Rs. lakh)	(Rs lakh)	(Nos)
1	2	3	4	5	6	7	8	9
1	Thiruvananthapuram	1342	6449	22914	30705	38454.54	165696.38	123658.00
2	Kollam	1875	7160	19697	28732	37977.28	97159.24	177850.00
3	Pathanamthitta	793	2972	10193	13958	13775.84	31915.49	46655.00
4	Alapuzha	769	6077	19725	26571	31041.34	119361.68	124308.00
5	Kottayam	598	4998	23494	29090	36560.8	100023.15	96681.00
6	Idukki	473	2544	4787	7804	9759.91	31046.44	27907.00
7	Ernakulam	856	5490	30646	36992	102965.85	558488.62	175834.00
8	Thrissur	1270	4902	24605	30777	59610.53	183609.56	125473.00
9	Palakkad	712	4120	17470	22302	34351.72	72276.93	103351.00
10	Malappuram	882	1999	10635	13516	24173.41	92467.65	54493.00
11	Kozhikode	466	2930	17809	21205	24819.97	104704.18	88679.00
12	Wayanad	308	1654	2714	4676	6162.11	11027.91	17352.00
13	Kannur	340	1817	13007	15164	22619.44	115395.18	98442.00
14	Kasaragod	165	902	6310	7377	10715.39	28876.16	39804.00
	Total	10849	54014	224006	288869	452988.13	1712048.57	1300487.00

Revised after the 3rd All India Census of SSIs Source : Directorate of Industries & Commerce

Appendix 8.21
District-wise Details of Working SSI Units Registered in Kerala as on 31st March 2008

SI.		N	umber c	of SSI units	promoted	d by	Total	Value of	Employment
No.	District	sc	ST	Women	Others	Total	Investment	goods &	Provided
<u> </u>							(Rs. lakh)	services	(Nos)
1	2	3	4	5	6	7	8	9	10
1	Thiruvananthapuram	781	159	5191	15655	21786	49894.94	106990.86	84494
2	Kollam	964	55	4447	10662	16128	34001	65812	72087
3	Pathanamthitta	482	37	2532	6119	9170	15914	18826	23486
4	Alapuzha	392	79	4225	13457	18153	49887	107745	70617
5	Kottayam	381	170	5244	14085	19880	61053	104335	57593
6	Idukki	321	155	1671	2935	5082	21585	25067	15877
7	Ernakulam	376	157	4613	19570	24716	106571	388212	104502
8	Thrissur	912	88	4033	17435	22468	72199	122264	84597
9	Palakkad	1142	105	2593	10768	14608	48727	65431	46626
10	Malappuram	356	76	1355	8332	10119	34891	66905	34404
11	Kozhikode	430	76	2313	13181	16000	55571	97023	58298
12	Wayanad	45	114	954	1759	2872	7440	8113	10030
13	Kannur	135	57	1346	8421	9959	28989	59694	36030
14	Kasaragod	117	86	788	4028	5019	13533	21483	24219
	Total	6834	1414	41305	146407	195960	600255	1257899	722860

*Remark: SSI registration in DICs has been discontinued from 02.10.2006

Source: Directorate of Industries & Commerce, Tvpm.

Appendix 8.22
Working Status of Small Scale Units as on 31st March 2008

SI. No.	District	Total No. of Units	Number of Units Identified as Sick	Sick Units Registered for Revival	No. of Units Revived	No. of Units Revived by DIC during 2007-08
1	2	3	4	5	6	7
1	Thiruvananthapuram	21786	643	279	125	0
2	Kollam	16128	543	300	151	6
3	Pathanamthitta	9170	278	66	62	0
4	Alappuzha	18153	532	240	199	0
5	Kottayam	19880	671	328	261	0
6	ldukki	5082	254	60	30	0
7	Ernakulam	24716	2182	297	125	0
8	Trissur	22468	691	157	70	0
9	Palakkad	14608	555	132	70	0
10	Malappuram	10119	350	71	11	0
11	Kozhikode	16000	512	259	110	1
12	Wayanad	2872	105	59	24	0
13	Kannur	9959	297	145	44	0
14	Kasaragod	5019	124	6	5	0
	Total	195960	7737	2399	1287	7

Source : Directorate of Industries & Commerce

Appendix 8.23
Achievement under Self Employment Programme during 2007-08 (PMRY)

SI.			Application	s sanctioned during		nt disbursed
No.	District	Target	Sanc	tioned	Dist	oursed
			Number	Amount (Rs.lakh)	Number	Amount (Rs. lakh)
1	2	3	4	5	6	7
1	Thiruvananthapuram	3100	3266	1770.70	2427	1273.06
2	Kollam	3100	2661	1581.17	2068	934.76
3	Pathanamthitta	1400	1434	893.79	1006	617.28
4	Alappuzha	2450	2354	1249.05	1814	947.29
5	Kottayam	3050	2792	1627.58	1840	966.41
6	Idukki	1300	1187	720.03	984	593.31
7	Ernakulam	3600	3668	2511.71	2413	1701.19
8	Trissur	3300	3231	1381.67	2389	1105.89
9	Palakkad	3450	3358	1660.51	2808	1339.77
10	Malappuram	2450	2101	1623.68	1547	1199.88
11	Kozhikode	2900	2824	1651.04	1991	1130.97
12	Wayanad	850	884	399.65	703	256.05
13	Kannur	1900	1919	1109.89	1321	768.63
14	Kasaragod	850	724	547.16	589	422.76
	Total	33700	32403	18727.634	23900	13257.25

Source: Directorate of Industries & Commerce

Appendix 8.24
Working Industrial Co-operative Societies in Kerala as on 30.6.2008

01		Industrial Co-operative societies	Total Number of Industrial Co-operative Societies as on 30-6-2008							
SI. No.	District	registered during 2007-08 (7/07 to 6/08)	sc	ST	Women	Others	Total number of societies			
1	2	3	4	5	6	7	8			
1	Thiruvananthapuram	3	75	3	61	96	235			
2	Kollam	2	20	nil	15	26	61			
3	Pathanamthitta	2	22	1	41	43	107			
4	Alappuzha	1	2	0	3	21	26			
5	Kottayam	1	17	1	54	69	141			
6	Idukki	1	30	21	31	25	107			
7	Ernakulam	nil	21	nil	104	94	219			
8	Trissur	4	9	nil	35	114	158			
9	Palakkad	2	31	7	73	45	156			
10	Malappuram	nil	23	2	29	104	158			
11	Kozhikode	nil	18	2	25	49	94			
12	Wayanad	1	6	32	25	15	78			
13	Kannur	nil	35	6	59	98	198			
14	Kasaragod	nil	8	6	38	26	78			
	Total	17	317	81	593	825	1816			

Source: Directorate of Industries & Commerce

Appendix 8.25
Outstanding Advances to Various Sectors by Commercial
Banks in Kerala

(Rs. Crore)

	V		Priority	Sector		Non	
SI. No.	Year (as at March)	Total	Total Agri SSI Prior		Other Priority Sector	Priority Sector Advances	Total Advances
1	2	3	4	5	6	7	8
1	2001	8894	2747	2262	3885	10286	19180
2	2002	10132	3035	2540	4557	11930	22062
3	2003	11867	3507	2562	5798	15140	27007
4	2004	15725	4502	2618	8605	16142	31867
5	2005	20903	5803	3128	11972	20045	40948
6	2006	27763	8259	3708	15796	24156	51919
7	2007	35683	11377	4391	19915	28590	64273
8	2008	44077	15991	6674	21412	31227	75304

Source: State Level Bankers' Committee.

Appendix 8.26
District-wise Number of Handloom Co-operative Socieites in the State

							No. of	socieites							
SI. District		2006-07							2007-08						
No		SC	S	т	Oth	ers		S	SC .	5	ST .	Oth	ners		
	Women	General	Women	General	Women	General	Total	Women	General	Women	General	Women	General	Total	
1 Thiruvananthapuram	n 5	14	1	7	46	290	363	5	14	1	7	46	290	363	
2 Kollam		7		1	1	70	79		7		1	1	70	79	
3 Pathanamthitta		3				6	9		3				6	9	
4 Alappuzha	2	1			2	21	26	2	1			2	21	26	
5 Kottayam		2			2	12	16		2			2	12	16	
6 Idukki	1			4		7	12	1			4		7	12	
7 Ernakulam		2	1			29	32		2	1			29	32	
8 Thrissur	1	5				25	31	1	5				25	31	
9 Palakkad		6		4	1	35	46		6		4	1	35	46	
10 Malappuram	1	2				10	13	1	2				10	13	
11 Kozhikode		2				41	43		2				41	43	
12 Wayanad		2		2			4		2		2			4	
13 Kannur		2				71	73		2				71	73	
14 Kasaragod						11	11						11	11	
Total	10	48	2	18	52	628	758	10	48	2	18	52	628	758	

Source: Directorate of Handlooms & Textiles

Appendix 8.27
Production and Productivity under Handloom Industry in Kerala

48446 68.26 307.17 1408.90 126624 539.1 26860 3120 2.62 11.79 839.74 6350
68.26 307.17 1408.90 126624 539.1 26860 3120 2.62 11.79 839.74
68.26 307.17 1408.90 126624 539.1 26860 3120 2.62 11.79 839.74
307.17 1408.90 126624 539.1 26860 3120 2.62 11.79 839.74
1408.90 126624 539.1 26860 3120 2.62 11.79 839.74
126624 539.1 26860 3120 2.62 11.79 839.74
539.1 26860 3120 2.62 11.79 839.74
26860 3120 2.62 11.79 839.74
3120 2.62 11.79 839.74
2.62 11.79 839.74
2.62 11.79 839.74
11.79 839.74
839.74
6350
3000
58.94
1238
8 217041.73
51566
70.88
318.96
1374.5
132974
533.03
28098
22
22
2051.00
432.00
2483.00
600.00
123.16
723.16

SI.No	Item	2006-07	2007-08
5	Value of unsold stock (Rs. crores)		
a	In the Co-operative Sector	35.07	25
b	In the Corporate Sector	11	
C	: Unorganised/ private sector	NA	
6	Number of Co-operative Societies		
a	a Factory type:		
1	working	112	112
2	Dormant	26	26
3	under liquidation	11	11
4	Not started working	6	6
	Total (a)	155	155
b	Cottage type:		
1	Working	440	440
2	Dormant	60	60
3	under liquidation	81	81
4	Not started working	22	22
	Total (b)	603	603
	Total 6 (a+b)	758	758

Source: Directorate of Handlooms & Textiles

Appendix 8.28
Working Results of Handloom Apex Society (Hantex)

SI.No	Particulars	2006-07	2007-08
1	2	3	4
1	Sales turnover (Rs.lakh)	1359.03	1176.57
2	Value of cloth produced (Rs.lakh)	639.33	833.96
3	Value of yarn purchased (Rs.lakh)	537.43	450.32
4	Value of yarn distributed (Rs.lakh)	540.51	472.97
5	No. of exhibitions conducted	15	10
	No. of primary socieites registered as members		
6	(cumulative)	466	469
7	Paid up share capaital (Rs. in lakhs)	1423.55	1441.85

* Revised

Source: Hantex

Appendix 8.29

Working Results of Kerala State Handloom Development Corporation (HANVEEV)

'Rs la

			(Rs lakh)
SI.No	Particulars	2006-07*	2007-08
1	2	3	4
1	Paid up capital (as at the end of the year)	1410.28	1422.28
	Total Borrowing (as at the end of the year including		
2	interest)	3267.16	3465.79
3	Gross Block (as at the end of the year)	434.73	460.51
	Value of production through clusters and sponsored		
4	societies (as at the end of the year)	9.19	5.2
	Income through sales of products (as at the end of		
5	the year)	1500.98	1326.80
6	Other income:-		
6	a Export of handloom cloth by K S H D C	0	
k	Grants, MDA, Interest, Processing charges etc.	84.67	81.04
7	Expenditure on Raw Materials		
á	a Yarn	266.06	324.44
k	Dyes and Chemicals	20.96	18.41
(c Fabrics	484.13	665.37
8	Expendiutre on personal payments	457.95	367
9	Provision of Depreciation	10.25	12.5
10	Expenditure towards interest and bank charges	194.02	198
11	Other Expenses	16.3	24.33
á	a Trading expenses	123.80	120.00
k	Administration and selling expenses	177.55	169
12	Stock differential	(-)204.51	(-)47.51
13	Net Profit (+), Net loss(-)	(-) 379.09	(-)443.8
14	Accumulated loss at the end of the year	3132.49	3576.29

^{*} Revised Source: Hanveev

Appendix 8.30 Production and Productivity under Powerloom Industry

SI.No	Items	2006-07	2007-08
1	2	3	4
1	Total No. of Powerlooms in the state	3800	4120
2	No. of looms in the cooperative sector	1381	1390
3	percentage of 2 to 1	36.34	33.74
4		33	
	No. of Powerloom cooperative socieities in the state		33
5	No. of members in the cooperative sector	6600	6600
6	No. of women employed in Powerloom sector	1223	1340
7	Co-operative sector		
а	Production of cloth (lakh metres)	74.00	80
b	Value of production (Rs. Lakh)	932.40	1080
С	Productivity(Metre/loom)	5358.44	5755.4
8	Un organised/private sector	NA	NA
9			
	Total (Cooperative and Unorganised/private sectors)		
а	Production of cloth (lakh metres)	74.00	80
b	Value of Production (Rs. Lakh)	932.40	1080
С	Productivity (Meter/loom)	5358.44	5755.4

Source: Directorate of Handlooms & textiles, Tvpm

Appendix 8.3

District - wise Distribution of Registered Working Factories in Kerala 2001 to 2007

SI. No.	District	2001	2002	2003	2004	2005*	2006	2007(p)
1	2	3	4	5	6	7	8	9
1	Thiruvanar	897	890	892	898	891	898	899
2	Kollam	1905	1899	1895	1903	2054	1930	1930
3	Pathanamt	532	504	505	509	618	528	528
4	Alappuzha	1213	1214	1241	1247	985	1260	1260
5	Kottayam	1297	1258	1255	1262	1270	1265	1265
6	Idukki	326	332	333	335	401	338	338
7	Ernakulam	2937	2928	2930	2938	2704	2957	2957
8	Thrissur	2559	2519	2516	2522	2476	2529	2529
9	Palakkad	1975	1893	1867	1873	1892	1875	1875
10	Malappurai	1003	1014	1014	1020	1033	1022	1022
11	Wayanad	141	134	133	135	118	135	149
12	Kozhikode	1768	1723	1707	1714	1504	1720	1925
13	Kannur	1729	1694	1696	1705	1826	1699	1699
14	Kasaragod	272	260	255	258	230	255	283
	Total	18554	18262	18239	18319	18002	18411	18659

^{*} Revised

Source: Directorate of Economics & Statistics, Thiruvananthapuram

Appendix 8.4

District - wise Distribution of Employment in Kerala 2001 to 2007

SI.No.	District -			Emp	oloyment (I	Nos)		
SI.NO.	DISTRICT -	2001	2002	2003	2004	2005*	2006	2007(p)
1	2	3	4	5	6	7	8	9
1	Thiruvanan	29188	30129	30024	30118	47522	47854	47854
2	Kollam	135518	128322	128773	128898	228282	228282	228282
3	Pathanamt	12660	9429	9447	9510	11475	11475	11475
4	Alappuzha	26216	25432	26614	26708	41217	41217	41217
5	Kottayam	17508	16674	16505	16615	27848	27848	27848
6	Idukki	7842	8343	8358	8389	14904	14904	14904
7	Ernakulam	64102	64315	62654	62779	98142	106974	106974
8	Thrissur	36213	35287	34957	35052	54319	55405	55405
9	Palakkad	24337	24811	23336	23430	38694	38694	38694
10	Malappurai	13409	9861	9196	9290	15689	15689	15689
11	Kozhikode	17004	21902	20141	20252	30595	34878	34878
12	Wayanad	25722	6546	6528	6561	3282	3741	3741
13	Kannur	23484	24658	24804	24945	37236	37236	37236
14	Kasaragod	3207	3104	2920	2967	1792	1989	1989
	Total	436410	408813	404257	405514	650997	666186	666186

^{*} Revised (P) Provisional

Source: Directorate of Economics & Statistics, Thiruvananthapuram

⁽p) Provisional

Appendix 8.31

Coir Co-operative Societies in Kerala

SI.	N Type of Society	No.of Societies	No. of Societies
0	Type of Society	as on 31-3-2007	as on 31-3-2008
1	2	3	4
	1 Primary Coir Co-operative Societies		
a)	Working	342	376
b)	New Societies which have not started working	9	9
c)	Dormant societies	124	116
	Total (1)	475	501
	2 Manufacturing Societies		
a)	Working (Started production)	33	35
b)	New Societies which have not started working	14	14
c)	Dormant societies	9	7
	Total (2)	56	56
	3 Small Scale Producers Co-operative Societies		
a)	Working	15	15
b)	New Societies which have not started working	10	13
c)	Dormant societies	3	3
	Total (3)	28	31
	4 Husk Procurement and Distribution Societies		
a)	Working	1	1
b)	New Societies which have not started working		
c)	Dormant societies	1	1
	Total (4)	2	2
	5 Fibre Societies (Defibering Mill Societies)		
a)	Working	18	6
ω,	9	. •	· ·
b)	New Societies which have not started working	23	23
c)	Dormant societies	31	43
	Total (5)	72	72
	6 Co-operative Coir Marketing Federation	1	1
	7 Total number of coir Co-operative societies		
a)	Working	410	434
b)	New Societies which have not started production	56	59
c)	Dormant societies	168	170
d)	Societies under liquidation	170	163
	Grand Total	804	826

Appendix 8.32
Activities of Coir Co-operative Societies

a.Yarn Se	ctor								
	No.of	No.of	Husk purchased		Fibre pu	Fibre purchased		Yarn produced	
Year	working Societies	Workers (1000)	Lakh Nos.	Value (Rs.lakh)	Qty (Tonnes)	Value (Rs.lakh)	Qty (Tonnes)	Value (Rs.lakh)	Wages paid (Rs. lakh)
2003-04	362	152.00	266.37	113.90	1300.50	412.95	3389.00	4179.76	591.06
2004-05	376	51.93	228.068	169.30	4436.84	769.75	4838.38	1427.76	593.08
2005-06	391	52.18	239.50	195.66	4706.37	646.92	5192.10	1592.62	734.49
2006-07	342	47.88	213.01	164.22	2536.25	348.31	5366.72	1645.32	758.59
2007-08	373	93.29	168.24	97.21	8964.26	1674.34	12067.25	3570.63	882.13
b.Product	Sector								
Year	No.of w Socie	•	No.of \	Vorkers		Production lakh)		Wages paid (Rs. lakh)	
2003-04	89	9	2	113	534	1.48		469.85	
2004-05	50	6	53	310	196	5.04		256.97	
2005-06	4	7	4	104	226	1.04	329.75		
2006-07	48	3	32	292	139	2.38	263.88		
2007-08	4(6	49	971	214	7.66		355.41	

Source: Directorate of Coir Development, Tvpm.

Appendix 8.33
District-wise Details of Coir Co-operative Societies

			No. of C	oir Societi	ies as on 31	as on 31-3-2008	
SI. No	District	Project Offices	Working & New	Dormant	Under liquidation	Total	
1	2	3	4	5	6	7	
1	Thiruvananthapuram	Chirayinkil	49	17	30	96	
2	Kollam	Kollam	71	48	23	142	
3	Alappuzha	Kayamkulam	61	21	10	92	
3		Alappuzha	122	28	19	169	
4	Kottayam / Idukki	Vaikkom	27	3	6	36	
5	Ernakulam	North Paravoor	20	4	41	65	
6	Thrissur	Thrissur	15	11	18	44	
7	Malappuram/ Palakkad	Ponnani	23	6	2	31	
8	Kozhikode	Kozhikode	65	17	11	93	
9	Kannur/ Kasaragod	Kannur	37	18	3	58	
	To	tal	490	173	163	826	

Source : Directorate of Coir Development, Tvpm.

Appendix 8.34 Export of Coir and Coir Products from India during 2006-07 & 2007-08

SI.		2006	6-07	2007-08		
No	Items	Qty	Value	Qty	Value	
140		(Tonnes)	(Rs.Lakh)	(Tonnes)	(Rs.Lakh)	
1	Curled Coir	1804.03	208.34	1279.99	152.06	
2	Coir Fibre	9356.54	1075.80	11101.64	1224.14	
3	Coir Rugs & Carpets	488.30	328.55	178.14	134.40	
4	Coir Pith	67152.99	5382.07	83613.24	6384.77	
5	Coir Rope	154.25	68.87	372.26	139.99	
6	Coir (other source)	119.31	66.04	57.02	57.83	
7	Coir Yarn	9691.17	3161.57	8407.09	2666.90	
8	Coir Geo-textiles	3044.51	1335.22	3364.72	1444.65	
9	Handloom Mat	42986.07	27370.67	40917.35	24299.85	
10	Powerloom Mat	246.21	168.84	75.06	52.69	
11	Tufted Mat	29017.02	18213.02	33950.35	19910.98	
12	Handloom Matting	3642.27	2354.63	3013.71	1879.33	
13	Powerloom Matting	104.75	85.11	115.82	88.30	
14	Rubberised Coir	947.31	697.86	1120.35	852.19	
	Total	168754.73	60516.59	187566.74	59288.08	

Source: Directorate of Coir Development, Tvpm.

Appendix 8.35
Foreign Exchange Earnings of India from Cashew Industry

(Rs. Crore)

	Export Val		Import Value	Net Foreign	
Year	Cashew Kernels	Cashewnut	Total	of	Exchange
	Cashew Reiners	shell liquid		Cashewnuts	Earned
2001-2002	1788.68	5.93	1794.61	949.25	845.36
2002-2003	1933.02	9.26	1942.28	1236.60	705.68
2003-2004	1804.43	7.03	1811.46	1400.90	410.56
2004-2005	2709.24	7.91	2717.15	2190.94	526.21
2005-2006	2514.86	7.21	2522.07	2162.95	359.12
2006-2007	2455.15	10.29	2465.44	1811.62	653.82
2007-08	2289.00	11.98	2300.98	1746.8	554.18

Source: Cashew Export Promotion Council, Kochi

Appendix 8.36 Import of Raw Cashewnuts

Year -	Kerala*		Inc	dia
Teal -	Quantity (MT)	Value (Rs.crore)	Quantity (MT)	Value (Rs.crore)
2001-02	191579	502.46	355443	949.25
2002-03	249970	772.47	400659	1236.60
2003-04	294552	909.45	452398	1400.90
2004-05	283149	1055.08	578884	2190.94
2005-06	306765	1134.83	565400	2162.95
2006-07	322443	971.79	586044	1811.62
2007-08	372497	1071.21	605970	1746.8

* Import through Cochin Port

Source: Cashew Export Promotion Council, Kochi.

Appendix 8.37

Kerala Khadi & Village Industries Board

Production, Sales, Employment, and Wages paid during 2006-07 & 2007-08

(Rs. Lakh)

SI.		Value of p	roduction	ction Value of sales Employment (Nos)				(Rs. Lakh) Wages paid			
No.	Name of Industry	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08		
1	2	3	4	5	6	7	8	9	10		
I	Khadi	529.81	584.35	2384.17	1222.30	4146	3178	362.95	304.73		
II	Polyvastra	33.99	32.62	115.25	89.71	401	274	41.48	29.23		
III 1	Village Industries Cottage Match	785.00	602.00	795.40	618.80	6228	6183	426.10	433.00		
2	Agarbathy	195.00	166.00	195.00	155.00	1230	1215	112.40	175.60		
3	Village Leather	1402.00	949.00	1447.00	1062.00	1265	1285	212.50	251.30		
4	Fibre & Screwpine	499.00	344.00	487.50	350.80	53158	5309	437.50	573.80		
5	Rubber based industry	1490.00	1178.00	1805.00	1499.00	1289	1274	235.00	341.80		
6	Handmade paper	290.00	337.00	303.00	378.00	443	463	88.50	111.20		
7	Village pottery	1925.00	1222.00	2302.00	1206.00	19925	19305	939.00	639.80		
8	Gurkhandasari	100.00	58.00	90.00	58.00	1441	1395	145.00	112.00		
9	Service Industry	394.00	328.00	394.00	318.00	780	762	416.00	531.40		
10	Non-edible oil & Soap	505.00	419.00	743.00	564.00	909.00	894.00	134.00	167.63		
11	Village oil	1184.00	1034.00	1482.00	1250.00	916	916	186.00	249.80		
12	Textile	750.00	657.00	773.00	704.00	5820	5793	439.00	866.40		
13	Palmgur	110.00	88.00	126.00	88.00	6390	6320	631.00	442.60		
14	Bee-keeping	173.80	156.80	169.20	135.20	15850	15847	155.00	268.30		
15	Processing of cereals & pulses	525.00	350.00	665.00	380.00	13314	13244	685.00	795.00		
16	Ayurvedic medicines	144.00	180.00	181.00	198.00	1022	1047	85.00	196.00		
17	Fruits & Vegetable Preservation	479.00	376.00	466.00	394.00	2659	2599	289.00	428.50		
18	Lime	1575.00	1472.00	1608.00	1626.00	8655	8948	1008.00	1214.80		
19	Cane & Bamboo	205.00	203.00	237.00	220.00	2905	2865	158.00	428.00		
20	Carpentry & Blacksmithy	1460.00	1213.00	1635.00	1240.00	5912	5110	1090.00	1745.40		
21	Aluminium industry	594.00	342.40	586.00	289.00	709	861	140.00	246.90		
22	Electronics	307.00	289.00	328.00	290.00	758	290	115.00	178.50		
	PVC	130.00	132.00	135.00	128.00	185	185	33.80	54.40		
	Total III	15221.80	12096.20	16953.10	13151.80	151763.00	102110.00	8160.80	10452.13		
	Grand Total	15785.6	12713.2	19452.5	14463.8	156310.0	105562.0	8565.2	10786.1		

Source: Kerala Khadi & Village Industries Board, Thiruvananthapuram

Appendix 8.38

District-wise Number of Sales Outlets
& Sales under KVIB during 2007-08

SI. No.	Name of project	No. of sales outlets	Sales during 2007-08 (Rs. Lakh)
1	Thiruvananthapuram	19	107.98
2	Kollam	18	84.73
3	Pathanamthitta	10	32.74
4	Alappuzha	18	60.84
5	Kottayam	17	67.86
6	Idukki	4	27.68
7	Ernakulam	10	173.6
8	Thrissur	18	50.27
9	Palakkad	17	74.66
10	Malappuram	12	29.44
11	Kozhikkodu Payyannur Khadi	30	114.6
12	Centre	45	533.07
	Total	218	1357.47

Source: Khadi & Village Industries Board, Thiruvananthapuram.

Appendix 8.39
Physical Achievement under Sericulture for the year 2006-07 & 2007-08

SI. No	District	Mulberry Cultivation (acres) (Cumulative)		No. of farmers DFLs sup (Cumulative) (Nos.)						Silk production (Kg)	
		2006-07				2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
1	2	3	4	5	6	7	8	9	10	11	12
1	Thiruvananthapuram	156.03	172.28	266	287	710	1525	184.34	372.10		
2	Kollam	214.89	221.69	380	395	5275	4165	1749.50	1380.73		
3	Pathanamthitta	158.67	165.17	260	276	4220	3510	1630.30	1470.80		
4	Alappuzha	233.89	246.84	431	452	6167	8405	2691.14	2892.20	1259.21	1340.00
5	Kottayam	203.25	209.75	326	338	3795	3010	1363.20	1318.70		
7	Idukki	589.76	627.01	770	808	9465	6070	3328.10	2750.19		
6	Ernakulam	175.10	184.60	275	289	13540	11775	4578.60	3929.78		
8	Thrissur	213.77	221.27	362	370	40660	18840	17800.20	8249.60		
9	Palakkad	419.55	494.30	462	542	72325	56980	29648.70	27173.60	89.5	
10	Malappuram	259.05	271.25	427	451	36090	22750	15090.40	12011.80		
11	Kozhikkode	161.30	169.30	291	303	7435	5375	2657.40	1834.25		
13	Wayanad	312.60	345.60	427	464	17920	19270	10665.10	10965.09		
12	Kannur	163.35	171.95	332	177	11305	9520	5778.10	3188.10		
14	Kasaragod	121.90	125.90	172	177	11555	6080	4129.15	2355.75	1421.94	1650.00
_	Total	3383.11	3626.91	5187	5503	240462	177275	101294.00	79893.00	2771.00	2990.00

^{*} Raw silk production reduced during 2006-07 due to the functioning of open cocoon market Source: SERIFED, Thiruvananthapuram.

Appendix 8.40
Kerala State Industrial Development Corporation
Physical & Financial Performance 2007-08

SI. N	ο.	Particulars	2007-08
Α		Physical	
1		Projects Completed	
	a.	No. of projects	12
	b.	Aggregate cost (Rs. crores)	35
	c.	Employment (Nos.)	941
2		Projects under implementation (31.03.2007)	
	a.	No. of projects	29
	b.	Aggregate cost (Rs. crores)	636
	c.	Employment (Nos.)	3188
3		Projects cleared by KSIDC Board	
	a.	No. of projects	23
	b.	Aggregate cost (Rs. crores)	339
	c.	Employment (Nos.)	2548
4		MOU signed with private parties	
	a.	No. of projects	54
	b.	Estimated aggregate cost (Rs. crores)	2414
В		Financial (Rs. crores)	
	а	Gross sanction	98.12
	b	Disbursement	61.94
	С	Recovery	97.13
	d	Operating profit	21.83

Source: Kerala State Industrial Development CorporationThiruvananthapuram

Appendix 8.41
Kerala Financial Corporation: Loan Operations during 2007-2008

(Rs. Lakh)

							(Rs. Lakh)
SI.No	Particulars —	S	SI	C	thers	Total	
31.140	Fai ticulai 5	No.	Amount	No.	Amount	No.	Amount
1	2	3	4	5	6	7	8
1	Application pending as on 1.4.2006	16	659.58	28	3137.00	44	3796.68
2	Application Received during 2006-07	191	5411.44	332	22834.21	523	28245.65
3	Total application for consideration	207	6071.12	360	25971.21	567	32042.33
4	Application withdrawn/ rejected or otherwise disposed off	17	1154.62	6	2673.12	23	3827.74
5	Application Sanctioned (Gross)	185	4538.75	341	20018.09	526	24556.84
6	A. Application cancelled/reduced out of current year's sanction	1	4.00	2	21.52	3	25.52
	B. Application cancelled/reduced out of previous year's sanction	28	1289.55	10	731.75	38	2021.30
	C. Total cancellation/ reduction (6A+B)	29	1293.55	12	753.27	41	2046.82
7	Application sanctioned effectively (5-6A)	184	4534.75	339	19996.57	523	24531.32
8	Net Sanctions (5-6C)	156	3245.20	329	19254.82	485	22510.02
9	Amount disbursed along with number of newly assisted units	175	4315.90	272	14327.32	444	18643.22
10	Application pending sanction as on at the end of the period	5	377.75	13	3280.00	18	3657.75

Source : Kerala Financial Corporation, Tvpm.

Appendix 8.42
District-wise details of Disbursement of Loan by KFC during 2007-08

(Rs. lakh)

		Effectiv	va Canatian	Disbursement					(Rs. lakh)	
Particulars			Effective Sanction -		SSI		Others		Total	
		No.	Amount	No.	Amount	No.	Amount	No.	Amount	
1	2	3	4	5	6	7	8	9	10	
Backward Districts										
Category - A	Lat. data?	4	400.70	0	40.05	4	470.40	0	400.05	
	Idukki	4	103.70	2	18.25	1	172.10	3	190.35	
	Wayanad	19	402.36	5	77.57	12	142.11	17	219.68	
Category - B										
	Alappuzha	36	1635.58	8	72.45	15	858.56	23	931.01	
	Malappuram	29	942.49	9	319.91	6	696.07	15	1015.98	
	Kannur	20	748.55	9	287.21	9	136.86	18	424.07	
	Kasaragod	37	893.80	8	66.86	25	805.50	33	872.36	
Category - C										
	Thiruvananthapuram	43	3778.14	7	107.46	34	3371.32	41	3478.78	
	Thrissur	70	2457.92	27	539.42	36	1364.12	63	1903.54	
	Total	258	10962.54	75	1489.13	138	7546.64	213	9035.77	
Non Backward Disrticts										
	Pathanamthitta	15	609.44	6	224.92	6	292.13	12	517.05	
	Kollam	42	1300.48	23	370.88	17	590.88	40	961.76	
	Kottayam	18	1078.57	3	79.75	8	600.13	11	679.92	
	Ernakulam	72	4262.77	27	811.31	43	1923.22	70	2734.53	
	Perumbavoor	19	1707.50	9	570.83	7	575.15	16	1145.98	
	Palakkad	24	1293.83	8	398.99	10	514.33	18	913.32	
	Kozhikode	55	2491.54	21	305.85	29	1898.69	47	2204.54	
	Thodupuzha	20	824.65	3	64.20	14	386.15	17	450.35	
	Total	265	13568.78	100	2826.729	134	6780.68	231	9607.45	
Grand	Total	523	24531.32	175	4315.859	272	14327.32	444	18643.22	

Source : Kerala Financial Corporation, Tvpm.

Appendix 8.43
Industry-wise Classification of Loan Sanctioned and Disbursed by the Kerala Financial
Corporation as on 31-3-2007

(Rs. Lakh)

					(Rs. Lakn)
SI. No	Type of Industry	Amount Sanctioned	% of total loans sanctioned	Amount disbursed	% of total loan Disbursed
1	2	3	4	5	6
1	Mining	11149.02	7.76	9192.63	7.61
2	Crude Petroleum	229.73	0.16	100.71	0.08
3	Petroleum Refining	13.27	0.010	11.31	0.010
4	Other Food Products	20673.76	14.39	19306.75	15.98
5	Textiles	5198.41	3.62	3800.24	3.15
6	Paper & Paper Products	5889.08	4.10	5264.27	4.36
7	Leather & Leather Products	281.83	0.10	277.95	0.23
8	Rubber Products	19085.93	13.29	16602.60	13.74
9	Chemical & Chemical Products	6033.20	4.10	5079.43	4.21
10	Cement	110.20	0.08	84.07	0.07
11	Basic Metals				
a)	Iron & Steel	2834.31	1.97	2121.60	1.76
b)	Non-Ferrous	751.71	0.52	590.08	0.49
12	Metal Products	5730.70	3.99	3918.54	3.24
13	Capital Goods				
a)	Non-Electrical Machinery	1338.21	0.93	1131.46	0.94
b)	Electrical Machinery	2294.80	1.60	1828.10	1.51
c)	Transport Equipment	1544.62	1.08	1073.58	0.89
14	Electricity Generation	109.75	0.08	34.95	0.29
15	Services				
a)	Motels & Shopping Complex	3075.22	2.14	2985.87	2.47
b)	Hospitals	1239.08	0.86	588.00	0.49
c)	Others	8023.64	5.59	8862.94	7.34
16	Others	48056.59	33.45	37939.10	31.41
	Total	143663.06		120794.18	

Source : Kerala Financial Corporation, Tvpm.

Appendix 8.44

Progress of the Working of Kerala Financial Corporation at a Glance

(Rs.lakh)

					(Monann)
Year	Loans sanctioned cumulative	Loans disbursed cumulative	Loans - outstanding	Profit before taxation	Profit after taxation
1	2	3	4	5	6
2001-02	227734	186918	120306	(-)2860	(-)2883
2002-03	243283	198149	113736	(-)604	(-)630
2003-04	260077	210051	113071	391	181
2004-05	271028	218599	61462	283	(-)249
2005-06*	12113	7852	54941	1138	177
2006-07	13583	9725	50958	1254	44
2007-08	24557	18643	50826	(-)1029	(-)2815

*Revised

Source: Kerala Financial Corporation, Tvpm.

Appendix 8.45
Selected Indicators of the Activities of SIDCO

No. Activities Unit 2006-07 2007-08 1 Raw Material Distribution SSI units assisted for procurement of raw materials Nos 120 932 1.2 Quantity of Raw Materials Distributed To and Steel including pig iron MT 6258.94 3248.00 b Cement MT 367.50 305.25 c Coal MT 100.70 542.75 d Paraffin wax MT 100.70 542.75 e Titanium Dioxide MT 11.18 6.77 f Others Titanium Dioxide MT 17.392 240.50 iii) IPCL MT 427.21 187.75 iv) Aluminium sheet KG 547.45 v) Paint Ltr 3004 403 v) Paint Ltr 10378.50 506.00 b Bitumen MT 3367.42 2353 2 Over dues Ltr 10378.50 506.00 3.1 SSI Units assisted in marketing of products Nos 100 110 3.2 Value of SSI products <th>SI.</th> <th></th> <th></th> <th></th> <th></th>	SI.				
Raw Material Distribution 1.1 SSI units assisted for procurement of raw materials Nos 120 932 1.2 Quantity of Raw Materials Distributed a Iron and Steel including pig iron MT 6258.94 3248.00 b Cement MT 367.50 305.25 c Coal MT 100.70 542.75 d Paraffin wax MT 100.70 542.75 e Titanium Dioxide MT 11.18 6.77 f Others WIT 11.18 6.77 j Pipe Mtr 17392 240.50 iii) PCL MT 427.21 187.75 iv) Aluminium sheet KG 547.45 547.45 v) Paint Ltr 3004 403 v) Paint Ltr 3004 403 v) Paint Ltr 10378.50 506.00 b Bitumen MT 3367.42 2353 2 Over dues Nil Nil Nil 3.1 SSI Units assisted in marketing of produc		Activities	Unit	2006-07	2007-08
1.1 SSI units assisted for procurement of raw materials Nos 120 932 1.2 Quantity of Raw Materials Distributed MT 6258.94 3248.00 b Cement MT 367.50 305.25 c Coal T MT 100.70 542.75 d Paraffin wax MT 100.70 542.75 e Titanium Dioxide MT 11.18 6.77 f Others MT 117392 240.50 ii) Pipe Mtr 17392 240.50 iii) IPCL MT 427.21 187.75 iv) Paint Ltr 3004 403 v) Paint Ltr 304 403 v) Paint Ltr 10378.50 506.00 b Bitumen MT 3367.42 2353 2 Over dues NI Ni NiI 3 Marketing of SSI products Ni Ni NiI 3.1 SSI Units assisted in marketing of products No 100 110 <tr< th=""><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th></tr<>	1	2	3	4	5
1.2	1	Raw Material Distribution			
A command Steel including pig iron	1.1	SSI units assisted for procurement of raw materials	Nos	120	932
b Cement color co		•			
c Coal d Paraffin wax MT 100.70 542.75 e Titanium Dioxide MT 11.18 6.77 f Others Industrial Estates & Infrastrucutre Development MT 17.392 240.50 MT 427.21 187.75 18	а	Iron and Steel including pig iron	MT	6258.94	3248.00
d Paraffin wax e Titanium Dioxide f Others i) Pipe Mtr 17392 240.50 iii) IPCL MT 427.21 187.75 iv) Aluminium sheet ∀) Paint Ltr 3004 403 ∀) IOC products a Lubricants b Bitumen MT 0378.50 506.00 b Bitumen MT 03878.50 506.00 b Bitumen MT 0378.50 506.00 b Bitumen MT 0378.50 506.00 b Bitumen MT 0378.50 540 b Bitumen MT 0378.50 540 b Called Salled Salled Nos 540 b Called Salled Nos 531 531 d SSI Units b Sheds available b Sheds occuiped c Sli Units c Nos 780 c 700	b	Cement	MT	367.50	305.25
e Titanium Dioxide f Others i) Pipe iii) IPCL iii) IPCL iii) Aluminium sheet v) Paint Ltr 3004 403 v) IOC products a Lubricants b Bitumen b Bitumen MT 3378.50 506.00 b Bitumen MT 3367.42 2353 2 Over dues a) No. of Units Nil b) Amount of over dues 3.1 SSI Units assisted in marketing of products a Domestic b Export Total Industrial Estates & Infrastrucutre Development 4.1 Major Estates a Quantity of Raw Materials Distributed b Sheds available c Sheds occuiped d SSI Units iii) Pipe Mtr 17392 240.50 Mtr 427.21 187.75 MTr 427.21 187.75 MTr 407.90 MTr 427.21 187.75 MTr 407.90 MTr 427.21 187.75 MTr 407.90 MTr 407.90 MTr 427.21 187.75 MTr 407.90 MTr 407.90 MTr 407.90 MTr 427.21 187.75 MTr 407.90 MTr 407.90 MTr 427.21 MTr 17 17 MTr 17 17 MTr 17 17 MTr 17 17 MTr 18 Sheds available C Sheds occuiped Nos 540 540 MTr 179.90 MTr 407.90 MTr 407.9	С	Coal			
Foliation Fol	d	Paraffin wax	MT	100.70	542.75
Pipe	е	Titanium Dioxide	MT	11.18	6.77
III IPCL	1	f Others			
iv) Aluminium sheet KG 547.45 v) Paint Ltr 3004 403 v) IOC products Ltr 10378.50 506.00 b Bitumen MT 3367.42 2353 2 Over dues Nil Nil Nil a) No. of Units Nil Nil Nil b) Amount of over dues Nil Nil Nil 3.1 SSI Units assisted in marketing of products Nos 100 110 3.2 Value of SSI products marketed through SIDCO Rs. in lakhs 1820.8 2223.3 a Domestic " 1820.80 2223.30 b Export Nil Nil Nil c Total 1820.80 2223.30 4 Industrial Estates & Infrastrucutre Development Nos 17 17 d Industrial Estates & Infrastrucutre Development Nos 540 540 e Sheds available Nos	i)	Pipe	Mtr	17392	240.50
Note	iii)	IPCL	MT	427.21	187.75
v) IOC products a Lubricants Ltr 10378.50 506.00 b Bitumen MT 3367.42 2353 2 Over dues Value Nil Nil Nil a) No. of Units Nil Nil Nil b) Amount of over dues Nil Nil Nil 3.1 SSI Units assisted in marketing of products Nos 100 110 3.2 Value of SSI products marketed through SIDCO Rs. in lakhs 1820.8 2223.3 a Domestic " 1820.80 2223.30 b Export Nil Nil Nil c Total 1820.80 2223.30 d Industrial Estates & Infrastrucutre Development Value	iv)	Aluminium sheet	KG	547.45	
Ltr 10378.50 506.00 b Bitumen MT 3367.42 2353 2 Over dues Ni	V)	Paint	Ltr	3004	403
Bitumen	V)	IOC products			
2 Over dues No. of Units Nil Nil b) Amount of over dues Nil Nil Nil 3 Marketing of SSI products Nos 100 110 3.1 SSI Units assisted in marketing of products Nos 100 110 3.2 Value of SSI products marketed through SIDCO Rs. in lakhs 1820.80 2223.30 b Export " 1820.80 2223.30 b Export Nil Nil Nil c Total 1820.80 2223.30 4 Industrial Estates & Infrastrucutre Development 4.1 Major Estates Nos 17 17 b Sheds available Nos 540 540 c Sheds occuiped Nos 780 780 d SSI Units Nos 700 700	а	Lubricants	Ltr	10378.50	506.00
a) No. of Units Nil Nil b) Amount of over dues Nil Nil Nil 3 Marketing of SSI products Nos 100 110 3.1 SSI Units assisted in marketing of products Nos 1820.8 2223.3 a Domestic " 1820.80 2223.30 b Export Nil <	b	Bitumen	MT	3367.42	2353
b) Amount of over dues Nil Nil 3 Marketing of SSI products Nos 100 110 3.1 SSI Units assisted in marketing of products Nos 100 110 3.2 Value of SSI products marketed through SIDCO Rs. in lakhs 1820.80 2223.30 b Export Nil Nil Nil c Total 1820.80 2223.30 b Industrial Estates & Infrastrucutre Development 1820.80 2223.30 4 Industrial Estates & Infrastrucutre Development Nos 17 17 b Sheds available Nos 540 540 c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	2	Over dues			
Marketing of SSI products 3.1 SSI Units assisted in marketing of products Nos 100 110 3.2 Value of SSI products marketed through SIDCO Rs. in lakhs 1820.80 2223.30 a Domestic " 1820.80 2223.30 b Export Nil Nil Nil c Total 1820.80 2223.30 c Industrial Estates & Infrastrucutre Development 1820.80 2223.30 d Industrial Estates & Infrastrucutre Development Nos 17 17 d Sheds available Nos 540 540 c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	a)	No. of Units		Nil	Nil
3.1 SSI Units assisted in marketing of products Nos 100 110 3.2 Value of SSI products marketed through SIDCO Rs. in lakhs 1820.80 2223.30 a Domestic " 1820.80 2223.30 b Export Nil Nil Nil Nil c Total 1820.80 2223.30 2223.30 4 Industrial Estates & Infrastrucutre Development 1820.80 2223.30 4.1 Major Estates Nos 17 17 b Sheds available Nos 540 540 c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	b)	Amount of over dues		Nil	Nil
3.2 Value of SSI products marketed through SIDCO Rs. in lakhs 1820.8 2223.30 a Domestic " 1820.80 2223.30 b Export Nil Nil c Total 1820.80 2223.30 4 Industrial Estates & Infrastrucutre Development 4.1 Major Estates Vos 17 17 a Quantity of Raw Materials Distributed Nos 540 540 b Sheds available Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	3	Marketing of SSI products			
a Domestic " 1820.80 2223.30 b Export Nil Nil Nil c Total 1820.80 2223.30 4 Industrial Estates & Infrastrucutre Development 4.1 Major Estates Vos 17 17 b Sheds available Nos 540 540 c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	3.1	SSI Units assisted in marketing of products	Nos	100	110
b Export Nil Nil c Total 1820.80 2223.30 4 Industrial Estates & Infrastrucutre Development 4.1 Major Estates a Quantity of Raw Materials Distributed Nos 17 17 b Sheds available Nos 540 540 c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	3.2	Value of SSI products marketed through SIDCO	Rs. in lakhs	1820.8	2223.3
c Total 1820.80 2223.30 4 Industrial Estates & Infrastrucutre Development 4.1 Major Estates a Quantity of Raw Materials Distributed Nos 17 17 b Sheds available Nos 540 540 c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	а	Domestic	II .	1820.80	2223.30
4 Industrial Estates & Infrastrucutre Development 4.1 Major Estates a Quantity of Raw Materials Distributed Nos 17 17 b Sheds available C Sheds occuiped Nos 540 540 C Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	b	Export		Nil	Nil
4.1 Major Estates a Quantity of Raw Materials Distributed Nos 17 17 b Sheds available C Sheds occuiped Nos 540 540 C Sheds occuiped Nos 531 531 C SSI Units Nos 780 780 I) Working Nos 700 700	С	Total		1820.80	2223.30
a Quantity of Raw Materials Distributed Nos 17 17 b Sheds available c Sheds occuiped d SSI Units i) Working Nos 700 700	4	Industrial Estates & Infrastrucutre Development			
b Sheds available Nos 540 540 c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	4.1	Major Estates			
c Sheds occuiped Nos 531 531 d SSI Units Nos 780 780 i) Working Nos 700 700	а	Quantity of Raw Materials Distributed	Nos	17	17
d SSI Units Nos 780 780 i) Working Nos 700 700	b	Sheds available	Nos	540	540
i) Working Nos 700 700	С	Sheds occuiped	Nos	531	531
, -	d	I SSI Units	Nos	780	780
ii) Defunct, Idle or closed Nos 80 80		i) Working	Nos	700	700
		ii) Defunct, Idle or closed	Nos	80	80

Source: SIDCO, Thiruvananthapuram

Appendix 8.46

Micro, Small & Medium Enterprises Development Institute, Thrissur (Formerly Small Industries Service Institute)

Achievements during 2007-08

SI. No	Name of Activity	Unit	Achievement
1	2	3	4
1	Units visited for providing technical assistance	No	259
2	Visitors rendered assistance at SISI premises	II	3871
a.	Assistance to prospective entrepreneurs	II .	2270
b.	Assistance to existing entrepreneurs	II .	1601
3	Preparation of State Profile	II .	1
4	Preparation of Industrial Potential Survey Report for Kerala	"	2
5	Project Profiles	"	28
6	Ancillary Development Programmes	II.	
7	Motivation campaigns	II .	20
8	EDPs - 4/6 weeks duration		
	i Courses undertaken	II .	5
	ii Persons trained	II .	116
9	Management Development Programmes		
	i Courses undertaken	ıı	4
	ii Persons trained	II .	87
10	BSDP		
	i Course Undertaken		3
	ii Persons trained		139
11	Common Facility Workshop / Lab performance		
	i Training (including skill development programme)	II	22
	ii Persons trained	II .	275
12	Export Packaging Training		
	a Courses undertaken	II	7
	b Persons trained	"	315
13	Training Prog. Organised under PD A/c a Courses undertaken		
	b Persons trained		

Source : MSME Development Institute, Trissur.

Appendix 8.47
Small Industries Development Bank of India's Asssitance to Small Scale Industries

(Rs. Crore)

_		Sanction and [nt	Performano	ce of Kerala as	
year	All	India	Ke	erala	% of	All India
_	Sanction	Disbursement	Sanction	Disbursement	Sanction	Disbursement
1	2	3	4	5	6	7
2001-2002	9026	5919	535	396	5.93	6.69
2002-2003	10904	6789	614	214	5.63	3.15
2003-2004	8246	4414	162	133	1.96	3.01
2004-2005	9091	6188	221	142	2.43	2.29
2005-2006*	11192	10191	773	739	6.91	7.25
2006-2007	11672	8922	497	457	4.26	5.12

Source: SIDBI, Ernakulam.

Appendix 8.48
DA/DP under DIC as on 31st March 2008

District	Name of DA/DP	Total area acquired (acres)	Allotable area	Area allotted (acres)	No. of working	No. of closed units	Total no. of units
2	3	4	(acres) 5	6	units 7	8	9
Thiruvanantha puram	DA, Veli	109.630	89.280	89.280	116	0	116
	DP, Manvila	27.530	22.690	22.690	44	66	110
Kollam	DP, Mundakkal	20.667	18.088	18.088	50	3	53
Alappuzha	DA, Kollakkadavu	16.220	15.470	15.470	28	15	43
	DP, Chengannur	5.510	4.280	4.280	8	10	18
	DP, Punnapra	57.280	53.000	53.000	31	18	49
	Coir Park-I, Cherthala	23.400	21.200	21.200	10	2	12
	Coir Park-II, Cherthala	17.060	16.540	16.540	0	4	4
	CIE, Aroor	15.800	12.330	12.330	43	7	50
	DA, Aroor	47.170	41.780	41.780	15	12	27
Kottayam	DP, Poovanthuruth	41.250	37.320	37.320	182	20	202
,	DP, Athirampuzha	1.000	0.860	0.860	10	0	10
	DP, Vaikkom	3.750	3.250	3.250	11	3	14
Pathanamthitta	DP, Kunnamthanam	20.940	15.370	14.470	15	0	15
Idukki	DP, Muttom	5.000	4.580	4.580	7	6	13
	DP, Thudanganad	17.500	17.500	5.000	2	0	2
Ernakulam	DA, Aluva	57.820	54.910	54.910	72	12	84
	DA, Angamaly	219.520	214.520	214.320	37	10	47
	DA, Edayar	435.240	376.700	376.700	268	50	318
	DA, Vazhakkulam	15.260	12.160	12.160	35	8	43
	DP, Angamaly	31.910	26.620	26.620	51	9	60
	DP, Kalamassery	78.120	64.740	64.740	153	25	178
Thrissur	DP, Athani	48.286	43.285	43.285	71	13	84
	DP, Kunnamkulam	3.004	2.100	2.100	19	4	23
	DP, Ayyankunnu	24.870	20.870	19.673	3	0	3
	DP, Velakkod	24.006	21.936	20.130	4	0	4
	PuzhakkalPadam	51.414		40.000	0	0	0
Palakkad	IDA, Pudussery	134.150	129.990	129.990	42	16	58
	NIDA, Kanjikod	532.800	513.440	512.750	264	24	288
	DP, Umminikulam	90.960	90.960	3.000	0	0	0
	DP, Kappoor	18.260	17.910	8.250	0	0	0
	Shornoor	17.720	17.120	5.000	0	0	0
	Kanjikode (w)	143.140	0.000	0.000	0	0	0
	Kanalpirivu	34.000	0.000	0.000	0	0	0
Malappuram	FIE, Payyanadu	16.190	6.790	6.790	16	2	18
kozhikkode	DP, West Hill	12.630	10.330	10.330	34	0	34
Kannur	DP, Andoor	59.310	46.610	46.610	152	22	117
Kasragod	DA, Ananthapuram	108.000	103.890	22.700	0	2	2
-	DP, Ananthapuram	104.500	97.690	67.520	3	27	30
	DP, Chattanchal	28.500	23.270	19.700	8	0	8
Total		2719.317	2269.379	2067.416	1804.000	390.000	2137.000

Appendix 8.49
Mini Industrial Estates under DIC as on 31st March 2008

SI. No.	District	No. of MIEs	Total No. of SSI units	No. of working units	No. of employees	No. of sheds allotted to working units	Total No. of sheds
1	Thiruvananthapuram	7	60	40	280	60	60
2	Kollam	5	32	22	131	34	50
3	Pathanamthitta	2	15	10	30	15	20
4	Alappuzha	7	52	40	158	62	68
5	Kottayam	11	96	89	462	100	100
6	ldukki	4	36	23	120	24	40
7	Ernakulam	14	152	96	310	96	152
8	Thrissur	9	139	113	521	113	149
9	Palakkad	6	45	45	216	45	58
10	Malappuram	5	31	31	150	38	42
11	Kozhikode	8	81	64	289	89	95
12	Kannur	4	29	22	78	28	37
13	Kasaragod	5	31	31	120	41	54
	Total	87	799	626	2865	745	925

Source: Directorate of Industries and Commerce, Tvpm.

Appendix 8.50

Major Industrial Estates under SIDCO as on 31st March 2008

SI. No.	District	Name of Industrial Estate	Total area acquired (Acres)	Allotable area (acres)	Total area allotted (acres)	No.of worki ng Units	No.of employees in working units	No. of closed units	Total No. of units	No. of sheds allotted to working units	Total No. of sheds
1	Thiruvananthapuram	Pappanamcode	18.5327	18.5327	18.3027	62	175	9	71	41	43
2	Kollam	Umayanallur	26.0400	26.0400	25.0400	79	212	9	88	46	46
		Karunagappally	8.6300	8.6300	7.2700	5	68	7	12	18	19
3	Alappuzha	Kollakadavu	19.1535	19.1535	18.4100	43	45	7	50	38	38
		Cherthala	8.9400	8.9400	8.1400	18	84	1	19	19	19
4	Kottayam	Changanacherry	14.2245	14.2245	14.1545	64	120	1	65	31	31
		Ettumanoor	30.3100	30.3100	30.1500	58	305	4	62	57	57
5	Ernakulam	Palluruthy	1.8600	1.8600	1.8600	6	28	2	8	7	7
		Mudickal	4.6215	4.6215	4.6215	13	35	nil	13	21	21
6	Trissur	Ollur	29.5625	29.5625	29.5625	122	210	5	127	50	51
		Kallettumkara	5.0000	5.0000	4.9000	14	38	2	16	22	22
7	Palakkad	Karakkad	10.9600	10.9600	10.9100	36	260	nil	36	22	22
		Olavakkod	21.9300	21.9300	19.2000	23	212	12	35	45	49
8	Malappuram	Manjeri	4.9900	4.9900	4.9900	22	115	1	23	21	21
9	Kozhikkode	West hill	12.4400	12.4400	12.4400	62	350	8	70	43	43
10	Kannur	Palayad	8.4200	8.4200	8.4200	33	75	9	42	11	11
11	Kasaragod	Kasaragod	15.8400	15.8400	15.1600	40	220	3	43	39	40
		Total	241.4547	241.4547	233.5312	700	2552	80	780	531	540

Source: SIDCO, Tvpm

			Append	dix 8.5				
	Industrial	Disputes	Arose, Ha	ndled, Se	ttled etc.	in Kerala		
SI. No.	Particulars	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
1	2	3	4	5	6	7	8	9
1	No. of disputes pending at the beginning of the year	2241	2263	2768	2667	2658	2749	2904
2	No. of disputes that arose during the year	3356	4005	4555	4019	3405	3376	3482
3	No. of disputes handled during the year (1+2)	5597	6268	7323	6686	6063	6125	6386
4	No. of disputes settled during the year							
а	By voluntary negotiation between parties	578	866	883	810	374	341	484
b	By conciliation	922	1391	1876	1608	1124	1361	1644
С	By withdrawal	1428	1230	1376	1178	1290	1066	795
d	Referred for Adjudication	406	392	521	432	526	453	644
е	Referred for Arbitration	0	0	0	0	0	0	0
f	Total number of disputes settled (a to e)	3334	3879	4656	4028	3314	3221	3567
	Number of disputes pending at the end of the year (3-4) Number of disputes led to	2263	2389	2667	2658	2749	2904	2819
	Strike (including pending previously)	9	7	22	14	7	8	7
b	Lockout including pending previously	38	49	35	30	29	29	23
С	Total (a + b)	47	56	57	44	36	37	30
7	No. of workers affected due							
а	Strike	29827	403510	47887	15202	446144	25926	697
b	Lockout	6700	12412	8858	82175	7301	7910	6410
С	Total(a + b)	36527	415922	56745	97377	453445	33836	7107
8	Mandays lost							
	Strike	392172	6404348	93854	150134	3224163	172177	23192
b	Lockout	1405805	1772811	1799224	1979708	1807511	1821036	1192022
С	Total (a + b)	1797977	8177159	1893078	2129842	5031674	1993213	1215214
Sour	ce: Office of the Labour Commissioner	, Thiruvananth	apuram					

Appendix 8.51
Mini Industrial Estates under SIDCO as on 31st March 2008

SI. No	District	Name of Industrial Estate	Total area of IE (Acres)	Total area allotted (Cents)	No.of working Units	No.of employees in working units	No. of closed units	Total No. of units	No. of sheds allotted to working units	Total No. of sheds
1	2	3	4	5	6	7	8	9	10	11
1		Ulloor	1.00	95.00	11	60	3	14	10	12
2	Thiruvananthapuram	Anad	1.00	90.00	4	20	3	7	10	12
3		Vellanad	1.00	90.00	4	15	2	6	4	12
4		Varkala	1.00	45.00	3	12	6	9	4	12
5		Chadayamangalam	1.00	95.00	5	45	nil	5	10	10
6	Kollam	Thrikovilvattom	1.00	90.00	2	12	5	7	7	10
7		Chithara	1.00	65.00	5	30	nil	5	6	12
8	Pathanamthitta	Pandalam	1.00	55.00	0	0	7	7	0	12
9	Alappuzha	Mararikulam	1.00	95.00	9	30	nil	9	10	12
10	11	Kadakarapally	1.00	80.00	9	20	nil	9	12	12
11		Nattakam	1.00	95.00	10	30	nil	10	12	12
12	Kottayam	Pampady	1.00	95.00	5	20	nil	5	12	12
13		Ayarkunnam	1.00	95.00	7	25	1	8	10	12
14		Adimali	1.00	74.00	3	18	0	3	12	12
15	Idukki	Kodikulam	1.00	70.00	7	12	1	7	11	12
16		Olamattom	1.00	95.00	5	12	0	5	12	12
17		Rayamangalam	1.00	95.00	9	21	0	9	12	12
18		Piravom	1.00	95.00	8	16	0	8	12	12
19	Ernakulam	Vazhakulam	1.00	95.00	10	24	0	10	12	12
20		Edathala	1.00	95.00	8	26	0	8	10	10
21		Kothamangalam	1.00	95.00	9	20	0	9	11	11
22		Mala	1.00	95.00	4	9	5	9	6	12
23	Thrissur	Kattoor	1.00	95.00	6	9	4	10	8	12
24		Arimbur	1.00	100.00	6	12	4	10	8	12
25		Ottappalam	1.00	100.00	11	24	1	12	11	12
26	Palakkad	Vaniyamkulam	1.00	100.00	9	19	3	12	9	12
27		Pattambi	1.00	100.00	9	20	1	10	11	12
28		Oorakam	1.00	100.00	9	15	nil	9	12	12
29	Malappuram	Kokkur	1.00	95.00	6	10	3	9	9	12
30		Edavanna	1.00	90.00	5	10	2	7	10	12
31	Kozhikode	Perambra	1.00	95.00	12	25	1	13	11	12
32	INOZIIIKUUU	Kadalundi	1.00	69.00	11	24	1	12	11	12
33	Kannur	Thaliparamba	1.00	90.00	9	20	2	11	9	10
34	Kalliui	Valapattonam	1.00	95.00	6	15	2	8	8	10
35	Kasaragod	Kanhangad	1.00	90.00	6	10	6	12	6	12
36	Wayanad	Sulthan Bathery	1.00	95.00	10	22	nil	10	12	12
	Total		36.00	32.08	252	712	63	314	340	421

Source: SIDCO, Thiruvananthapuram

Appendix 8.52

Total Area Covered by Mining Leases

SI. No.	Minerals	Area in Hectares
1	Clay	82.98
2	Silica Sand	39.6
3	Bauxite	1.37
4	Limeshell	1964
5	Limestone	245.69
6	Mineral Sand	169.77
7	Quartz	50.51
8	Laterite	27.31
9	Graphite	1.25
	Total	2581.98

Source: Directorate of Mining & Geology

Appendix 8.53
Production and Sale of Major Minerals other than Mineral Sand in Kerala during 2007-08

(In Tonnes)

			1
SI. No.	Mineral	Production	Sales
1	2	3	4
1	China Clay	661799	661799
2	Silica Sand	127238	127238
3	Bauxite	108602	108602
4	Limeshell	72358	72352
5	Limestone	401986	401986
6	Quartz	800	800

Source : Directorate of Mining & Geology

Appendix 8.54
Production and Sale of Mineral Sand in
Kerala - 2007-08

_	i toi aia	_00.00	
SI. No.	Mineral	Production	Sales
0	orai	(Tonnes)	(Tonnes)
1	2	3	4
1	Zircon	17095	17095
2	Rutile	7380	7380
3	Ilmenite	145667	145667
4	Sillimanite	4612	4612

Source : Directorate of Mining & Geology

Appendix 8.6
Central Sector Investment in Kerala

(Rs. crore)

Years as	Investment in	Gross Block	Percentage of
on 31 st — March	All India	Kerala	column(3) to column(2)
1	2	3	4
2001	411865	9893	2.40
2002	490397	13504	2.75
2003	525301	14550	2.77
2004	596725	15301	2.56
2005	649245	16872	2.60
2006*	715108	17796	2.49
2007	782992	19144	2.44

^{*} Revised

Source: Public Enterprises Survey -2006-07, Gol

Appendix 8.7
Central Sector Investment in Selected States as on 31-03-2007

	Gross Block Employment							
Rank No.	Name of State	(Rs. Crores)	(Lakh Nos)					
1	2	3	4					
1	Maharashtra	134036	1.94					
2	Uttarpradesh	53253	0.85					
3	Andhra Pradesh	50450	1.00					
4	Tamilnadu	49091	0.96					
5	Gujarat	48842	0.47					
6	Assam	37183	0.49					
7	Orissa	36673	0.69					
8	West Bengal	36450	1.95					
9	Madhya Pradesh	35882	1.03					
10	Karnataka	32726	0.76					
16	Kerala	19144	0.41					
	All India	782992	16.14					

Source: Public Enterprises Survey -2006-07, Go I

Appendix 8.8

Capital Investment and Employment in respect of Government of India Companies

Functioning in Kerala

SI.		Capital Inve	stment (Rs.	Employment (Nos) as		
No	Name of Company	any Lakh) as on			n	
NO		31-3-2007	31-3-2008	31-3-2007	31-3-2008	
1	2	3	4	5	6	
1	Hindustan Organic Chemicals Ltd	3342.00	3342.00	433	434	
2	Hindustan Newsprint Ltd.	8254.00	9999.00	1000	1003	
3	Cochin Refineries Ltd.			1887	1900	
4	Hindustan Latex Ltd.	4403.06	8223.44	1920	1880	
5	Hindustan Machine Tools Ltd.	902.91	926.79	731	638	
6	Cochin Shipyard Ltd.	31201.31	25980.18		2051.00	
7	Kerala Lekshmi Mills	3867.98	4724.07	457	546	
8	Vijaya Mohini Mills	2876.12	4677.11		262	

Source: Reports of Companies Concerned

Appendix 8.9

Performance of Government of India Companies in Kerala in terms of Value of Production and Sales Turnover

(Rs Lakh)

SI.	Name of Company	Value of P	roduction	Total Sales Turnover		
No	Name of Company	2006-07	2007-08	2006-07	2007-08	
1	2	3	4	5	6	
1	Hindustan Organic Chemicals Ltd	39918.00	43775.00	41200.00	46530.00	
2	Hindustan Newsprint Ltd.	31519.00	29861.00	31519.00	29861.00	
3	Hindustan Latex Ltd.	18995.52	18662.59	17561.27	19537.03	
4	Cochin Refineries Ltd.	2113920.00	2273655.00	*		
5	Hindustan Machine Tools Ltd	4290.00	5004.00	4828.00	5068.00	
6	Cochin Shipyard Ltd.	79556.14	72402.94	71974.07	83378.58	
7	Kerala Lekshmi Mills	2792.95	1719.16	2385.99	1926.40	
8	Vijaya Mohini Mills	1609.84	1188.39	1237.13	1416.33	

^{*}KRL ceased to exist and became a Strategic Business Unit (SBU) and the sales are recorded at corporate level.

Source: Reports of Companies Concerned

Appendix 9.1

Growth of Foreign Tourist Arrivals in Kerala (2003-2007)

Year	India (Nos.)	Percentage Change	Kerala (Nos.)	Percentage change	Kerala's share(%)in Country's Tourism
1	2	3	4	5	6
2003	2726214	14.34	294,621	26.68	10.81
2004	3457477	26.82	345,546	17.28	9.99
2005	3915324	13.24	346,499	0.28	8.85
2006	4429915	13.14	428,534	23.68	9.67
2007	5081504	14.3	515,808	20.37	10.36

Source: Department of Tourism

Appendix 9.2 Flow of Domestic Tourist to Kerala (2003-2007)

Year	Number of Tourists	Percentage variation over the previous year
1	2	3
2003	5,871,228	5.44
2004	5,972,182	1.72
2005	5,946,423	-0.43
2006	6,271,724	5.47
2007	6,642,941	5.92

Source: Department of Tourism

Appendix 9.3

District Wise Foreign and Domestic Tourist Arrivals during 2006&2007								
		No. of Domestic						
District	No. of Forei	_		urists				
	2006	2007	2006	2007				
1	2	3	5	6				
Thiruvananthapuram	151,578	193,924	866,712	948,579				
Kollam	7,918	8,854	122,998	145,524				
Pathanamthitta	346	547	57,032	60,988				
Alappuzha	36,407	40,463	179,115	170,731				
Kottayam	26,543	27,358	196,284	189,411				
Idukki	44,583	46,463	515,182	505,229				
Ernakualam	131,767	165,125	1,080,591	1,109,644				
Thrissur	4,142	4,645	1,398,014	1,546,576				
Palakkad	809	615	300,674	315,591				
Malappuram	7,109	9,766	303,844	313,200				
Kozhikode	11,154	10,020	550,694	570,832				
Wayanad	2,611	4,093	225,923	256,190				
Kannur	2,730	3,067	351,309	375,255				
Kasaragod	837	868	123,352	135,191				
	428,534	515,808	6,271,724	6,642,941				

Source : Department of Tourism

Appendix 9.4 Earnings from Tourism (2003-2007) (Rs in Crores) **Total Revenue Generated Earnings From Domestic** Foreign Exchange Year from Tourism (Direct & **Tourists Earnings** Indirect) 2003 983.37 3492.68 5938.00 2004 1266.77 3881.92 6829.00 2005 1552.31 4281.42 7738.00 2006 1988.40 4891.94 9126.00 2007 2640.94 5978.65 11433.00

Source: Department of Tourism

Appendix 9.5					
State Plan Allocation	State Plan Allocation for Tourism (2004-2009)				
Year Allocation(Rs.in Crore					
2004-05	69.29				
2005-06	88.02				
2006-07	81.57				
2007-08	83.18				
2008-09	97.54				

Source : Department of Tourism

Appendix 9.6					
Central Financial Assi	Central Financial Assistance for Tourism (2004-2009)				
Year Allocation (Rs.in Crores)					
2004-05	21.99				
2005-06	48.09				
2006-07	40.89				
2007-08	41.24				
2008-09	5.57 (Till Date)				

Source: Department of Tourism

	Appendix 9.7								
Details of Availability of Accommodation Facility in Classified Hotels 2006 & 2007									
	2	006	2007 (pro	ovisional)					
Category of Hotels			Number of	Number of					
	Number of Hotels	Number of Rooms	Hotels	Rooms					
1	2	3	4	5					
5 Star Deluxe	1	100	1	100					
5 Star	5	288	8	903					
4 Star	12	826	12	416					
3 Star	154	4252	154	4252					
2 Star	60	1154	67	1195					
1 Star	6	170	4	115					
Heritage/ Resort	20	20 673 20 673							
Total	258	7463	266	7654					

Source: Department of Tourism

Appendix 9.8

Kerala Tourism Development Corporation Ltd - Performance for the Year 2007-08

(Rs. in lakh)

						Operational		Total	· · · · · ·
SI. Name of Units	Bed	Bed Occupancy	Domestic	Foreign	Total	Expenditure	Administrative	Expenditure	Net
No No	Available	%	Tourists	Tourists	income	before interest	Expenditure	before interest	Income
1 2	3	4	5	6	7	& Depreciation 8	9	& Depreciation 10	11
1 Mascot Hotel TVM	35280		8965	3251	804.59	683.84	19.57		101.18
2 Hotel Chaithram, TVM	10560		6987	2900	320.13	335.54	6.04	341.58	-21.45
·									
3 Hotel Samudra, Kovalam	43008	53.48	9419	2159	476.63	309.41	6.97	316.38	160.25
4 Aranya Nivas & Lake Palace	26352		5775	2552	558.25	268.48	4.46		285.31
5 Periyar House, thekkady	32208	39.78	2145	658	129.57	108.13	3.02	111.15	18.42
6 Bolgaty Palace Hotel,Kochi	21892	120.68	6815	3399	309.54	299.13	6.81	305.94	3.60
7 Garden House, Malampuzha	12444	22.15	689	30	42.54	51.37	1.26	52.63	-10.09
8 Hotel Nandanam, Guruvayur	32400	36.00	12398	27	41.90	47.41	1.18	48.59	-6.69
9 Hotel Mangalya, Guruvayur	2160	23.74	265	0	54.09	58.26	7.32	65.58	-11.49
10 Water Scapes Kumarakom	29840	45.74	13650	751	354.64	274.40	7.90	282.30	72.34
11 Malabar Mansion Kozhikode	10800	26.67	1744	159	97.39	104.95	4.25	109.20	-11.81
12 Tea County Munnar	31476	77.18	24294	3390	493.32	276.37	5.60	281.97	211.35
13 Agastya House Neyyar Dam	1764	35.00	1703	61	39.14	44.72	0.34	45.06	-5.92
14 Ayurveda resort	0.400	40.70	0047	405	E4 E0	40.00	0.44	54.44	0.00
Thaneermukkam	3436		3217	165	51.50	49.03	2.41	51.44	0.06
15 Motel Araam	15840		3459	12	517.19	521.10	3.30		-7.21
16 Yatri Nivases 17	102240	49.00	4598	18	328.42	382.67	4.52	387.19	-58.77
Sabala restaurant & beer parlour					1045.10	1070.39	38.43	1108.82	-63.72
18 Miscellaneous Group					266.87	299.26	13.20	312.46	-45.59
19 Head Office					103.87	58.31	57.56	115.87	-12.00
GRAND TOTAL	411700		106123	19532	6034.68	5242.77	194.14	5436.91	597.77
Interest Charge									87.05
Depreciation Charge									304.16
Net Profit / Loss									206.56

Source : KTDC

Appendix 10.1

Growth of Transport & Communications in Kerala since 2000 compared to 1975

SI. No.	Item	Unit	1975	2000	2001	2002	2003	2004	2005	2006	2007	2008
1	2	3	4	6	7	8	9	10	11	12	13	
1	Road Length (PWD)	Kms.	14870	21731	21508	21347	21467	21467	26269	28203	28203	28203
2	Road Length (PWD) per sq.km.	"	0.38	0.56	0.55	0.55	0.56	0.56	0.68	0.72	0.72	0.72
3	Road Length (Panchayats)	"	54812	81790	87094	92084	95516	98973	104257	108451	109105	122232
4	Motor Vechicles	Nos.	119720	1910237	2111885	2315322	2552171	2792094	3122082	3558704	4025350	4442387
5	Motor Vechicles per 100 sq.km.	"	308	4945	5434	5958	6567	7184	8033	9159	10358	11431
6	Buses & Stage											
	Carriages	"	7828	58888	65681	71966	79713	87447	94486	127574	138916	147993
7	Good Vechicles	"	15875	163443	173856	184176	195363	211798	234191	264262	294491	321986
8	Buse owned by KSRTC	"	2212	4093	4562	4421	4302	4319	4642	4668	4559	4900
9	Railway route length	Kms.	896	1119	1148	1148	1148	1148	1148	1148	1148	1148
10	Post Offices	Nos.	4024	5069	5071	5074	5077	5083	5082	5071	5070	5070
11	Telephone Exchanges	"	286	924	988	1088	1179	1195	1218	1223	1239	1240
12	Total Equipped Capacity	"	70410	2203954	2584236	3153418	3653413	4070934	4319958	4700880	6637725	6930360
13	Public Call Offices	"	2352	27388	36926	48321	59444	81917	104142	120570	127149	127369

Appendix 10.2

District-wise and Category-wise Length of Roads Maintained by PWD (R&B) as on 31-3-2008

(In Km)

					(In Km)	
SI.N o	Name of District	State Highway s	Major District Roads	Other District Roads	Village Roads	Total
1	2	3	4	5	6	7
1	Thiruvananthapuram	181.00	2256.00	0.00	0.00	2437.00
2	Kollam	100.00	1677.00	0.00	0.00	1777.00
3	Alappuzha	170.00	1095.00	0.00	0.00	1265.00
4	Pathanamthitta	271.00	1605.00	0.00	0.00	1876.00
5	Kottayam	404.00	2426.00	0.00	0.00	2830.00
6	ldukki	964.00	1530.00	0.00	0.00	2494.00
7	Ernakulam	171.00	2484.00	0.00	0.00	2655.00
8	Thrissur	320.00	1458.00	0.00	0.00	1778.00
9	Palakkad	232.00	1495.00	0.00	0.00	1727.00
10	Malappuram	393.00	2031.00	0.00	0.00	2424.00
11	Kozhikode	275.00	1933.00	0.00	0.00	2208.00
12	Wayanad	177.00	793.00	0.00	0.00	970.00
13	Kannur	330.00	2013.00	0.00	0.00	2343.00
14	Kasaragode	149.00	1270.00	0.00	0.00	1419.00
	Total	4137.00	24066.00	0.00	0.00	28203.00

Source: PWD (R&B)

Appendix 10.10

Category - Wise Growth of Motor Vehicles in Kerala since 2000 to 2008

SI. No	Type of Vehicles	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
I	GOODS VEHICLES								
1	Four Wheelers and above	142168	146719	152802	161343	173110	194232	211175	227454
2	Three Wheelers including Tempos	31688	37457	42561	50455	61081	70030	83316	94532
II	BUSES								
1	Stage Carriages	25161	26899	29249	31889	33736	35206	37076	39763
2	Contract Carriages/Omni buses	40520	45067	50464	55558	61750	92368	101840	108230
Ш	CARS AND STATION WAGONS								
1	Cars	282996	305837	336583	378955	428327	498472	567294	654582
2	Station Wagons			0	0	0	0	0	0
3	Taxi Cars	75628	82236	88070	93458	100012	119753	127873	134650
4	Jeeps	69261	70212	70864	71656	72227	73158	73680	73698
IV	THREE WHEELERS								
1	Autorickshaws	248350	265767	285092	303092	320788	342466	368706	391100
2	Motorised Cycle rickshaws	58	63	63	63	63	61	61	61
٧	TWO WHEELERS								
1	Motorised Cycle	1124	1124	1124	1124	1124	1017	1017	1017
2	Scooter/Motor Cycles	1151735	1289035	1449283	1595937	1818760	2098635	2418092	2677444
VI	Tractors	8177	8459	8700	9002	9459	9978	10657	11236
VII	Tillers	4763	4979	4980	4980	5037	5184	5184	5184
VIII	Trailors	1576	1771	1823	1913	2001	2264	2307	2321
IX	Others	28680	29697	30513	32679	34607	15880	17072	21115
	Total	2111885	2315322	2552171	2792104	3122082	3558704	4025350	4442387
Per	centage increase over the previous year	10.56	9.63	10.22	9.4	11.82	12.06	13	10.4

Source:Motor Vehicles Department

Appendix :10.11
District-wise Road Accidents in Kerala in which number of persons held during 2006-07, 2007-08

SI.No	Name of District	No.of Acc	cidents	Increases/	No.of Per injure		Increases/	No.of persons Killed		Increase s/Decrea
		2007	2008	%	2007	2008	%	2007	2008	
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram City	1504	1400	-6.91	1860	1617	-13.06	107	121	13.08
2	Thiruvananthapuram Rural	2114	2048	-3.12	2252	2354	4.53	186	188	1.08
3	Kollam	2309	2165	-6.24	2768	2507	-9.43	239	266	11.30
4	Pathanamthitta	1171	1128	-3.67	1327	1152	-13.19	79	79	0.00
5	Alappuzha	2631	2413	-8.29	2735	2729	-0.22	198	269	35.86
6	Kottayam	2087	1966	-5.80	2418	2424	0.25	157	188	19.75
7	ldukki	833	821	-1.44	1146	989	-13.70	63	56	-11.11
8	Ernakulam City	1996	1779	-10.87	2027	1757	-13.32	94	134	42.55
9	Ernakulam Rural	3017	2760	-8.52	3442	3266	-5.11	261	295	13.03
10	Thrissur	3313	3144	-5.10	3796	3649	-3.87	273	314	15.02
11	Palakkad	1651	1624	-1.64	2171	1887	-13.08	228	219	-3.95
12	Malappuram	1909	1967	3.04	2363	2638	11.64	185	234	26.49
13	Kozhikode City	1282	1212	-5.46	1267	1218	-3.87	98	142	44.90
14	Kozhikode Rural	1188	1197	0.76	1375	1418	3.13	122	123	0.82
15	Wayanad	435	445	2.30	596	735	23.32	33	49	48.48
16	Kannur	1269	1287	1.42	1887	1831	-2.97	134	113	-15.67
<u>1</u> 7	Kasaragod	607	616	1.48	999	763	-23.62	87	78	-10.34
	Total	29316	27972	-4.58	34429	32934	-4.34	2544	2868	12.74

Source:State Crime Records Bureau

Appendix - 10.12

Motor Vehicle Accidents in Kerala by Primary Causes of Accidents during 2008

SI. No	Name of District	Fault of Driver of motor vehicles	Fault of driver other than motor vehicles	Fault of Cyclist	Fault of Pedestria n	Fault of passenge rs	Defect of Motor vehicles	Defect of road surface	Bad weather condition	Other causes	Causes not known	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Thiruvananthapuram City Thiruvananthapuram	1356	0	0	0	0	0	0	0	43	1	1400
2	Rural	1985	0	0	20	12	8	6	7	6	4	2048
3	Kollam	2097	0	0	0	0	23	4	2	39	0	2165
4	Pathanamthitta	1102	0	0	0	0	15	9	0	2	0	1128
5	Alappuzha	2356	0	0	0	0	0	0	0	57	0	2413
6	Kottayam	1908	0	6	14	3	22	0	0	13	0	1966
7	ldukki	803	0	0	0	0	18	0	0	0	0	821
8	Ernakulam City	1768	0	1	8	1	0	0	0	0	1	1779
9	Ernakulam Rural	2758	0	0	0	0	0	0	0	0	2	2760
10	Thrissur	3123	0	0	0	0	16	0	0	5	0	3144
11	Palakkad	1624	0	0	0	0	0	0	0	0	0	1624
12	Malappuram	1967	0	0	0	0	0	0	0	0	0	1967
13	Kozhikode City	1209	0	0	0	0	3	0	0	0	0	1212
14	Kozhikode Rural	1195	0	0	0	0	2	0	0	0	0	1197
15	Wayanad	409	34	0	0	0	0	0	0	2	0	445
16	Kannur	1275	0	0	0	0	0	0	0	12	0	1287
17	Kasaragod	615	0	1	0	0	0	0	0	0	0	616
	Total	27550	34	8	42	16	107	19	9	179	8	27972
	Percentage to total	98.49	0.12	0.03	0.15	0.06	0.38	0.070	0.03	0.64	0.03	100.00

Source:State Crime Records Bureau

Appendix - 10.13

Type-wise details of Motor Vehicles Involved in Road Accidents in Kerala during 2008

SI. No	District	KSRTC Buses	Other Buses	Goods Vehicl es	Motor Cars	Jeeps	Autorick shaws	Two wheeler s	Miscella neous vehicles	not	Total
1	2	3	4	5	6	7	8	9	10	11	12
	Thiruvananthapuram										
1	City	102	61	94	336	13	248	946	71	21	1892
	Thiruvananthapuram										
2	Rural	132	93	258	386	68	323	1303	71	20	2654
3	Kollam	84	158	271	521	76	393	1455	159	34	3151
4	Pathanamthitta	39	138	125	314	54	257	685	53	6	1671
5	Alappuzha	84	157	339	709	23	391	1602	295	17	3617
6	Kottayam	64	249	197	515	64	486	1213	77	24	2889
7	Idukki	23	85	111	167	114	272	353	19	3	1147
8	Ernakulam City	50	305	220	534	28	227	1220	167	30	2781
9	Ernakulam Rural	67	318	441	644	71	474	1999	243	22	4279
10	Thrissur	64	441	499	850	68	626	2116	235	17	4916
11	Palakkad	30	229	314	279	84	381	953	87	15	2372
12	Malappuram	39	339	315	432	125	537	1019	51	9	2866
13	Kozhikode City	35	310	152	339	38	206	676	58	13	1827
14	Kozhikode Rural	30	204	166	253	104	295	630	31	7	1720
15	Wayanad	17	44	41	81	60	122	209	23	4	601
16	Kannur	30	263	241	228	85	309	569	33	4	1762
17	Kasaragod	21	62	85	130	41	171	209	14	3	736
	Total	911	3456	3869	6718	1116	5718	17157	1687	249	40881
	Percentage to Total	2.23	8.45	9.46	16.43	2.73	13.99	41.97	4.13	0.61	100

Source:State Crime Records Bureau

Appendix 10.14

Motor Vehicle Accidents by time of day during 2008

SI.No	District	Day light	Darkness	Time not known	Total
1	2	3	4	5	6
1	Thiruvananthapuram City	965	434	1	1400
2	Thiruvananthapuram Rural	1564	476	8	2048
3	Kollam	1473	691	1	2165
4	Pathanamthitta	873	255	0	1128
5	Alappuzha	1689	724	0	2413
6	Kottayam	1475	470	21	1966
7	ldukki	638	183	0	821
8	Ernakulam City	1268	511	0	1779
9	Ernakulam Rural	1930	830	0	2760
10	Thrissur	2251	893	0	3144
11	Palakkad	1167	457	0	1624
12	Malappuram	1491	476	0	1967
13	Kozhikode City	801	406	5	1212
14	Kozhikode Rural	894	298	5	1197
15	Wayanad	319	124	2	445
16	Kannur	965	322	0	1287
17	Kasaragod	460	156	0	616
	Total	20223	7706	43	27972
	Percentage to Total	72.3	27.55	0.15	100.00

Source:State Crime Records Bureau

Appendix 10.15
Age-Wise Details of Vehicles Owned by KSRTC as on 31.03.2008

		as on	as on
SI.No	Buses	31.03.2008	31.08.2008
1	2	3	4
1	10 Years and above	1367	1367
2	Above 7 years and below 10 years	1260	1260
3	Above 5 years and below 7 years	243	243
4	Below 5 years	1104	2030
	Total	3974	4900

Source: KSRTC

Appendix 10.16

Major indicators showing operational efficiency of KSRTC

SI No	Itomo	Ye	ar	Increase/
SI.No	Items	2006-07	2007-08	Decrease
1	2	3	4	5
1	Fleet Strength (Nos)	4666	4640	-26
2	Gross revenue earnings (Rs. In crores)	876.16	883.83	7.67
3	Gross revenue expenditure (Rs. In crores)	1018.10	1076.21	58.11
4	Gross operating loss (Rs. In crores)	(-)141.94	(-)192.38	50.44
5	No. of schedules operated as on 31st March 2008	3335	3758	423
6	Average earnings per vehicle on road per day (Rs)	6585	6695	110
7	Average earnings per km. of buses operated (paise)	2037	2070	33
8	Average earnings per Passenger (Paise)	727*	732*	5
9	Average route length (Kms)	49.07*	49.41*	0.34
10	Average kms. Run per bus per day	323.18	323.43	0.25
11	Average number of buses held daily (Nos.)	4666	4640	-26
12	Passengers carried (Lakhs)	12045*	12069*	24

Source: KSRTC (*) Provisional Figures

				Appen	dix 10.17				
			KSRTC (Operational S	tatistics during	2007 - 08			
		No.of buses	No.of	No.of routes		Gross	Effective	Passengers	Average
SI.		held as on	schedules	as on	Route distance	Kms.Operated	Kms.Operated	Carried (in	carrying
No Ui	nit	31.03.08	31.03.08	31.03.08	(Kms)	(in lakh)	(in lakh)	lakh)	Capacity per
1	2	3	4	5	6	7	8	9	10
1 Parassala		78	75	105	5626	92.36	72.42	106.94	60
2 Neyyattinkara+\	Vellarada	153	148	246	8130	171.1	117.29	407.63	60
3 Poovar		76	72	66	2400	81.25	57.46	196.34	60
4 Vizhinjam		81	82	40	1624	87.95	57.08	196.00	60
5 Kattakkada		82	89	85	2850	96.69	65.07	237.6	60
6 Thiruvananthap	uram City	134	120	225	2478	96.76	64.63	370.84	60
7 Pappanamcode)	103	129	205	2352	94.31	63.38	401.39	60
8 Thiruvananthap	uram Central	110	77	40	12216	172.35	143.41	200.12	60
9 Vikas Bhavan		93	79	126	2791	67.99	46.81	260.98	60
10 Peroorkada		87	85	171	2838	68.37	45.21	323.71	60
11 Nedumangad+F	PLD+ARD+VTR	179	163	320	10651	178.12	131.58	379.57	60
12 Vellanad		55	55	70	1772	50.97	35.72	149.78	60
13 Kaniyapuram		59	59	39	1694	62.43	41.55	150.34	60
14 Venjaramoodu		38	37	97	7562	38.68	27.86	82.94	60
15 Chathannur		44	40	125	4776	47.34	38.76	130.74	60
16 Attingal		85	85	72	1557	101.47	74.41	237.45	60
17 Kilimanoor+ PP	M+CDLM	143	139	220	7429	158.55	11.35	450.83	60
18 Kollam		104	97	123	7162	122.31	97.19	375.30	60
19 Kottarakkara		129	120	133	8320	137.68	107.48	283.84	60
20 Punaloor+ Kula	thupuzha	87	72	230	6672	84.25	64.81	276.36	60
21 Karunagapally		74	70	142	2603	85.50	62.51	233.34	60
22 Edathuva+ Mall	appally	43	38	22	1440	44.72	32.33	45.92	60
23 Pathanamthitta		69	59	77	5150	79.58	64.38	165.19	60
24 Adoor+ Pandala	am	65	62	78	4849	74.25	52.47	198.82	60
25 Thiruvalla		65	49	70	3278	56.80	54.36	101.14	60
26 Kayamkulam		69	64	111	4954	79.88	64.21	216.78	60
27 Harippad		40	37	68	3134	45.37	36.88	103.28	60
28 Mavelikkara		38	38	26	1323	52.05	38.02	129.38	60
29 Alappuzha		100	97	69	3368	117.45	89.84	250.99	60
30 Cherthala		103	99	30	1579	113.99	90.61	266.73	60
31 Chengannur		57	58	30	1768	68.76	55.52	219.75	60
32 Changanassery	,	59	52	23	1778	61.81	47.94	161.81	60
33 Kottayam		109	102	59	5567	137.92	109.69	303.45	60
34 Ponkunnam+ E	rumely	48	40	77	3233	51.35	40.78	85.69	60

		No.of buses	No.of	No.of routes		Gross	Effective	Passengers	Average
SI.		held as on	schedules	as on	Route distance	Kms.Operated	Kms.Operated	Carried (in	carrying
No	Unit	31.03.08	31.03.08	31.03.08	(Kms)	(in lakh)	(in lakh)	lakh)	Capacity per
1	2	3	4	5	6	7	8	9	10
35 P	Pala	76	68	58	3966	93.29	74.56	184.05	60
36 E	rattupetta	54	49	22	2878	59.35	46.96	124.03	60
37 V	/aikom	42	37	14	1254	47.98	36.93	94.36	60
	/luvattupuzha	62	57	49	2280	68.04	54.82	155.82	60
39 T	hodupuzha+Moolamattom	69	64	45	3934	82.07	66.55	145.02	60
40 K	Kothamangalam+Munnar	63	48	44	4065	63.26	58.54	82.94	60
41 E	rnakulam	86	71	50	4564	111.84	82.51	213.74	60
42 A	lluva	70	64	37	2768	71.66	58.28	191.33	60
43 A	nkamaly	47	37	40	1200	41.66	34.18	122.13	60
44 N	lorth Paravoor	56	62	90	3477	70.03	50.63	149.78	60
45 P	Perumbavoor	46	49	21	2297	53.90	40.00	178.46	60
46 C	Chalakkudy	63	46	34	1245	55.56	46.85	109.15	60
47 Ir	ringalakkuda	12	13	9	372	18.57	11.99	21.55	60
48 N	/lala+ Kodungallur	68	56	90	3296	72.54	56.66	108.56	60
49 T	hrissur	88	84	40	3878	137.37	96.28	214.07	60
50 P	Puthukkad	21	11	21	776	16.89	13.72	48.45	60
51 G	Guruvayoor	42	38	22	4338	59.15	45.84	82.96	60
52 P	Ponnani	31	24	30	2326	35.71	27.42	66.90	60
53 P	Perinthalmanna	34	28	19	2120	46.47	34.99	51.96	60
54 N	/lalappuram+Nilambur	80	53	65	2195	86.43	70.72	112.39	60
55 P	Palakkad+Vadakkanchery	104	89	47	4947	152.21	119.42	399.10	60
56 C	Chittor	29	23	14	2095	36.95	32.43	61.56	60
57 N	/lannarkkadu	19	13	18	4785	20.33	18.16	25.85	60
58 T	hottilpalam+ Vadakara	46	28	28	1720	33.48	31.99	53.69	60
59 K	Cozhikkode	101	72	46	3908	109.35	93.10	210.17	60
60 T	hamarassery	47	43	45	2860	51.88	43.76	101.57	60
61 K	Cannur	103	76	53	6749	116.29	93.06	207.40	60
62 P	Payyannur	70	59	36	2551	78.10	57.46	159.47	60
63 S	Sulthan Bathery	73	59	28	3063	79.06	68.9	125.39	60
64 K	(asaragode	107	89	48	3617	116.17	92.2	243.00	60
	/lananthavady	64	51	42	2784	67.23	58.48	109.60	60
66 K	Calpetta	48	38	39	2265	49.23	44.86	101.93	60
	Cumily	31	34	43	2973	49.37	33.13	65.11	60

Source: KSRTC

Appendix- 10.18 Fare structure of KSRTC during 2008

SI. No.	Type of service	Basic fare per KM (paise)	Minimum fare (paise)
1	2	3	4
1	City	55	400
2	Ordinary	55	400
3	City Fast Passenger	57	400
4	Fast Passenger	57	500
5	Super Fast	60	1000
6	Express	No Service	No Service
7	Super Express	65	1500
8	Super Delux Service	75	2000
9	A/C Air Bus	90	3000
10	High Tech (Volvo)	90	3000

Source: KSRTC

Appendix - 10.19 **KSRTC Operational Statistics during 2007-08** Average distance Average Earning per Average No.of Average Kms. Percentage Average route earning per travelled by a Vehicle on road Earning per km of SI. buses held run per day vehicular length (Kms) passengers passenger (Kms) per day buses operated (in No Unit daily utilisation (Ps) (in Rs) per bus (*) Ps) 3 5 6 8 10 77 335.8 77.01 53.58 1371 13.45 6798 2024 1 Parassala 2 Neyyattinkara+ Vellarada 295.03 33.05 560 5797 1966 78 68.38 12.67 3 Poovar 74 305.02 75.76 36.36 641 17.94 6146.76 2015 4 Vizhinjam 79 285.22 69.37 40.6 622 16.2 6098.28 2138 5 Kattakkada 2066 85 280.33 74.92 33.53 565 14.92 5790.54 6 Thiruvananthapuram City 74.17 28.19 2447 117 203.31 11.01 426 4974.12 7 Pappanamcode 109 210.74 75.29 11.47 334 10.14 4469.47 2121 8 Thiruvananthapuram Central 110 506.74 70.26 305.4 1697 9.81 12002.3 2369 9 Vikasbhavan 86 211.26 70.29 22.15 438 12 5162.37 2444 10 Peroorkada 81 206.08 73.97 16.60 314 9.26 4633.13 2248 11 Nedumangad+ PLD+ARD+VTR 43 281.73 73.46 33.28 713 18.19 5765 2046 12 Vellanadu 53 245.08 75.35 25.31 558 22.58 5741.62 2343 13 Kaniyapuram 62 278.88 65.95 43.44 571 17.99 5763.81 2067 14 Venjaramoodu 39 266.7 77.96 644 15.81 1920 73.13 5119.46 15 Chathannur 41 322.88 79.95 38.21 613 17.65 6679.42 2069 16 Attingal 81 324.72 77.55 21.63 693 17.14 7183.59 2212 17 Kilimanoor+PPM+CDLM 139 299.67 73.84 33.77 505 19.86 2005 6011.27 18 Kollam 95 335.35 83.47 58.23 587 18.59 7607.73 2269 6632.35 19 Kottarakkara 122 319.21 75.5 62.56 786 17.92 2078 20 Punaloor+ Kulathupuzha 285.05 525 6074.97 2134 86 79.95 29.01 19.75 571 19.03 2133 21 Karunagappally 74 294.07 78.17 18.33 6272.9 22 Edathuva+ Mallappally 42 298.06 71.1 65.45 1454 22.07 6136.68 2063 23 Pathanamthitta 66 358.45 74.52 66.88 753 17.88 6929.19 1933 24 Adoor+ Pandalam 31 301.74 73.82 62.17 533 21.07 6175.35 2048 25 Thiruvalla 61 328.43 74.85 46.83 1110 18.46 6785.55 2066 26 Kayamkulam 327.37 624 20.47 68 79.11 44.63 6899.66 2108 324.5 80.93 18.1 2144 27 Harippad 38 46.09 765 6957.79 28 Mavelikkara 40 351.74 73.19 50.88 604 22.01 7234.11 2057 29 Alappuzha 97 318.38 79.92 48.81 774 17.88 6891.58 2165 30 Cherthala 98 722 21.07 311.04 81.42 52.63 6616.84 2127 31 Chengannur 58 297.71 88.00 58.93 540 18.46 6367.33 2139 32 Changanassery 55 297.61 79.75 77.30 588 19.20 5912.9 1987 33 Kottayam 113 370.04 71.67 94.36 787 21.24 8065.08 2180

						Average	Average distance		
		Average No.of	Average Kms.	Percentage		earning per	travelled by a	Vehicle on road	Earning per km of
SI.		buses held	run per day	vehicular	length (Kms)	passengers	passenger (Kms)	per day	buses operated (in
No	Unit	daily	per bus	utilisation	(*)	(Ps)	(*)	(in Rs)	Ps)
1	2	3	4	5	6	7	8	9	10
	ınnam+ Erumely	22	349.17	71.17	41.99	908	26.72	6741.88	1931
35 Pala		77	342.4	77.80	68.38	805	20.63	6809.74	1989
36 Erattu	petta	50	327.72	78.49	130.82	813	21.96	7038.35	2148
37 Vaikko	om	40	330.33	77.20	89.57	754	21.12	6369.46	1928
38 Muvat		60	311.05	81.09	46.53	768	19.38	6795.06	2185
39 Thodu	ıpuzha+ Moolamattom	34	357.39	77.38	87.42	990	20.39	7561.07	2120
40 Kotha	mangalam+ Munnar	28	358.02	80.95	92.39	1437	22.16	7283.98	2036
41 Ernak	ulam	78	394.5	73.21	91.28	832	17.26	8510.08	2157
42 Aluva		67	295.86	80.78	74.81	604	16.03	5872.77	1985
43 Ankan	nali	38	302.33	82.01	30.00	541	16.03	5847.78	1934
44 North	Paravoor	58	308.07	77.76	38.63	634	20.94	5779.77	1876
45 Perum	nbavoor	44	305.12	81.78	109.38	495	17.79	6741.98	2210
46 Chala	kkudy	50	318.46	79.88	36.62	853	19.99	6330.68	1988
47 Irinjala	akkuda	12	361.01	73.05	41.33	1158	20	7515.24	2082
48 Mala+	- Kodungallur	59	338.51	78.00	36.62	1035	24.22	6788.59	2002
49 Thriss	sur	87	427.22	70.62	96.65	908	23.8	8624.95	2019
50 Puthul	kkad	17	304.63	91.70	36.95	652	18.08	5698.84	1871
51 Guruv	rayoor	40	404.54	77.98	197.18	1084	33.47	7939.94	1963
52 Ponna	ani	26	380.81	76.54	77.53	765	24.78	7114.37	1868
53 Perint	halmanna	29	451.84	74.00	111.58	1313	26.42	8814.29	1951
54 Malap	puram+ Nilambur	57	420.62	80.94	33.71	1202	27.82	7901.36	1873
55 Palakl	kad+VDCY+Chittur	41	407.27	79.88	105.26	621	29.36	7883.20	1922
56 Chittu	r	25	406.73	86.98	149.64	1005	25.10	7761.49	1908
57 Manna	arkkadu	18	366.63	73.76	265.8	1272	29.36	6643.16	1812
58 Thottil	lppalam+ Vadakara	35	298.98	79.67	61.42	1110	15.96	5397.80	1801
59 Kozhil	kkode	90	379.04	74.51	84.95	965	15.96	8264.23	2180
60 Thama	arassery	47	309.51	82.47	63.55	816	21.66	5864.70	1895
61 Kannu	ır	91	349.42	80.58	127.33	824	19.63	6421.35	1838
62 Payya	nnur	61	326.65	79.16	7086	652	22.99	5913.84	1811
63 Sultha	an Bathery	69	336.95	81.61	109.39	1111	19.60	6814.57	2022
64 Kasara	agod	97	326.57	79.96	75.35	719	18.64	6193.74	1897
65 Manar	nthavady	61	329.23	70.69	66.28	1145	21.34	7070.18	2147
66 Kalpet	tta	47	340.82	75.96	58.07	845	17.94	6550.77	1922
67 Kumily		32	365.09	76.99	69.13	1057	15.32	7586.90	2078

Source: KSRTC

(*) Provisional Figures

Appendix No 10.20
Category-Wise staff position of KSRTC

CI	Na	Cotomomi	A 04 04 07	A = == 04 04 00	A 24 40 2000
<u> 31.</u>	No.	Category	As on 01.04.07	AS ON 01.04.08	As on 31.10.2008
	1	2	3	4	5
	1	Administrative staff			
				2055	
			2275 (Permanent)	(Permanent)	2032 (Permanent)
			137 (Temporary)	325 (Temporary)	358 (Temporary)
	2	Traffic Personnel		16743	17658
				(Permanent)	(Permanent)
			14885 (Permanent)	10233	10643
			9573 (Temporary)	(Temporary)	(Temporary)
	3	Maintenance Personnel		3070	
				(Permanent)	
			3624 (Permanent)	2514	2980 (Permanent)
			1013 (Temporary)	(Temporary)	2266 (Temporary)
		Total	31507	34940	35937
		Course KCDTC			

Source: KSRTC

Appendix 10.21

NO. OF SHIPS CALLED AT COCHIN PORT DURING 2006-07 AND 2007-08

		No. of Ships		% variation Increase (+)	Net Reg	variation Increase	
SI.No	Type of Vessel	2006-07	2007-08	Decrease (-)	2006-07	2007-08	(+)
1	Container	382	350	-8.38	2675191	2710308	1.31
2	Break Bulk	92	73	-20.65	261914	146613	-44.02
3	Dry Bulk	54	34	-37.04	532485	529188	-0.62
4	Liquid Bulk	382	352	-7.85	5550643	7125849	28.38
5	Passenger (Foreign)	38	43	13.16	380077	302833	-20.32
6	Others	225	269	19.56	171031	194352	13.64
	Total	1173	1121	-4.43	9571341	11009143	15.02

Source : Cochin Port Trust

Appendix 10.22

Commodity - wise cargo handled at the Intermediate and Minor ports of Kerala during 2007-08.

(in tonnes)

			Importo Evporto						(in tonnes)
	Name of Port	Commodity		Imports			Exports		-Grand Total
SI.No				Foreign	Total	Coastal		Total	
1	2	3	4	5	6	7	8	9	10
1	Kasaragod		0	0	0	0	0	0	0
2	Azhikkal	Miscellaneous	0	0	0	249	0	249	249
3	Kannur		0	0	0	0	0	0	0
4	Thalassery		0	0	0	0	0	0	0
5	Kozhikode	Soda Ash	23143	0	23143	0	0	0	23143
		Machinery	50	0	50	218		218	268
		Palm Oil	1	26881	26882	13	0	13	26895
		Wet Date	1	1671	1672	7	0	7	1679
		Wheet	9907	0	9907	0	0	0	9907
		Oil Cake	80	0	80	0	0	0	80
		Salt	673	0	673	3	0	3	676
		Rice	963	0	963	25	0	25	988
		Cattle feed	1196	0	1196	495	0	495	1691
		Mustard seeds	1220	0	1220	0	0	0	1220
		Cement	0	0	0	14678	0	14678	14678
		POL	10	0	10	1655	0	1655	1665
		LPG	0	0	0	460	0	460	460
		Timber	2	0	2	1638	0	1638	1640
		Iron & Steel	0	0	0	653	0	653	653
		Metal	0	0	0	21091	0	21091	21091
		Sodium Bi-Carbonate	1218	0	1218	0	0	0	1218
		Bauxite	0	0	0	0	0	0	0
		Veg. & Fruits	0	0	0	746	0	746	746
		Granite & Marble	0	0	0	441	0	441	441
		Miscellaneous	5020	0	5020	21102	0	21102	26122
		Sub Total	43484	28552	72036	63225	0	63225	135261
6	Ponnani		0	0	0	0	0	0	0
7	Kodungallore		0	0	0	0	0	0	0
8	Alappuzha		0	0	0	0	0	0	0
9	Neendakara		0	0	0	0	0	0	0
10	Trivandrum		0	0	0	0	0	0	0
11	Vizhijam	Miscellaneous	0	0	0	0	11482	11482	11482
	Total		43484	28552	72036	63474	11482	74956	146992

Source: Directorate of Ports

Appendix 10.23

Number and Tonnage of steamers and sailing Vesels which called at the Intermediate and Minor Ports of kerala during 2007-08.

	Coastal / _	Stea	amers		y Vessles	Total No.	Total
Name of Port	Foreign	No.	Tonnage	No.	Tonnage	of Vessels	Tonnage
1	2	3	4	5	6	7	8
	Coastal /	0	0	0	0	0	0
Kasaragod	Foreign	0	0	0	0	0	0
	Coastal /	0	0	2	797	2	797
Azhikkal	Foreign	0	0	0	0	0	0
	Coastal /	0	0	0	0	0	0
Kannur	Foreign	0	0	0	0	0	0
	Coastal /	0	0	0	0	0	0
Thalassery	Foreign	0	0	0	0	0	0
	Coastal /	116	143702	323	158058	439	301760
Kozhikode	Foreign	6	65121	6	4697	12	69818
	Coastal /	0	0	0	0	0	0
Ponnani	Foreign	0	0	0	0	0	0
	Coastal /	0	0	0	0	0	0
Kodungallore	Foreign	0	0	0	0	0	0
	Coastal /	0	0	0	0	0	0
Alappuzha	Foreign	0	0	0	0	0	0
	Coastal /	0	0	0	0	0	0
Neendakara	Foreign	0	0	0	0	0	0
	Coastal /	0	0	0	0	0	0
Trivandrum	Foreign	0	0	0	0	0	0
	Coastal /	0	0	0	0	0	0
Vizhinjam	Foreign	66	55799	31	4997	97	60796
Total		188	264622	362	168549	550	433171

Source: Directorate of Ports

Appendix 10.24

Number of Harbour Crafts registered at the Intermediate and Minor Ports of Kerala during 2007-08

	0		C		Ma-1		Ma - !-				
Name of Port		o boats g Barges		including oats		nanised y vessels		anised vessels		Total	Grand
-	New	Renewal	New	Renewal	New	Renewal	New	Renewal	New	Renewal	Total
1	2	3	4	5	6	7	8	9	10	11	12
Kasaragod	0	0	0	136	0	0	0	0	0	136	136
Azhikkal	0	0	0	0	0	0	0	0	0	0	0
Kannur	0	0	0	0	0	0	0	0	0	0	0
Thalassery	0	0	0	0	0	0	0	0	0	0	0
Kozhikode	0	0	0	0	6	0	1	0	7	0	7
Ponnani	0	0	1	1	0	0	0	0	1	1	2
Kodungallore	0	0	0	0	114	552	0	0	114	552	666
Alappuzha	0	0	0	0	306	1342	0	0	306	1342	1648
Neendakara	0	0	0	0	79	238	0	0	79	238	317
Trivandrum	0	0	0	0	0	0	0	0	0	0	0
Vizhinjam	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	137	505	2132	1	0	507	2269	2776

Source: Directorate of Ports

Appendix 10.25

Category - wise break up of Revenue Collected at the Intermediate and

Minor Ports of Kerala during 2007-08

(in Rupees)

SI.No	Name of Port/Office	Port Dues	Export & Import dues	Tug hire Charges	Pilotage fees	Registration and other fees		Total
1	2	3	4	5	6	7	8	9
1	Kasaragod	0	0	0	0	20400	1505635	1526035
2	Azhikkal	479	2824	0	0	0	4181239	4184542
3	Kannur	0	0	0	0	0	152396	152396
4	Thalassery	0	0	0	0	0	1708279	1708279
5	Kozhikode	186202	1446106	984150	250355	19400	3691084	6577297
6	Ponnani	0	0	0	0	884	18619	19503
7	Kodungallore	0	0	0	0	280580	8240	288820
8	Alppuzha	0	0	0	0	667814	362769	1030583
9	Neendakara	0	0	0	0	173564	521183	694747
10	Trivandrum	0	0	0	0	0	0	0
11	Vizhinjam	168173	113085	0	0	0	638325	919583
12	Directorate of Ports	0	0	0	0	0	11564	11564
	Total	354854	1562015	984150	250355	1162642	12799333	17113349

Source: Directorate of Ports

Appendix 10.26

Operational Statistics of Inland Water Transport Agencies in Kerala **Kerala Shipping State Water** and Inland **Transport** Navigation **Particulars** Department Corporation Ltd. 2007-08 2006-07 2007-08 2006-07 1 2 4 5 3 No. of boats/Jhankars 81 81 25 25 47 47 5 0 Boat in operation No. of trips on Schedule 646 689 8318 0 147.77 No. of passengers carried 153 lakh (lakh) 529090 0 Gross Route Distance (in KM) 6775 6018 40937 0 Volume of Cargo carried (000 Tonnes) 0 0 592137 518624 Total Revenue Receipts (in lakh) 479 449 425.45 396.32 Total Revenue Expenditure (in lakh) 1593 1727 472.68 484.05 No. of Employees (Total) 786 779 258 258

Source: State Water Transport Department,

Kerala Shipping and Inland Navigation Corporation Ltd.

Appendix 10.27(A)

Details of flights operated by various agencies from Thiruvananthapuram International Airport

			200	06-07			2007-08			
SI. No.	Airlines	No. of F	lights	No of Pas	sengers	No. of	Flights	No of Pas	sengers	
NO.	-	DOM	INT	DOM	INT	DOM	INT	DOM	INT	
1	2	3	4	5	6	7	8	9	10	
1	Air India	0	1698	0	154958		1456		132193	
2	Gulf Air	0	730	0	143765		794		119346	
3	Oman Air	0	730	0	95766		722		98706	
4	Kuwait Airways	0	414	0	65,751		413		71966	
5	Sri Lankan Airways	0	1324	0	151,193		1218		127428	
6	Qatar Airways	96	730	0	112617		732		111066	
7	Jet Airways	2186	0	132933	0	2183		135903		
8	Silk Airways	0	412	0	34077		440		37627	
9	My Travels/First Choice	0	70	0	16752					
10	Emirates	0	834	0	142816		828		173585	
11	Air Decan	2409	0	215229	0	2656		220428		
12	Indian	2764	1316	202283	130264	2290	1355	11730	137145	
13	Air India Express	0	834	0	84790		3302		151570	
14	Non Schedule	325	0	1568	0					
15	Air Sahara	356	44	16167	1240	176	94	7366	22033	
16	Air Arabia	0	294	0	44085		818		118172	
17	Paramount	0	460	0	15715	978		35079		
18	King Fisher	0	304	0	12328	1850		76267		
19	Ethihad						418		52307	
20	Mihirlanka						236		15597	
21	Island Avitation						142		6905	
22	Jetirte					544		25500		
	Total	8136	10194	568180	1206117	10677	12968	512273	1375646	

Source:International Airport, Thiruvananthapuram

Appendix 10.27 (B)

Details of flights operated by various agencies from Kozhikode Airport

SI.	_		20	06-07			200	7-08	
No.	Airlines	No.of F	lights	Passe	engers	No.of	Flights	Passe	engers
NO.	_	DOM	INT	DOM	INT	DOM	INT	DOM	INT
1	2	3	4	5	6	7	8	9	10
1	Indian Airlines	238	238	9391	21232	2780	2779	106987	267872
2	Air India	86	144	685	25669	647	1392	33964	204467
3	Jet Airways	62	0	680	0	731	275	60789	14766
4	Sree Lankan Airways	0	70	0	10972		852		128387
5	Air Decan	0	0	0	0	132		3756	
6	King Fisher	124	0	1458	0	764		7546	
7	Air India Express					760	4004	26788	442990
8	Air Arabia						34		5148
	Others (Defence, Casuals								
9	Etc)	19	0	0	0	410	7	36	8
	Total	529	452	12214	57873	6224	9343	239866	1063638

Source:International Airport ,Kozhikode

Appendix 10.27 (C)

Details of flights operated by various agencies from

Cochin International Airport

				nternation 106-07	<u>, port</u>		200	07-08	
SI.No	Airlines	No.of F	lights	Passe	engers	No.of I	Flights	Passe	ngers
		DOM	INT	DOM	INT	DOM	INT	DOM	INT
1	2	3	4	5	6	7	8	9	10
1	Air India	0	2112	0	191019		1474		151841
2	Air India Express	0	2552	0	203744		3889		356392
3	Indian Airlines	2185	3204	201053	101494	1626	3033	155069	107918
4	Oman Air	0	716	0	82825		720		93766
5	Silk Air	0	610	0	59974		732		74263
6	Kuwait Airways	0	356	0	64659		418		74779
7	Emirates Airlines	0	740	0	203424		966		255860
8	Qatar Airways	0	552	0	72803		732		94878
9	Saudi Arabian Airlines	0	316	0	79218		314		80141
10	SriLankan Airways	0	1134	0	122430		1096		103087
11	Gilf Air	0	526	0	60961		524		56434
12	Mahan Air	0	358	0	42810		138		17751
13	Air Arabia	0	778	0	120787		871		140544
14	Jazeera Airways	0	182	0	23024		302		37758
15	Ethihad Airways						488		80629
16	Tiger Airways					4704	132	349809	16787
17	Jet Airways						480		27784
18	Air Decan	3451	0	217684	0	3958		211592	
19	King Fisher Airlines	3160	0	182170	0	5620		268038	
20	Go Air	590	0	48401	0	1122		147194	
21	Paramount Airways	582	0	0	0	1308		54619	
22	Air Sahara					1984		160549	
23	Inter Globe Aviation					1203		129932	
24	Spice Jet Limited					887		90728	
25	Non Scheduled flights	582	36	0	0	421	26		
	Total	10550	14172	649308	1429172	22833	16335	1567530	1770612

Source:International Airport ,Cochin

Appendix 10.28

No. of Passports issued from the Passport Ofices in Kerala from 2000-01 to 2007-08

	No. of ap	plications	Received		No. of I	Passports	Issued	
Year	Thiruvananthapuram	Kochi	Kozhikode	Total	Thiruvananthapuram	Kochi	Kozhikode	Total
1	2	3	4	5	6	7	8	9
2000-01	84609	111974	147831	344414	76454	101356	141169	318979
2001-02	97952	134863	182604	415419	90969	130084	181880	402933
2002-03	100525	136971	168922	406418	96396	136766	164126	397288
2003-04	125517	133754	238543	497814	120907	126965	199680	447552
2004-05	119177	177598	228566	525341	126529	183627	250036	560192
2005-06	126914	189638	241248	557800	125455	185308	248539	559302
2006-07	140634	210961	217327	568922	144889	203404	235689	583982
2007-08	85370	364756	271868	721994	84415	377080	265253	726748

Source:Passport Offices,Thiruvananthapuram, Kochi and Kozhikode

Appenxi.10.29

Growth of Post Offices in Kerala During the Last Nine Years

Year	HOs	DSOs	EDSOs	EDBOs	Total
2000	51	1462	528	3028	5069
2001	51	1461	528	3031	5071
2002	51	1462	527	3034	5074
2003	51	1463	527	3036	5077
2004	51	1464	526	3042	5083
2005	51	1464	508	3059	5082
2006	51	1451	470	3099	5071
2007	51	1451	468	3100	5070
2008	51	1452	468	3099	5070

Source: Chief Postmaster General, Kerala Circle

Appendix 10.3

District-wise, Surface-wise & Category-wise length of roads maintained by Kerala PWD as on 31-03-2008

SI.	District		State Highv	vays		Major District Roads				Total
No	•	CC	BT	WBM	Others	CC	BT	WBM	Others	Roads
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	0.000	181.000	0.000	0.000	0.000	2212.782	12.978	30.240	2437.000
2	Kollam	0.000	100.000	0.000	0.000	0.000	1670.103	6.897	0.000	1777.000
3	Alappuzha	0.000	170.000	0.000	0.000	0.000	1019.922	39.785	35.293	1265.000
4	Pathanamthita	0.000	271.000	0.000	0.000	0.000	1555.837	29.650	19.513	1876.000
5	Kottayam	0.000	404.000	0.000	0.000	0.000	2322.893	25.640	77.467	2830.000
6	ldukki	0.000	944.000	0.000	20.000	0.000	1309.743	22.407	197.850	2494.000
7	Ernakulam	0.000	171.000	0.000	0.000	0.464	2314.176	60.715	108.645	2655.000
8	Thrissur	3.391	316.609	0.000	0.000	0.000	1443.000	15.000	0.000	1778.000
9	Palakkad	0.000	216.250	1.250	14.500	0.000	1435.310	40.690	19.000	1727.000
10	Malappuram	0.000	393.000	0.000	0.000	0.000	1877.860	122.650	30.490	2424.000
11	Kozhikkode	0.000	275.000	0.000	0.000	0.000	1918.560	14.440	0.000	2208.000
12	Wayanad	0.000	175.000	2.000	0.000	0.000	749.218	23.600	20.182	970.000
13	Kannur	2.800	327.200	0.000	0.000	0.000	1968.481	4.386	40.133	2343.000
14	Kasaragode	0.000	149.000	0.000	0.000	0.000	1244.850	25.150	0.000	1419.000
	Total	6.191	4093.059	3.250	34.500	0.464	23042.735	443.988	578.813	28203.000

Source: PWD (R&B)

Appendix- 10.4
Surface-wise and Category-wise Length of P.W.D. Roads added during 2007-2008

(in Kms.)

					(in Kms.)
Item	State Highways	Major District Roads	Other District Roads	Village Roads	Total
1	2	3	4	5	6
Cement Concrete					
Length as on 31.3.2007	6.191	0.464	0.000	0.000	6.655
Length added in 07-08	0.000	0.000	0.000	0.000	0.000
Length as on 31.3.2008	6.191	0.464	0	0	6.655
Black topped					0.000
Length as on 31.3.2007	4093.059	23042.735	0.000	0.000	27135.794
Length added in 07-08	0.000	0.000	0.000	0.000	0.000
Length as on 31.3.2008	4093.059	23042.735	0.000	0.000	27135.794
Water Bound Macadom					0.000
Length as on 31.3.2007	3.250	443.988	0.000	0.000	447.238
Length added in 07-08	0.000	0.000	0.000	0.000	0.000
Length as on 31.3.2008	3.250	443.988	0.000	0.000	447.238
Others					0.000
Length as on 31.3.2007	34.500	578.813	0.000	0.000	613.313
Length added in 07-08	0.000	0.000	0.000	0.000	0.000
Length as on 31.3.2008	34.500	578.813	0.000	0.000	613.313
Total					0.000
Length as on 31.3.2007	4137.000	24066.000	0.000	0.000	28203.000
Length added in 07-08	0.000	0.000	0.000	0.000	0.000
Length as on 31.3.2008	4137.000	24066.000	0.000	0.000	28203.000

Source: PWD (R&B)

Appendix 10.30

Category - wise Offices in Postal and other Postal Services in Kerala.

Category of Office	As on 31st March			
Category of Office	2007	2008		
1	2	3		
(a) Postal Services				
1. Head Post Offices	51	51		
2. Sub Post Offices	1451	1452		
ii) Extra Departmental Sub Post Offices	468	468		
3. Branch Offices	3100	3099		
Total (a)	5070	5070		
(b) Speed Post Centres				
National	13	13		
State	12	12 SPC now introduced		
Extension Counters	183	to all POs		
Total(b)	208			
(c) Other Postal Services				
1. Head Record Office	3	3		
ii) Sorting Mail Offices	28	24		
iii) Sub Record Office	26	19		
iv) Transit Mail Offices	12	12		
v) R.M.S. Sections	18	18		
vi) Press Sorting Office	2	2		
vii) Parcel Sorting Office	2	1		
viii) Pathrika Channel Office	5	2		
ix) Mail Motor Service Division unit	1	1		
x) Circle Stamp Depot	1	1		
xi) Postal Store Depot	3	3		
Total (C)	101	86		

Appendix 10.31

Division-wise and Category - wise Post Offices under kerala Circle as on 31.3.2008

SI No	Name of Division	Sub O	Sub Offices			
SI.No.	Name of Division	Offices	so	EDSO	EDBO	Total
1	2	3	4	5	6	7
1	Trivandrum (N)	2	74	8	112	196
2	Trivandrum (S)	2	68	15	135	220
3	Quilon	3	91	28	123	245
4	Pathanamthitta	3	77	45	187	312
5	Thiruvalla	2	64	26	67	159
6	Alappuzha	2	48	27	47	124
7	Mavelikara	2	52	20	53	127
8	Changanacherry	2	46	8	109	165
9	Idukki	2	52	12	225	291
10	Kottayam	3	79	40	136	258
11	Ernakulam	2	72	4	61	139
12	Aluva	3	71	28	153	255
13	Thrissur	3	106	28	158	295
14	Irinjalakuda	2	63	11	116	192
15	Lakshadweep	0	7	2	1	10
16	Palakkad	3	83	21	129	236
17	Ottappalam	1	55	20	143	219
18	Manjeiri	2	46	21	191	260
19	Tirur	2	52	18	101	173
20	Kozhikode	3	70	13	217	303
21	Vadakara	2	40	31	152	225
22	Thalassery	1	44	7	156	208
23	Kannur	2	63	25	139	229
24	Kasaragod	2	29	10	188	229
	Total - (Kerala Circle)	51	1452	468	3099	5070

Source:Chief Postmaster General, Kerala Circle

Appendix 10.32
Urban/Rural Split of Post Offices as on 31-3-2008

	Head	Office	 D:	so	ED	SO	ED	ВО	Grand	l Total
Name of Division	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Thiruvananthapuram (North)	0	2	44	30	7	1	94	18	145	51
Thiruvananthapuram (South)	0	2	39	29	15	0	130	5	184	36
Kollam	2	1	66	25	26	2	118	5	212	33
Pathanamthitta	0	3	69	8	43	2	181	6	293	19
Thiruvalla	0	2	53	11	25	1	62	5	140	19
Total Southern Region	2	10	271	103	116	6	585	39	974	158
Alappuzha	0	2	23	25	20	7	35	12	78	46
Mavelikara	0	2	45	7	20	0	50	3	115	12
Changanacherry	1	1	43	3	8	0	107	2	159	6
ldukki	1	1	48	4	12	0	223	2	284	7
Kottayam	0	3	56	23	35	5	133	3	224	34
Ernakulam	0	2	19	53	2	2	43	18	64	75
Aluva	0	3	40	31	25	3	148	5	213	42
Thrissur	1	2	68	38	18	10	138	20	225	70
Irinjalakuda	0	2	39	24	9	2	98	18	146	46
Lakshadeep	0	0	7	0	2	0	1	0	10	0
Total Central Region	3	18	388	208	151	29	976	83	1518	338
Palakkad	1	2	64	19	21	0	122	7	208	28
Ottapalam	0	1	44	11	18	2	133	10	195	24
Manjeri	0	2	38	8	20	1	178	13	236	24
Tirur	0	2	46	6	18	0	101	0	165	8
Kozhikode	0	3	20	50	9	4	178	39	207	96
Vadakara	0	2	36	4	25	6	150	2	211	14
Thalassery	0	1	15	29	1	6	126	30	142	66
Kannur	0	2	24	39	10	15	101	38	135	94
Kasargode	0	2	20	9	8	2	182	6	210	19
Total	1	17	307	175	130	36	1271	145	1709	373
Grand Total	6	45	966	486	397	71	2832	267	4201	869
	5	51	14	52	40	68	30	99	50	70

Source: Chief Postmaster General, Kerala Circle

Appendix10.33

District - wise details of area and population served by one post office during 2007-08

SI. No.	Name of district	Post Office	Area (Sq.Km.)	Area served by One post office	(2001	Population served by one
	2	(Nos.) 3	4	(Sq.Kms) 5	census)	post office 7
1	Kasargod	234	1992	8.51	1204078	5258
2	Kannur	380	2966	7.8	2408956	6339
3	Wayanad	177	2131	12.03	780619	4789
4	Kozhikode	394	2344	5.94	2879131	7074
5	Malappuram	438	3550	8.1	3625471	8315
6	Palakkad	455	4480	9.84	2974232	5803
7	Thrissur	486	3032	6.23	3105798	6107
8	Ernakulam	395	3068	7.76	1129221	7902
9	Idukki	294	4358	14.82	1953646	3907
10	Kottayam	406	2208	5.43	2109160	4730
11	Alappuzha	300	1414	4.71	1234016	7505
12	Pathanamthitta	316	2637	8.31	2585208	3917
13	Kollam	365	2491	6.82	3234356	7063
14	Thiruvananthapuram	416	2192	5.25	31841374	7268
	Total	5056	38863	7.68	60650	6296
	UT of Lakshadweep	10	32	3.20	60650	6065
	UT of Pondichery (Mahe only)	4	8.71	2.18	35119	8779

Source: Chief Postmaster General, Kerala Circle

Appendix 10.34

District - Wise details of Telephone net work during 2007-08

SI.No	Name of District	No. of Exchanges	Equipped Capacity	Working connections	Area (sq.Kms)	No. of Telephone (Sq. Kms)	No. of Telephone per 1000 population
1	2	3	4	5	6	7	8
1	Alleppy	72	403695	386524	1414	273	183.62
2	Calicut	91	576614	502137	2344	214	174.47
3	Kannur	112	541582	485494	2966	164	201.28
4	Ernakulam	125	828040	766218	2407	318	247.33
5	Idukki	80	224853	199603	5019	40	176.8
6	Kasaragod	58	273706	234012	1992	117	194.52
7	Kottayam	101	528878	492628	2203	224	252.37
8	Lakshadweep	10	19897	18737	32	586	307.16
9	Malppuram	94	608445	531241	3550	150	146.35
10	Palakkad	115	478530	394935	4480	88	150.91
11	Pathanamthitta	83	384586	324400	2642	123	263.31
12	Pondicherry (Mahe)	1	10467	11800	10	1180	393.33
13	Kollam	85	542938	502824	2491	202	194.59
14	Thrissur	86	621218	620118	3032	205	208.44
15	Thiruvananthapuram	96	755491	677825	2192	309	209.53
16	Wayanad	31	131420	107266	2131	50	136.3
	Total	1240	6930360	6255762	38905	161	195.93

Source: BSNL,TVPM

Appendix -10.35 Details of slum population of Kerala

(No.)

SI.No	Cities/towns reporting slums	Slui	Slum Population				
31.140	Cities/towns reporting sidins	Total	Male	Female			
1	Thiruvananthapuram Corporation	11817	5912	5905			
2	Kollam Corporation	483	256	227			
3	Kayamkulam Municipality	1755	851	904			
4	Alappuzha Municipality	14586	7018	7568			
5	Kottayam Municipality	2285	1127	1158			
6	Kochi Corporation	7897	3965	3932			
7	Thrissur Corporation	169	82	87			
8	Palakkad Municipality	2426	1173	1253			
9	Ponnani Municipality	4883	2363	2520			
10	Kozhikode Corporation	10390	5081	5309			
11	Thalassery Municipality	675	321	354			
12	Kannur Municipality	3255	1622	1633			
13	Kasaragod Municipality	3935	1928	2007			
	Total	64556	31699	32857			

Source:Census India - 2001

Appendix 10.36
Details of Major Projects undertaken by the Capital Region Development Programme-2007-08

	(Rs.in lakh)									
SI.No	Major Project	Ongoing/ completed	Yeat of Starting	Estimated Cost	Expenditure as on 31.10.08	Physical achievement				
1	City Road improvement Programme	ongoing	2004	10500	10500	Work in progress				
2	Implementation of Water supply Schemes in Water Scarce Areas	ongoing	2003	1000	1121.6	95% of work has been completed				
3	Solid Waste Disposal	ongoing	2003		946.65	Provided vehicles & other equipments to the TVPM. Corporation				
4	Bus Terminus-Upgradation, Construction and Maintenance- Thampanopor and Enchakkal	ongoing	2003		491.1	90% of land acquisition has been completed				
5	a) Prevention of flood of the Karamana and Killi Rivers and the Ulloor Thodu b) Beautification of the Killi River	ongoing	2005	878	509.6	75% of work has been completed				
6	Prevention of flooding at Thambanoor and Pazhavangadi	completed	2003	5035.43	5035.43	work completed				
7	Renovation of the Ulloor Thodu from Edavakkode to Kannammoola	ongoing	2006	200	51.88	75% of work has been completed				
8	Electrical Crematorium at Thycaud	completed	2006	375	66	commissioned on 30.07.07				
9	International Convention Complex Project	ongoing	2004	14000	195.52	Handed over to the Tourism Department				
10	Development of Vizhinjam, Port	ongoing	2003	2864.53	300.82	Handed over to the Port Department				
11	Ecological Restoration of Parvathy Puthanar Canal	ongoing	2005	499	33.61	20% of the work has been completed.Centrally sponsored scheme.				
	Regeneration of Veli-Akkulam Lake	ongoing	2007	2481	27.55	Survey completed. Centrally sponsored scheme.				

Source: KSUDP

Appendix- 10.5

Dstrict-wise and Surface-wise Length of Roads Maintained by P.W.D. as on 31.3.2008

(in Kms.)

						(in Kms.)
SI.No	Name of District	Cement Concrete	Black Topped	Water Bound Mecadam	Others	Total
1	2	3	4			5
1	Thiruvananthapuram	0.000	2393.782	12.978	30.240	2437.000
2	Kollam	0.000	1770.103	6.897	0.000	1777.000
3	Alappuzha	0.000	1189.922	39.785	35.293	1265.000
4	Pathanamthitta	0.000	1826.837	29.650	19.513	1876.000
5	Kottayam	0.000	2726.893	25.640	77.467	2830.000
6	ldukki	0.000	2253.743	22.407	217.850	2494.000
7	Ernakulam	0.464	2485.176	60.715	108.645	2655.000
8	Thrissur	3.391	1759.609	15.000	0.000	1778.000
9	Palakkad	0.000	1651.560	41.940	33.500	1727.000
10	Malappuram	0.000	2270.860	122.650	30.490	2424.000
11	Kozhikode	0.000	2193.560	14.440	0.000	2208.000
12	Wayanad	0.000	924.218	25.600	20.182	970.000
13	Kannur	2.800	2295.681	4.386	40.133	2343.000
14	Kasaragode	0.000	1393.850	25.150	0.000	1419.000
	Total	6.655	27135.794	447.238	613.313	28203.000

Appendix- 10.6 No.of Bridges and Culverts in P.W.D. Roads as on 31.3.2008

SI. No.	Item	SH	MDR	Total
1	2	3	4	5
1	Total Number of bridges	627	1552	2179
2	Number of unsafe bridges	60	88	148
3	Total Number of culverts	11512	39910	51422
4	Number of unsafe culverts	641	878	1519

Source:PWD(R&B)

Appendix - 10.7

NUMBER OF MOTOR VEHICLE HAVING VALID REGISTRATION AS ON 31.03.2008 (Provisional)

		Goods \	/ehicles	В	uses	Cai	rs and Stati	ion Wago	ns	Three w	heelers	Two Wh	neelers			Trac	tors		
SI.No	District	Four wheelers & above	Three wheelers including Tempos	Stage carriag es	Contract Carriages/ Omni Buses	Cars	Station wagons	Taxis	Jeeps	Auto ricksha w s	Motoris ed Cycle ricksha ws	Motorised cycles	Scootor/ Motor cycles	Tractors, Trailor Articulat ed	Tractors	Tillers	Trailers	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Thiruvananthapuram	18714	10330	8636	14832	90409	0	14559	7172	38259	12	0	400951	0	271	108	141	2999	607393
2	Kollam	15179	5956	1081	5941	59038	0	6934	4879	30886	9	1004	202686	0	403	227	337	840	335400
3	Pathanamthitta	8962	3673	1023	4133	38238	0	9004	3460	14940	0	4	101941	0	192	37	177	219	186003
4	Alappuzha	11131	9407	1119	5610	41733	0	8151	544	16489	3	3	211351	0	319	108	266	348	306582
5	Kottayam	17543	5696	2686	10803	66267	0	12909	11130	32972	37	0	180097	0	586	101	59	568	341454
6	ldukki	4554	1525	947	1977	10489	0	3973	5365	9366	0	0	30762	0	208	131	13	470	69780
7	Ernakulam	47399	12842	4983	18309	121901	0	16524	2124	44679	0	0	471743	0	1166	1299	151	5485	748605
8	Thrissur	22351	10958	4409	15823	56629	0	13485	4432	35511	0	0	305821	0	886	451	612	844	472212
9	Palakkad	17674	4863	2282	8693	24290	0	7725	3739	25692	0	0	181102	0	4412	949	121	1766	283308
10	Malappuram	22447	12327	4094	9888	43377	0	18318	9758	59315	0	6	164148	0	1018	714	95	805	346310
11	Kozhikode	18678	7606	3488	4806	50120	0	8455	8003	29955	0	0	226635	0	273	143	79	1946	360187
12	Wayanad	3221	1470	491	1197	5221	0	2953	3874	6687	0	0	24982	0	118	255	103	1599	52171
13	Kannur	15014	6152	3598	5517	30531	0	9341	5936	29054	0	0	123163	0	1322	259	98	2752	232737
14	Kasargode	4587	1727	926	701	16339	0	2319	3282	17295		0	52062	0	62	402	69	474	100245
	Total	227454	94532	39763	108230	654582	0	134650	73698	391100	61	1017	2677444	0	11236	5184	2321	21115	4442387

Source:Motor Vehicles Department

Appendix - 10.8
NEWLY REGISTERED VEHICLES FOR THE YEAR 2007 - 08

				13	IEWLY	KEGIS	ILKEL	VEHIC	LESF		YEAR	2007 - (<i>J</i> 0							
SI.No.	CLASSIFICATION OF	TVM	KLM	PTA	ALP	KTM	IDK	ERK	TSR	PKD	MLP	KZD	WYD	KNR	KSD	ATG	MUV	VKA	NS	TOTAL
	VEHICLES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	TRANSPORT VEHICLES	5																		
1	Multiaxied Articulated Vechicles	2	3		3	1	1	11	7	43	1	0	5	5	2	0	9	1		94
2	Trucks and Lorries	250	82	92	121	111	44	118	112	46	46	35	1	318	15	54	161	22		1628
3	Four Wheelers	676	892	502	975	1317	320	2373	1477	813	1210	747	160	670	409	308	1238	470		14557
4	Three Wheelers	818	899	356	662	572	281	1140	1033	978	1382	625	296	821	265	306	379	403		11216
	TOTAL	1746	1876	950	1761	2001	646	3642	2629	1880	2639	1407	462	1814	691	668	1787	896		27495
5	Stage Carriage	14	73	70	69	234	131	199	181	167	189	116	29	269	68	42	142	105	589	2687
6	Contract Carriage	151	124	61	148	190	68	321	184	131	82	34	13	86	12	39	64	31		1739
7	Private Service Vehicles	357	16	4	15	12	6	66	32	13	11	5	0	11	4	15	10	3		580
8	Other Buses	70	36	18	14	34	14	39	31	9	17	7	3	100	6	33	17	5		453
	TOTAL	592	249	153	246	470	219	625	428	320	299	162	45	466	90	129	233	144	589	5459
9	Motor Cabs	179	372	411	664	605	224	1516	450	296	126	71	18	78	49	60	306	50		5475
10	Maxi Cabs/Taxi	0	0	1	0	0	0	0	5	0	1	0	0	0	3	0	0	0		10
11	Other Taxis	208	61	3	7	3	20	81	81	41	81	116	52	293	80	70	13	82		1292
	TOTAL	387	433	415	671	608	244	1597	536	337	208	187	70	371	132	130	319	132		6777
12	LMV 3 seater	1359	1126	641	666	1830	1244	2118	1613	1784	3769	828	201	0	1167	784	667	1117		20914
13	LMV 4 to 6seater	0	0	0	23	0	0	0	0	0	0	0	0	1457	0	0	0	0		1480
14	Motor Cycle hire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	TOTAL	1359	1126	641	689	1830	1244	2118	1613	1784	3769	828	201	1457	1167	784	667	1117		22394
	Other TVs	157	151	67	90	165	52	329	144	80	163	61	37	369	43	28	142	37		2115
1	TOTAL TRANSPORT	4241	3835	2226	3457	5074	2405	8311	5348	4401	7078	2645	815	4477	2123	1739	3148	2326	589	64238
15	Scooters	0	0	0	91	0	3	0	127	0	0	0	0	0	0	0	0	0		221
16	Mopads	433	565	177	611	197	74	1127	1610	2823	350	177	30	363	44	236	376	58		9251
17	Motor Cycles	23808	19358	10011	20060	13846	3211	36201	28600	13496	19147	14319	2068	11973	6005	8057	11566	8154		249880
	TOTAL	24241	19923	10188	20762	14043	3288	37328	30337	16319	19497	14496	2098	12336	6049	8293	11942	8212		259352
18	Cars	9290	6623	5187	4191	8228	1704	13507	7776	4079	6162	4117	809	5414	2557	2279	3623	1742		87288
19	Jeeps	0	0	0	0	0	10	0	8	0	0	0	0	0	0	0	0	0		18
20	Omni Buses	354	218	173	150	247	63	485	352	207	369	220	45	320	98	107	126	84		3618
21	Tractors	19	31	11	32	51	14	87	57	63	68	13	4	12	8	12	93	4		579
22	Trailors	0	0	0	11	0	1	0	0	0	0	0	0	2	0	0	0	0		14
23	Others	73	121	51	66	250	25	267	219	108	164	68	69	106	70	47	179	47		1930
	TOTAL	9736	6993	5422	4450	8776	1817	14346	8412	4457	6763	4418	927	5854	2733	2445	4021	1877		93447
NON	N TRANSPORT VEHICLES TOTAL	33977	26916	15610	25212	22819	5105	51674	38749	20776	26260	18914	3025	18190	8782	10738	15963	10089		352799
	GRAND TOTAL	38218	30751	17836	28669	27893	7510	59985	44098	25177	33338	21559	3840	22667	10905	12477	19111	12415	589	417038

Source:Motor Vehicles Department

Appendix -10.9

District-wise Growth of Motor Vehicles in Kerala and Their Index (Base 1990-91 =100)

		1990	-01	2000-	01	2001-	02	2002-	03	2003-	04	2004-	05	2005-	06	2006-	07	2007-	-08
SI. No	District	Motor Vehicle s (Nos)	Index	Motor Vehicles (Nos)	Index														
1	Thiruvanathapuram	101980	100	293199	109	320061	120	350455	133	388763	148	433468	167	490306	190	556109	215	607393	235
2	Kollam	57694	100	152526	111	168907	124	189346	139	212249	157	239511	177	270438	200	304649	225	335400	248
3	Pathanamthitta	35555	100	96241	110	106070	122	117704	136	131254	152	146207	158	152741	174	168167	191	186003	211
4	Alappuzha	39545	100	125327	111	139551	125	157011	140	176296	160	201743	193	242539	221	277913	253	306582	279
5	Kottayam	39758	100	183614	106	196400	115	213004	125	230997	136	251133	154	284478	169	313561	186	341454	203
6	ldukki	12812	100	33477	108	36359	118	39721	129	43468	143	48044	159	53635	185	62270	214	69780	240
7	Ernakulam	105622	100	369168	109	405661	121	446959	126	464922	142	525204	160	591137	181	669509	204	748605	228
8	Thrissur	70831	100	220607	109	241560	120	266665	134	296763	151	333598	171	378441	193	428115	218	472212	240
9	Palakkad	37623	100	123526	109	134854	123	151979	133	165072	147	181608	175	216924	209	258131	248	283308	272
10	Malappuram	30671	100	157240	110	174504	122	192958	135	214127	151	239623	174	276347	197	312972	223	346310	247
11	Kozhikode	55939	100	172387	111	190809	120	207117	132	227125	147	252962	170	293439	189	326213	210	360187	232
12	Wayanad	8379	100	29737	106	31553	113	33550	121	36026	131	39047	151	44630	163	48331	176	52171	190
13	Kannur	36540	100	108022	109	118115	120	129680	132	142899	149	161150	171	185061	194	210070	220	232727	244
14	Kasaragode	14793	100	46814	109	50968	120	56022	133	62113	147	68784	168	78588	191	89340	217	100245	243
	Total Source: Motor Vehicles F	647742		2111885		2315372		2552171		2792074		3122082		3558704		4025350		4442377	

Source:Motor Vehicles Department

Appendix 11.1 Literacy rate- Kerala 1951-2001

Year	Persons	Male	Female
1	2	3	4
1951	47.18	58.35	36.43
1961	55.08	64.89	45.56
1971	69.75	77.13	62.53
1981	78.85	84.56	73.36
1991	89.81	93.62	86.17
2001	90.92	94.2	87.86

Source: www. kerala.gov.in

Appendix 11.2

Literacy rate by Sex for State and Districts 1991 and 2001 -Kerala

	•	-		Literacy ra	te		
SI.	States/District	Pers	sons	Mal	е	Fen	nale
No		1991	2001	1991	2001	1991	2001
1	2	3	4	5	6	7	8
	Kerala	89.81	90.92	93.62	94.2	86.17	87.86
1	Thiruvananthapuram	89.22	89.36	92.84	92.68	85.76	86.26
2	Kollam	90.47	91.49	94.09	94.63	87.00	88.6
3	Pathanamthitta	94.86	95.09	96.56	96.62	93.29	93.71
4	Alappuzha	93.87	93.66	96.79	96.42	91.12	91.14
5	Kottayam	95.72	95.9	97.46	97.41	94.00	94.45
6	Idukki	86.97	88.58	90.89	92.11	82.97	85.04
7	Ernakulam	92.3	93.42	95.4	95.95	89.22	90.96
8	Thrissur	90.18	92.56	93.77	95.47	86.94	89.94
9	Palakkad	81.27	84.31	87.24	89.73	75.72	79.31
10	Malappuram	87.94	88.61	92.08	91.46	84.09	85.96
11	Kozhikode	91.10	92.45	95.58	96.3	86.79	88.86
12	Wayanad	82.73	85.52	87.69	90.28	77.69	80.8
13	Kannur	91.48	92.8	95.54	96.38	87.65	89.57
14	Kasargod	82.51	85.17	88.97	90.84	76.29	79.80

Source: Kerala State Literacy Mission Authority

Appendix 11.11
Stage-wise and Management-wise Number of Teachers in Schools in Kerala: 2007-08

Stage	G	overnment			Aided			Unaided		Total Teachers		
Stage —	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
L.P.School	3565	9903	13468	6466	19148	25614	247	1648	1895	10278	30699	40977
U.P.School	4141	8330	12471	9169	21084	30253	349	1980	2329	13659	31394	45053
High School	10062	17899	27961	14789	35002	49791	2193	8118	10311	27044	61019	88063
TTI 's	182	218	400	79	406	485	0	0	0	261	624	885
Total	17950	36350	54300	30503	75640	106143	2789	11746	14535	51242	123736	174978

Source: Directorate of Public Instruction, Thiruvananthapuram.

Appendix 11.12

SI. No	Name of District	Deployed in Govt. School	Retained in	a- 2007-2008 Deployed in other Aided School	Undeployed	Total number of protected teachers
1	2	3	4	5	6	7
1	Thiruvananthapuram	120	49	36	23	228
2	Kollam	298	116	13	29	456
3	Pathanamthitta	89	30	9	9	137
4	Alappuzha	87	24	18	0	129
5	Kottayam	31	40	9	3	83
6	ldukki	13	20	10	2	45
7	Ernakulam	57	110	23	12	202
8	Thrissur	117	77	20	24	238
9	Palakkad	98	97	29	10	234
10	Malappuram	150	124	8	11	293
11	Kozhikkode	357	99	36	19	511
12	Wayanad	11	10	10	0	31
13	Kannur	173	207	21	75	476
14	Kasaragod	40	25	5	0	70
	TOTAL	1641	1028	247	217	3133

Source: Directorate of Public Instruction

Appendix 11.13
Uneconomic School During the Year 2007-08

				N	lumber of	Schools			
SI. No	District		Govern	nment			Aid	ed	
		LPS	UPS	HS	Total	LPS	UPS	HS	Total
1	2	3	4	5	6	7	8	9	10
1	Thiruvananthapuram	120	19	6	145	20	5	3	28
2	Kollam	126	7	0	133	46	2	2	50
3	Pathanamthitta	130	29	19	178	161	29	6	196
4	Alappuzha	132	32	8	172	88	19	3	110
5	Kottayam	134	49	22	205	134	35	6	175
6	Idukki	52	17	16	85	54	11	2	67
7	Ernakulam	138	63	16	217	110	29	2	141
8	Trissur	68	18	12	98	104	11	3	118
9	Palakkad	79	2	0	81	68	4	0	72
10	Malappuram	39	2	0	41	19	0	0	19
11	Kozhikode	84	14	8	106	218	13	0	231
12	Wayanad	39	2	1	42	4	1	0	5
13	Kannur	85	30	1	116	395	53	0	448
14	Kasaragod	84	16	2	102	30	4	0	34
	·	1310	300	111	1721	1451	216	27	1694

Source: Directorate of Public Instruction

Appendix 11.14 SSLC Examination Result 2006 (a)

	TOTAL	BOYS	GIRLS	SC	ST
No. of Candidates Attended	471305	232521	238784	44063	5085
No. of Candndates Passed	326741	153061	173680	21405	2094
Percentage of Pass	69.33	65.83	72.74	48.58	41.18
SSLC 1	Examinati	on Result	t 2007 (b)		
	TOTAL	BOYS	GIRLS	sc	ST
No. of Candidates Attended	458890	227256	231634	42664	4907
No. of Candndates Passed	377356	181569	195787	27803	2977
Percentage of Pass	82.23	79.9	84.52	65.17	60.67
SSLC F	Examinatio	on Result	-2008 (c)		
	TOTAL	BOYS	GIRLS	SC	ST
No. of Candidates Attended	451479	222997	228482	41392	4836
No. of Candidates Passed	415744	201046	214698	34511	3988
Percentage of Pass	92.08	90.16	93.97	83.38	82.46

Source: Office of the Commissioner of Government Examinations

Appendix 11.15
District-wise/Management-wise Number of Higher Secondary Schools in Kerala 2008

SI.No	Districts	Number of	of Higher	Secondary S	Schools		Number o	f batchs	
		Govt.	Aided	Un-aided	Total	Science	Humanities	Commerce	Total
1	2	3	4	5	6	7	8	9	10
1	Thiruvananthapuram	74	46	44	164	268	95	108	471
2	Kollam	55	49	25	129	202	69	79	350
3	Pathanamthitta	26	36	29	91	127	56	55	238
4	Alappuzha	41	49	16	106	186	63	70	319
5	Kottayam	37	59	28	124	221	83	65	369
6	Idukki	25	26	15	66	86	32	35	153
7	Ernakulam	63	63	53	179	257	76	129	462
8	Thrissur	62	44	45	151	191	63	92	346
9	Palakkad	55	23	30	108	146	73	76	295
10	Malappuram	82	44	71	197	224	101	146	471
11	Kozhikode	62	40	34	136	180	86	86	352
12	Wayanad	26	11	7	44	57	36	29	122
13	Kannur	72	28	27	127	189	73	90	352
14	Kasargod	55	11	15	81	93	49	49	191
	Total	735	529	439	1703	2427	955	1109	4491

Source:Directorate of Higher Secondary Education

Appendix 11.16 (a)

Numer of Students appeared and passed in
Higher Secondary Education(2007-2008)

Year	Number of	of students	appeared	Number o			
	Boys	Girls	Total	Boys	Girls	Total	%
1	2	3	4	5	6	7	8
2007-2008	153081	173264	326345	102113	135386	237499	72.78%

Appendix 11.16 (b)

Number of SC Students Appeared and Passed in Higher Secondary Examination 2007-2008

.,	Number of Students appeared			Number	s Passed		
Year	Boys	Girls	Total	Boys	Girls	Total	%
1	2	3	4	5	6	7	8
2007-2008	14019	15146	29165	6113	9165	15278	56.94%

Appendix 11.16 (c)

Number of ST Students Appeared and Passed in Higher Secondary Examination-2007-2008

Year	Number of Students appeared			Number of students Passed			
	Boys	Girls	Total	Boys	Girls	Total	%
1	2	3	4	5	6	7	8
2007-2008	1525	1867	3392	646	1020	1666	49.12%

Source: Directorate of Higher Secondary Education

Appendix 11.19

District wise Number of Arts and Science Colleges
(Government & Private Aided) in Kerala 2008

SI No	District	Government	Private	Total
1	Thiruvananthapuram	8	12	20
2	Kollam	1	12	13
3	Pathanamthitta		9	9
4	Alappuzha		12	12
5	Kottayam	1	21	22
6	ldukki	2	6	8
7	Ernakulam	4	21	25
8	Thrissur	3	17	20
9	Palakkad	4	9	13
10	Malappuram	3	8	11
11	Kozhikode	6	8	14
12	Wayanad	2	4	6
13	Kannur	2	9	11
14	Kasargod	3	2	5
0	Total	39	150	189

Source: Directorate of Collegiate Education

Appendix 11.20
Details of B.A Degree Enrolment in Colleges during the year 2007-08

(Students in Nos)

		Firs	t Year	Secor	nd Year	Thir	d Year
SI.No	Subject	Total	of which girls	Total	of which girls	Total	of which girls
1	2	3	4	5	6	7	8
1	Economics	6515	4652	6468	4364	6074	3326
2	History	3913	2621	3872	2411	3323	2312
3	Sociology	936	982	821	761	781	325
4	Politics	1036	971	975	712	704	336
5	Philosophy	928	812	898	691	615	393
6	Geography	278	171	174	103	168	95
7	Psychology	60	321	498	281	425	276
8	English	4531	2432	4461	2294	4311	3321
9	Malayalam	3696	2345	3545	2215	3423	2115
10	Hindi	1632	973	1518	818	1318	736
11	Arabic	515	563	492	470	433	261
12	Sanskrit	525	730	468	696	423	315
13	Kannada	70	73	68	61	50	30
14	Islamic History	731	503	698	454	623	211
15	Tamil	110	93	98	65	96	50
16	Music	205	86	161	102	180	53
	Total	25681	18328	25215	16498	22947	14155

Source: Directorate of Collegiate Education

Appendix 11.21

Details of B.Sc.Degree Enrolment in Colleges during 2007- 2008

(Students in Nos.)

		First	Year	Seco	nd Year	Fin	al Year
SI.No	Subject	Total	Out of which girls	Total	Out of which girls	Total	Out of which girls
1	2	3	4	5	6	7	8
1	Mathematics	5518	3398	5346	3116	5088	2896
2	Physics	4312	3122	4201	3021	3970	2733
3	Chemistry	4201	3028	4068	2831	3753	2573
4	Zoology	4019	2915	3959	2902	3231	2460
5	Botany	3661	2918	3521	2790	3206	2580
6	Statistics	312	148	168	90	262	138
7	Geology	220	128	80	83	138	98
8	Homescience	115	65	75	63	44	28
9	Bio Chemistry	161	52	138	45	165	93
10	Polymer Chemistry	168	61	226	39	130	90
11	Bio Technology	151	56	141	45	133	96
12	Computer Science	160	36	68	27	98	98
13	Industrial Fish and Fisheries	60	38	105	25	32	33
14	Electronics	110	48	98	33	73	42
15	Analytical Chemistry	50	19	41	16	11	10
	Total	23218	16032	22235	15126	20334	13968

Source: Directorate of Collegiate Education

Appendix 11.22
Details of B.Com Degree Enrolment in Colleges 2007-08

Year		Students in Number							
	Boys	Girls	Total						
First Year	4301	4978	9279						
Second Year	4221	4868	9089						
Third Year	4083	4831	8914						
Total	12605	14677	27282						

Source: Directorate of Collegiate Education

Appendix 11.23

Details of Enrolment of M.A. Students in Colleges during 2007- 2008 (in Nos.)

SI.No	Subject		First Year		S	econd Ye	ar
31.140	Subject	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8
1	Economics	130	797	927	108	763	871
2	History	118	458	576	96	426	522
3	Sociology	38	26	64	21	18	39
4	Politics	42	253	295	38	228	266
5	Philosophy	38	61	99	27	32	59
6	Geography	43	32	75	36	18	54
7	Psychology	54	37	91	38	22	60
8	English	161	628	789	148	593	741
9	Malayalam	154	468	622	131	421	552
10	Hindi	148	201	349	136	193	329
11	Geology	35	28	63	29	15	44
12	Arabic	61	43	104	46	29	75
13	Sanskrit	42	48	90	38	41	79
14	Kannada	16	18	34	10	10	20
15	Islamic History	54	158	212	42	128	170
16	Tamil	19	18	37	10	10	20
	Total	1153	3274	4427	954	2947	3901

Source: Directorate of Collegiate Education, Thiruvananthapuram

Appendix.11.24

Details of Enrolment of M.Sc. Students in Colleges during 2007 - 08(in Nos.)

SI. No	Subject		First Year	•	S	econd Ye	ar
		Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8
1	Mathematics	146	598	744	98	588	686
2	Physics	136	542	678	112	538	650
3	Chemistry	158	638	796	121	628	749
4	Zoology	145	465	610	115	456	571
5	Botany	151	418	569	113	405	518
6	Home Science	151	603	754	115	597	712
7	Statistics	15	38	53	10	30	40
8	Geology	8	63	71	6	53	59
9	Analytical Chemistry	13	36	49	10	31	41
10	Bio-Chemistry	11	27	38	8	22	30
	Total	934	3428	4362	708	3348	4056

Source: Directorate of Collegiate Education, Thiruvananthapuram

Appendix. 11.25

Details of Enrolment of M.Com Students in Colleges

SI.No	Year	Enrolment			
31.NO	Teal	Enrolme Boys Girls 3 4 618 1223 502 1003 1120 2226	Total		
1	2	3	4	5	
1	First Year	618	1223	1841	
2	Second Year	502	1003	1505	
	Total	1120	2226	3346	

Source: Directorate of Collegiate Education, Thiruvananthapuram

Appendix. 11.26

University-wise Number of Teachers in Arts & Science Colleges in Kerala(2005-06 to 2007-08)

SI.N	1	Number of Teachers									
	Name of University		2005-06			2006-07			2007-08		
0.		Men	Women	Total	Men	Women	Total	Men	Women	Total	
1	2	6	7	8	9	10	11	9	10	11	
1	Kerala	1528	1305	2833	1515	1297	2812	1535	1307	2842	
2	Mahatma Gandhi	1891	1632	3523	1871	1618	3489	1896	1630	3526	
3	Calicut	1401	1208	2609	1396	1198	2594	1383	1216	2599	
4	Kannur	562	275	837	546	256	802	548	295	843	
	TOTAL:	5382	4420	9802	5328	4369	9697	5362	4448	9810	

Source: Directorate of Collegiate Education, Thiruvananthapuram

Appendix 11.27
Details of Scheduled Caste/Scheduled Tribe Students in Arts and Science Colleges in Kerala during 2007-08

SI.	Name of Course -	Sch	eduled Ca	aste	Sch	Scheduled Tribe			
No	Name of Course	Boys	Girls	Total	Boys	Girls	Total		
1	B.A	4466	7589	12055	590	925	1515		
2	B.Sc	2500	5181	7681	200	330	530		
3	B.Com	1583	2078	3661	240	262	502		
4	M.A	323	828	1060	57	94	151		
5	M.Sc.	225	718	943	37	76	113		
6	M.Com	248	362	610	31	28	59		
	Total	9345	16756	26010	1155	1715	2870		

Source: Directorate of Collegiate Education

Appendix 11.28.

Number of Teachers having Ph.D Degree in Arts

&Science Colleges in 2008

Governemnt Colleges	Private Aided Colleges	Private Unaided Colleges	Total
454	2093		2547

Appendix 11.29

Number of Guest Lectures appointed in Arts

&Science Colleges in 2008

Governemnt Colleges	Private Aided Colleges	Private Unaided Colleges	Total
375	988		1363

Source: Directorate of Collegiate Education

Appendix 11.30

District-wise and Management wise details of Engineering Colleges in Kerala-2008

No	Name of District		No.	of Colleges		(Sanctione	d Intake	
	-	Govt.	Aided	Unaided	Total	Govt	Aided	Unaided	Total
1	2	3	4	5	6	7	8	9	10
1	Thiruvananthapuram	2	0	13	15	833	0	3660	4493
2	Kollam	0	1	8	9	0	500	2205	2705
3	Pathanamthitta	0	0	5	5	0	0	1470	1470
4	Alappuzha	0	0	3	3	0	0	600	600
5	Kottayam	1	0	6	7	300	0	1905	2205
6	Idukki	1	0	3	4	240	0	840	1080
7	Ernakulam	0	1	12	13	0	480	4120	4600
8	Thrissur	2	0	8	10	533	0	2770	3303
9	Palakkad	1	1	1	3	180	480	240	900
10	Malappuram	1	0	3	4	46	0	940	986
11	Kozhikode	1	0	3	4	240	0	1080	1320
12	Wayanad	1	0	0	1	120	0	0	120
13	Kannur	1	0	3	4	300	0	900	1200
14	Kasaragod	0	0	2	2	0	0	510	510
	Total	11	3	70	84	2792	1460	21240	25492

Source: Directorate of Technical Education, Thiruvananthapuram.

Appendix - 11.3

District-wise/ Management-wise Number of Schools in Kerala: 2007-08

<u> </u>	D	Н	igh Sc	chools			U.P.Sc	chools			L.P.S	chools	}		To	tal	
SI. No	District	G	РА	PUA	т	G	РА	PUA	Т	G	РА	PUA	т	G	РА	PUA	Т
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Thiruvananthapuram	119	95	43	257	98	101	27	226	300	180	27	507	517	376	97	990
2	Kollam	78	131	17	226	61	139	19	219	268	190	32	490	407	460	68	935
3	Pathanamthitta	48	111	9	168	42	83	16	141	168	235	22	425	258	429	47	734
4	Alappuzha	59	130	8	197	67	77	11	155	192	197	21	410	318	404	40	762
5	Kottayam	60	166	22	248	67	128	11	206	168	267	25	460	295	561	58	914
6	Idukki	55	73	12	140	40	63	4	107	85	136	10	231	180	272	26	478
7	Ernakulam	87	175	52	314	91	103	22	216	181	270	30	481	359	548	104	1011
8	Thrissur	80	150	30	260	55	162	14	231	115	381	23	519	250	693	67	1010
9	Palakkad	61	79	35	175	63	159	12	234	194	349	12	555	318	587	59	964
10	Malappuram	82	84	79	245	113	223	35	371	350	477	26	853	545	784	140	1469
11	Kozhikod	70	99	23	192	74	240	13	327	181	529	11	721	325	868	47	1240
12	Wayanad	40	23	5	68	34	39	2	75	91	53	6	150	165	115	13	293
13	Kannur	83	80	23	186	76	280	19	375	114	607	10	731	273	967	52	1292
14	Kasaragod	77	33	17	127	72	72	15	159	141	115	12	268	290	220	44	554
	Total	999	1429	375	2803	953	1869	220	3042	2548	3986	267	6801	4500	7284	862	12646

Source: Directorate of Public Instruction, Thiruvananthapuram.

G-Govt, PA-Private Aided PUA-Private Unaided T.-Total

Appendix. 11.31
Branch-wise Distribution of Seats in Engineering Colleges-2007-08

SI.No	Name of Course/Branch	Total Sanctioned Seats
1	2	3
1	Applied Electronics	1200
2	B.Tech (Agricultural Engineering)	46
3	Architecture	140
4	Bio-medical Engineering	100
5	Bio-Technology	240
6	Civil Engineering	1772
7	Chemical Engineering	150
8	Automobile Engineering	240
9	Computer Science & Engineering	4820
10	Diary Science & Technology	23
11	Electronics and Communication	5855
12	Electrical and Electronics	3810
13	Electronics & Instrumentation	300
14	Instrumentation and Control Engineering	120
15	Industrial Engineering	30
16	Information Technology	2415
18	Mechanical (Engineering)	3291
19	Mechanical (Production Engineering)	90
20	Polymer Engineering	60
21	Production Plant Engineering	90
22	Printing Technology	30
	Total	24822

Source: Directorate of Technical Education, Thiruvananthapuram.

Appendix 11.32 (a)

Course-wise Annual intake of students in Government and Aided Enginering colleges at Graduate level 2007-08 to 2008-09

	_	A	Annual Inta	ake 2007-	08	Α	nnual Inta	ake 2008-	09
SI.No	Name of Course	Go	ovt	Aid	ded	G	ovt	Aid	ded
		Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
1	2	3	4	5	6	7	8	9	10
1	Computer Science & Engineering	156	234	68	102	160	230	70	100
2	Electronics & Communication Engineering	220	290	84	116	219	291	86	114
3	Electrical & Electronics Engineering	176	264	130	180	150	290	110	200
4	Information Technology	90	90	0	0	85	95	0	0
5	Applied Electronics & Instumentation	55	65	0	0	54	66	0	0
6	Civil Engineeing	205	187	140	160	199	193	141	159
7	Chemical Engineering	50	60	18	22	40	70	16	24
8	Mechanical Engineering	21	440	10	300	25	436	15	295
9	instrumentation & Control Engineering	0	0	20	40	0	0	21	39
10	Production cum plant Engineering	5	25	0	0	6	24	0	0
11	Architecture	41	18	18	22	32	27	19	21
12	Industrial Engineering	10	20	0	0	9	21	0	0
13	Mechanical (Production) Engineering	0	0	2	28	0	0	1	29
	Total	1029	1693	490	970	979	1743	479	981

Appendix 11.32(b)

Course-wise Annual intake of students in Government and Aided Enginering colleges at Post Graduate level 2007-08 to 2008-09

			200	7-08			200	8-09	
SI.No	Name of Course	Govt		Aided		Govt		Aic	ded
	-	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
1	2	3	4	5	6	7	8	9	10
1	Civil Engineering	31	27	4	3	47	21	8	5
2	Mechanical Engineering	16	51	0	6	15	52	1	9
3	Electrical & Electronics Engineering	35	24	0	0	38	21	0	0
4	Electronics & Communication Engineering	14	29	0	0	17	20	0	0
5	MCA	32	28	31	29	38	22	30	29
6	Chemical Engineering	0	9	0	0	6	2	0	0
	Total	128	168	35	38	161	138	39	43

Source: Directorate of Technical Education

Appendix- 11.33(a)

Annual Intake and Students Strength in Government Polytechnic in Kerala
(2006-07 to 2008-09)

	No. of	Stud	ents Stren	gth	Annual Intake				
Year	Polytechnics	Boys	Girls	Total	Boys	Girls	Total		
1	2	3	4	5	6	7	8		
2006-07	43	22032	2448	24480	7344	816	8160		
2007-08	43	22016	2464	24480	7328	832	8160		
2008-09	43	21199	3901	25100	7300	1100	8400		

Source: Directorate of Technical Education

Appendix- 11.33(b) Annual Intake and Students Strength in Private Aided Polytechnic in Kerala (2006-07 to 2008-09)

	No. of	Stu	udents Stre	ngth	Annual Intake				
Year	Polytechnics	Boys Girls		Total	Boys	Girls	Total		
1	2	3	4	5	6	7	8		
2006-07	6	4050	450	4500	1340	160	1500		
2007-08	6	4053	452	4505	1345	155	1500		
2008-09	6	3867	632	4499	1290	210	1500		

Source: Directorate of Technical Education

Appendix. 11.34
Trade-wise Annual Intake of students in
Polytechnics - 2008-09

	1 Olyteelinies 2000 03	Sanctioned
SI.No.	Name of Trade	Intake
1	Civil Engineering	980
2	Mechanical Engineering	1310
3	Electrical Engineering	980
4	Electronics	1800
5	Chemical Engineering	90
6	Automobile	240
7	Textile Technology	160
8	Computer Engineering	1660
9	Instrument Technology	90
10	Polymer Technology	140
11	Computer hardware Maintenance	470
12	Tool & Die making	90
13	Electronic Production Technology	120
14	Architecture	70
15	Electronics & Communication	390
16	Electrical & Instrumentation	320
17	Wood and Paper Technology	40
18	Printing Technology	70
19	Commercial Practice	330
20	Electronics& Avionics	50
21	CA & BM	260
22	Bio Medical Engineering	40
23	Information Technology	80
	Total	9780

Source: Directorate of Technical Education, Thiruvananthapuram.

Appendix 11.35

Number of Students and Teachers in Polytechnics 2007& 2008

	Students (in Nos)							Teachers (in Nos)					
Type of Institutions	2007			2008			2007			2008			
	Boys	Girls	Total	Boys	Girls	Total	Male	Female	Total	Male	Female	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	
1. Government	22016	2464	24480	21199	3901	25100	1144	290	1434	1156	299	1455	
2. Private (Aided)	4053	452	4505	3867	632	4499	246	73	319	246	74	320	
Total	26069	2916	28985	25066	4533	29599	1390	363	1753	1402	373	1775	

Source: Directorate of Technical Education, Thiruvananthapuram.

Appendix 11.36

Number of SC/ST Students and SC/ST Teachers in Polytechnics(2007-08 to 2008-09)

Turna		Students							Teachers					
Type of Institution	2007-08				2008-09			2007-08			2008-09			
of institution	SC	ST	Total	SC	ST	Total	SC	ST	Total	SC	ST	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13		
Government Polytechnics	1958	584	2542	1976	590	2566	90	22	112	91	23	114		
Private Aided Polytechnics	359	92	451	360	90	450	0	0	0	0	0	0		

Source: -Directorate of Technical Education

Appendix 11.37

Number of Students and Teachers in Technical High Schools (2006-07 to 2008-09)

Vaan	Numb	er of Stu	idents	Number of Teachers						
Year -	Boys	Girls	Total	Men	Women	Total				
1	2	3	4	5	6	7				
2006-07	5674	631	6305	837	178	1015				
2007-08	5670	630	6300	840	179	1019				
2008-09	5709	576	6285	834	176	1010				

Source: Directorate of Technical Education

Appendix 11.38 (a)

Number of SC Students and Teachers in Technical High Schools
(2006-07 to 2008-09)

Year	Nu	mber of Studen	ts	Number of Teachers					
Tear	Boys	Girls	Total	Men	Women	Total			
1	2	3	4	5	6	7			
2006-07	439	65	504	102	48	150			
2007-08	450	60	510	105	45	150			
2008-09	465	75	540	101	39	140			

Source: Directorate of Technical Education

Appendix 11.38(b)

Number of ST Students and Teachers in Technical High Schools
(2006-07 to 2008-09)

Year -	Nu	mber of Studen	ts	Nι	ımber of Teache	rs
i eai —	Boys	Girls	Total	Men	Women	Total
1	2	3	4	5	6	7
2006-07	107	19	126	28	12	40
2007-08	104	18	122	29	13	42
2008-09	94	16	110	31	7	38

Source: Directorate of Technical Education

Appendix 11.39

DETAILS OF SELF FINANCING COURSES OFFERED THROUGH VARIOUS CENTRES OF COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY DURING 2008-09

				Duration of	
SI. No	Name of Course	Institutions	Year of Starting	Course	Sanctioned Intake
1	2	3	4	5	6
1 B	3.Tech Computer Science & Engineering	School of Engineering	1995	8 Semester	90
2 B	3.Tech Civil Engineering	11	1995	8 Semester	90
3 B	3.Tech Electrical & Electronics Engineering	11	1995	8 Semester	60
4 B	3.Tech Electronics & Communication Engineering	п	1995	8 Semester	90
5 B	3.Tech Information Technology	п	1995	8 Semester	90
6 B	3.Tech Mechanical Engineering	п	1995	8 Semester	90
7 B	3.Tech Safety & FireEngineering	II.	1995	8 Semester	30
8 B	3.Tech Marine Engineering	School of Marine Engineering School of Management	2003	8 Semester	30
9 M	MBA Travel & Tourism	Studies Cochin University College	2007	4 Semester	30
10 B	3.Tech Computer Science & Engineering	of Engineering, Kuttanadu	1999	8 Semester	60
11 B	3.Tech Electrical & Electronics Engineering	n	1999	8 Semester	60
12 B	3.Tech Electronics & Communication Engineering	п	1999	8 Semester	60
13 B	3.Tech Information Technology	n	1999	8 Semester	60
14 B	3.Tech Mechanical Engineering	II .	1999	8 Semester	60

Source: Cochin University of Science and Technology

Appendix 11.4
District wise Number of Schools (other than state syllabus) in Kerala (2008-2009)

SI.N	District	CBSE	ICSE	Kendriya	Javahar
ο.	DISTRICT		ICSE	Vidyalaya	Navodaya
1	2	3	4	5	6
1	Thiruvananthapuram	51	13	4	1
2	Kollam	30	15	0	1
3	Pathanamthitta	26	13	1	1
4	Alappuzha	42	11	1	1
5	Kottayam	48	8	1	1
6	Idukki	17	5	0	1
7	Ernakulam	92	15	6	1
8	Thrissur	54	8	1	1
9	Palakkad	44	2	3	1
10	Malappauram	56	2	1	1
11	Kozhikode	44	2	2	1
12	Wayanad	15	1	1	1
13	Kannur	45	3	3	1
14	Kasaragod	23	2	2	1
	Total	587	100	26	14

Source: Directorate of Public Instruction, Thiruvananthapuram.

Appendix 11.5

District - wise Details of Govt.Schools having Building Facilities - Kerala (2007-2008)

SI.N	District	No.of S	Schools hav	ving Pucca	Buildings	No.of	Schools ha	aving That	ched Sheds	No.of	Schools w	orking in ding.	Rented
0.	District _	L.P	U.P	H.S	Total	L.P	U.P	H.S	Total	L.P	U.P	H.S	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	298	92	99	489	2	6	20	28	0	0	0	0
2	Kollam	268	61	78	407	0	0	0	0	0	0	0	0
3	Pathanamthitta	168	42	48	258	0	0	0	0	0	0	0	0
4	Alappuzha	192	67	59	318	0	0	0	0	0	0	0	0
5	Kottayam	168	67	60	295	0	0	0	0	0	0	0	0
6	ldukki	85	40	55	180	0	0	0	0	0	0	0	0
7	Ernakulam	181	91	87	359	0	0	0	0	2	0	0	2
8	Thrissur	115	55	80	250	0	0	0	0	14	0	0	14
9	Palakkad	194	63	61	318	0	0	0	0	33	2	0	35
10	Malappuram	350	113	82	545	0	0	0	0	55	26	3	84
11	Kozhikode	181	74	70	325	0	0	0	0	27	8	2	37
12	Wayanad	91	34	40	165	0	0	0	0	0	0	0	0
13	Kannur	114	76	83	273	0	0	0	0	23	16	2	41
14	Kasaragod	141	72	77	290	0	0	0	0	6	1	0	7
	Total	2546	947	979	4472	2	6	20	28	160	53	7	220

Appendix 11.6 Facilities in Kerala- 2008

	_			No.	o. of Scho	ols hav	ing		
SI.	District			ng Water				/ Latrine	
No		L.P	U.P	H.S	Total	L.P	U.P	H.S	Total
1	2	3	4	5	6	7	8	9	10
1	Thiruvananthapuram	297	94 119 510		510	296	95	119	510
2	Kollam	258	56	77	391	259	56	76	391
3	Pathanamthitta	168	42	48	258	167	42	48	257
4	Alappuzha	192	67	58	317	187	66	59	312
5	Kottayam	157	65	60	282	161	67	60	288
6	Idukki	69	37	51	157	82	39	47	168
7	Ernakulam	178	87	86	351	181	91	85	357
8	Thrissur	111	54	80	245	109	55	80	244
9	Palakkad	170	61	61	292	174	63	61	298
10	Malappuram	333	107	82	522	335	113	82	530
11	Kozhikode	167	74	70	311	169	73	70	312
12	Wayanad	88	34	37	159	89	34	40	163
13	Kannur	101	75	83	259	100	75	83	258
14	Kasaragod	127	71	73	271	137	72	74	283
	TOTAL:	2416	924	985	4325	2446	941	984	4371

Appendix 11.7

Management-wise/Standardwise Enrolment of Students in Schools: Kerala 2008-09

(Nos) **Standards** Total I Management Total VII VI VIII IX Ш IV Total Total to X Government 137174 140250 Aided Un Aided 447853 1427293 4545826 **Grand Total** 1665993 465359 498226 1452540 492178

Source: Directorate of Public Instruction, Thiruvananthapuram

Appendix 11.8

Enrolment of Students in Schools- District-wise and Stage-wise (2008- 09)

SI.No	Districts -		L.P.S(I-IV)			U.P.S(V-VII)			H.S(VIII-X)	TOTAL			
31.110	Districts	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	Thiruvananthapuram	74020	75514	149534	65915	66145	132060	65557	65215	130772	205492	206874	412366	
2	Kollam	56588	56815	113403	54251	52795	107046	54308	51760	106068	165147	161370	326517	
3	Pathanamthitta	20743	19947	40690	21396	20570	41966	22623	21157	43780	64762	61674	126436	
4	Alappuzha	41080	41741	82821	40304	39046	79350	41925	39513	81438	123309	120300	243609	
5	Kottayam	40653	39878	80531	37716	36335	74051	38197	37170	75367	116566	113383	229949	
6	ldukki	25762	24775	50537	22902	20972	43874	20623	19087	39710	69287	64834	134121	
7	Ernakulam	62268	62196	124464	59134	57197	116331	59171	58231	117402	180573	177624	358197	
8	Thrissur	75942	76063	152005	68120	65828	133948	65208	65583	130791	209270	207474	416744	
9	Palakkad	79210	78883	158093	69321	66061	135382	65020	63455	128475	213551	208399	421950	
10	Malappuram	152389	147321	299710	123541	113534	237075	115238	111063	226301	391168	371918	763086	
11	Kozhikode	83179	81609	164788	72084	68636	140720	72018	69049	141067	227281	219294	446575	
12	Wayanad	26197	24992	51189	20574	19705	40279	17447	17133	34580	64218	61830	126048	
13	Kannur	63118	61354	124472	55970	52680	108650	56033	53852	109885	175121	167886	343007	
14	Kasaragod	37450	36306	73756	31585	30223	61808	31410	30247	61657	100445	96776	197221	
	Total	838599	827394	1665993	742813	709727	1452540	724778	702515	1427293	2306190	2239636	4545826	

Appendix 11.9
Standardwise Strength of SC/ST Students in Kerala: 2008-09

Ctondord	Go	overnment Sch	ools		F	Private Aide	ed Schools	3	Р	rivate Unai	ded School	S
Standard —	Total	Others	SC	ST	Total	Others	SC	ST	Total	Others	SC	ST
1	2	3	4	5	6	7	8	9	10	11	12	13
I	112234	91620	16222	4392	218876	192238	22792	3846	41497	39707	1687	103
II	125398	102844	18076	4478	241727	211797	25995	3935	41934	40075	1749	110
Ш	137637	112996	20070	4571	256102	224291	27856	3955	42551	40689	1749	113
IV	143670	118556	20715	4399	261790	228971	29027	3792	42577	40920	1570	87
V	129955	107882	17517	4556	299001	262441	32471	4089	36403	35247	994	162
VI	137174	114315	18574	4285	316065	276776	35561	3728	35716	34495	1067	154
VII	140250	117507	18805	3938	324706	285990	35331	3385	33270	32195	923	152
VIII	155396	131630	20075	3691	305207	271635	31151	2421	31575	30603	832	140
IX	153446	131318	19106	3022	302822	271179	29363	2280	30994	30104	781	109
Χ	142181	122957	16785	2439	275529	248630	25233	1666	30143	29321	708	114
Total	1377341	1151625	185945	39771	2801825	2473948	294780	33097	366660	353356	12060	1244

Source: Directorate of Public Instruction, Thiruvananthapuram

Appendix 11.10
District-wise/Stage-wise Drop Out Ratio in Schools: 2006-07

	Districts		LP Stage	;		UP Stage	9		HS Stage			
SI No	Districts	Enrolment	Drop Out	% Drop Ou	ıt Enrolment	Drop Out	% Drop Ou	t Enrolment	Drop Out	% Drop Out		
1	2	3	4	5	6	7	8	9	10	11		
1	Thiruvananthapuram	166280	1162	0.70	133653	834	0.62	137177	1213	0.88		
2	Kollam	121256	432	0.36	108232	429	0.40	110689	847	0.77		
3	Pathanamthitta	49111	188	0.38	44165	107	0.24	48326	238	0.49		
4	Alapuzha	90771	258	0.28	79554	187	0.24	85102	641	0.75		
5	Kottayam	91610	338	0.37	75982	230	0.30	77473	621	0.80		
6	Idukki	54008	551	1.02	43580	387	0.89	40639	989	2.43		
7	Ernakulam	137941	843	0.61	117553	559	0.48	121582	1419	1.17		
8	Thrissur	168608	522	0.31	138214	605	0.44	132212	1397	1.06		
9	Palakkad	166697	1347	0.81	134475	906	0.67	129844	2217	1.71		
10	Malappuram	300760	1583	0.53	235536	1262	0.54	228669	4191	1.83		
11	Kozhikode	174909	918	0.52	141463	589	0.42	144097	2514	1.74		
12	Wayanad	52818	999	1.89	38232	735	1.92	35346	906	2.56		
13	Kannur	135066	591	0.44	112017	461	0.41	114553	2556	2.23		
14	Kasargode	79582	744	0.93	61425	350	0.57	60269	446	0.74		
	Total	1789417	10476	0.59	1464081	7641	0.52	1465978	20195	1.38		

Appendix 12.1 Medical Institutions and Beds in Kerala - Category-wise - 2008

SI. No.	District	Hos	spitals		ncluding Centres		munity Centres	Dispe	nsaries	Clinics	.B. s/Centr es		d in aid tutions	Sub centres	Leprosy Control Clinics/	Total No	Total Beds
		No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds		Units		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Thiruvananthapuram	18	3752	77	490	10	528	9	34	1		3	245	455	1	116	4804
2	Kollam	9	1534	65	342	9	413			2		3	325	449	4	89	2289
3	Pathanamthitta	8	1291	51	504	3	66	1		1		4	863	260		64	1861
4	Alappuzha	10	2457	65	493	8	307	1		2	36	4	750	368	1	87	3293
5	Kottayam	12	1506	60	544	8	426			2	48	6	1021	359		82	2524
6	Idukki	3	488	52	528	6	219	2		1		0	0	231		64	1235
7	Ernakulam	22	3010	77	935	10	485	5	80	1	40	3	1010	351		115	4550
8	Thrissur	16	2558	87	640	9	323	5	6	1		1	170	492	4	122	3527
9	Palakkad	8	1147	82	790	12	537	8		1		3	187	471	1	112	2474
10	Malappuram	7	1302	94	760	11	406	6		2	52	2	70	508	3	123	2520
11	Kozhikode	8	2115	69	311	11	364	3		1		0	0	389	2	94	2790
12	Wayanad	3	374	25	318	5	221	7		1		0	0	204		41	913
13	Kannur	9	1693	79	761	7	244	9	70	1		0	0	352		105	2768
14	Kasargode	3	644	46	259	5	191	3		1		0	0	205	2	60	1094
	TOTAL:	136	23871	929	7675	114	4730	59	190	18	176	29	4641	5094	18	1274	36642

Source: Directorate of Health Services

Excluding Medical colleges and attached institutions

Appendix 12.10

District-wise Distribution of Institutions , Beds and patients treated under Government Homoeopathy

Directorate (2007 & 2008)

(Nos.)

												(1105.)
SI.N o.	District	Hos	pitals	Ве	ds	Dispe	nsaries	Institu	utions		ts treated 008	Doctors 2008
0.		2007	2008	2007	2008	2007	2008	2007	2008	I.P	O.P	2000
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Thiruvananthapuram	4	4	185	185	51	51	55	55	2123	1470948	63
2	Kollam	3	3	75	75	37	37	40	40	741	724344	44
3	Pathanamthitta	1	1	25	25	25	25	26	26	0	654273	26
4	Alappuzha	3	3	75	75	41	41	44	44	762	1179206	48
5	Kottayam	3	3	175	175	44	44	47	47	627	1072974	54
6	Idukki	2	2	50	50	33	33	35	35	571	781590	38
7	Ernakulam	3	3	85	85	51	51	54	54	2283	1345856	59
8	Thrissur	1	1	25	25	39	39	40	40	575	1045281	42
9	Palakkad	1	1	25	25	39	39	40	40	577	898801	42
10	Malappuram	2	2	50	50	42	42	44	44	600	992608	47
11	Kozhikode	3	3	75	75	45	45	48	48	958	933156	52
12	Wayanad	1	1	25	25	19	19	20	20	700	347725	22
13	Kannur	1	1	25	25	38	38	39	39	1161	658022	40
14	Kasaragode	3	3	75	75	21	21	24	24	534	612640	27
	TOTAL:	31	31	970	970	525	525	556	556	12212	12717424	604

Source: Directorate of Homoeopathy

Appendix 12.11
Annual intake of students and courses in
Homogo Colleges - 2008

	Homoeo Colleges	- 2008	
		Annua	l intake
		of stu	ıdents
SI.N			P.G.
0.	Name of College	BHMS	Degree
1	2	3	4
1	Government Homoeopathic Medical college,		
'	Thiruvananthapuram	50	18
2	Homoeopathic Medical college, Kozhikode Government aided Dr.Padiyar memorial	50	18
3	Homoeopathic Medical college, Ernakulam Athurasramam N.S.S. Homoeopathic Medical	50	
4	college, Kottayam Sree Vidhyadhiraja	50	
5	Homoeopathic Medical college, Nemom	50	
	Total	250	36

Source: Govt. Homoeo Medical College, Thiruvananthapuram

S 178

Appendix 12.12

District wise details of infrastructure under Co-operative sector - 2008

SI. No.	Name of District	No.of hospitals	No. of beds	No.of doctors	No of other Paramedical Staff	during	ents treated g 2007
					including Nurses	IP -	OP OP
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	Nil	Nil	Nil	Nil	Nil	Nil
2	Kollam	8	130	24	133	20610	80430
3	Pathanamthitta	1	25	1	5	1400	27303
4	Alappuzha	7	20	2	6	0	4524
5	Kottayam	2	35	9	48	2851	57171
6	ldukki	1	150	12	32	1512	35739
7	Ernakulam	7	510	60	245	13697	124267
8	Thrissur	9	639	82	345	44646	150554
9	Palakkad	2	112	16	25	8886	75081
10	Malappuram	4	760	74	455	29504	344933
11	Kozhikode	12	706	95	339	35419	442296
12	Wayanad	Nil	Nil	Nil	Nil	Nil	Nil
13	Kannur	15	2514	349	1392	118688	1206571
14	Kasaargode	5	225	33	158	13191	118054
	TOTAL:	73	5826	757	3183	290404	2666923

Source: Registrar of Co-operative socieites

Appendix 12.13
Institution Wise Patients Treated under Directorate of Insurance Medical Services - 2008

SI.						No. of Major	No of Minor
No.	Institution	Beds	IP	OP	Total	Operation	Operation
1	2	3	4	5	6	7	8
1 1	Peroorkada ESI Hospital	128	3095	29599	32694	230	650
2	Parippally ,,	100	3492	14691	18183	6	55
3	Ezhukone ,,	138	4115	21506	25621	299	531
4 /	Alappuzha ,,	60	1465	8649	10114	5	23
5 '	Vadavathur ,,	65	1357	23472	24829	2	606
6	Ernakulam ,,	65	2075	35942	38017	165	149
7	Udyogamandal ,,	155	1786	17308	19094	3	137
8 (Olarikkara ,,	102	2173	22981	25154	23	61
9 1	Mulamkunnathukavu ,,	110	820	3310	4130	0	0
10	Palakkad ,,	50	842	6819	7661	1	78
11	Feroke ,,	100	1938	24806	26744	0	344
12	Thottada ,,	50	920	10898	11818	3	19
•	Total	1123	24078	219981	244059	737	2653

Source: Directorate of Insurance Medical Directorate

S 178

Appendix 12.12

District wise details of infrastructure under Co-operative sector - 2008

SI. No.	Name of District	No.of hospitals	No. of beds	No.of doctors	No of other Paramedical Staff	during	ents treated g 2007
					including Nurses	IP -	OP OP
1	2	3	4	5	6	7	8
1	Thiruvananthapuram	Nil	Nil	Nil	Nil	Nil	Nil
2	Kollam	8	130	24	133	20610	80430
3	Pathanamthitta	1	25	1	5	1400	27303
4	Alappuzha	7	20	2	6	0	4524
5	Kottayam	2	35	9	48	2851	57171
6	ldukki	1	150	12	32	1512	35739
7	Ernakulam	7	510	60	245	13697	124267
8	Thrissur	9	639	82	345	44646	150554
9	Palakkad	2	112	16	25	8886	75081
10	Malappuram	4	760	74	455	29504	344933
11	Kozhikode	12	706	95	339	35419	442296
12	Wayanad	Nil	Nil	Nil	Nil	Nil	Nil
13	Kannur	15	2514	349	1392	118688	1206571
14	Kasaargode	5	225	33	158	13191	118054
	TOTAL:	73	5826	757	3183	290404	2666923

Source: Registrar of Co-operative socieites

Appendix 12.13
Institution Wise Patients Treated under Directorate of Insurance Medical Services - 2008

SI.						No. of Major	No of Minor
No.	Institution	Beds	IP	OP	Total	Operation	Operation
1	2	3	4	5	6	7	8
1 1	Peroorkada ESI Hospital	128	3095	29599	32694	230	650
2	Parippally ,,	100	3492	14691	18183	6	55
3	Ezhukone ,,	138	4115	21506	25621	299	531
4 /	Alappuzha ,,	60	1465	8649	10114	5	23
5 '	Vadavathur ,,	65	1357	23472	24829	2	606
6	Ernakulam ,,	65	2075	35942	38017	165	149
7	Udyogamandal ,,	155	1786	17308	19094	3	137
8 (Olarikkara ,,	102	2173	22981	25154	23	61
9 1	Mulamkunnathukavu ,,	110	820	3310	4130	0	0
10	Palakkad ,,	50	842	6819	7661	1	78
11	Feroke ,,	100	1938	24806	26744	0	344
12	Thottada ,,	50	920	10898	11818	3	19
•	Total	1123	24078	219981	244059	737	2653

Source: Directorate of Insurance Medical Directorate

Appendix 12 .14

Number of attack and death due to major principal diseases during 2007 & 2008

SI.No.	Name of Diseases	Atta	ck	De	ath
SI.NO.	Name of Diseases	2007	2008	2007	2008
1	2	3	4	5	6
1	Acute Diarrhoeal Diseases	344603	505560	5	10
2	Diptheria	3	3	1	1
3	Acute Poliomyelitis	0	0	0	0
4	Tetanus-Others	4	8	3	0
5	Neonatal Tetanus	0	0	0	0
6	Whooping Cough	116	147	0	0
7	Measles	2076	2674	1	2
8	Chickenpox	13776	16572	5	7
9	Acute Respiratory Infection	5611490	7711253	110	171
10	Pneumonia	11047	15659	54	87
11	Enteric Fever	3129	4261	2	4
12	Dengue Fever	387	550	7	8
13	Viral Hepatitis-A	4683	6231	2	4
14	Viral Hepatitis-B	348	562	9	10
15	Weils Disease(Leptosprirosis)	648	1106	58	116
16	Japanese Encephalitis	0	0	0	0
17	Menningococal Menningitis	7	34	0	2
18	Rabies(Hydrobhobia)	11	13	11	13
19	Syphillis	33	36	0	0
20	Gonococcal Infection	66	110	0	0
21	Pulmonary Tuberculosis	8781	12199	73	202
00	All Other Diseases (including	20244225		4000	
22	communicable and non communicable diseases	26241325	28173684	4326	6157
23	Anthrax	2	20173004	0	
20					0
	Total	32242535	36450664	4667	6794

Appendix 12.15

Target and achievement of Immunisation programme

			20	005-06	_	200	6-07		20	007-08
SI.No	Item	Unit	Target	Achievement	%	Target	Achievement	%	Target	Achievement
1	2	3	4	5	6	7	8	9	10	11
	M.C.H. Programme									
a)	Immunisation Programme									
(I)	D.P.T	Dose	556520	557925	100.3	567318	526300	92.8	548989	509175
(ii)	Polio	Dose	554704	552201	99.5	567318	522688	92.1	548989	509004
(iii)	B.C.G.	Dose	556520	550967	99.0	567318	565879	99.7	548989	539947
(iv)	Measles	Dose	554704	540524	97.4	567318	500046	88.1	548989	486788
(v)	T.T for Pregnant women	Dose	560463	594647	106.1	617170	545094	88.3	603888	523078
(vi)	T.T. for 5 Years	Dose	511619	481521	94.1	529720	412516	77.9	510667	379557
(vii)	T.T. for 10 Years	Dose	511619	510971	99.9	540674	351349	65.0	499154	318494
(VIII)	T.T. for 16 Years	Dose	511619	499793	97.7	534042	381515	71.4	500816	381515
b)	Prophylaxis against nutritional anaemia									
(I)	Women	Dose	552979	555430	99.6	604717	344325	56.9	603888	451487
(ii)	children'	Dose	1664112	1514431	109.9	1653840	644543	39.0	548989	280340

Appendix 12.16

District wise details of Dengue fever - 2008

(Nos.)

				(1100.)
SI.No.	District	Patients Treated	Patients Cured	Death
1	2	3	4	5
1	Thiruvananthapuram	258	256	2
2	Kollam	10	10	0
3	Pathanamthitta	4	4	0
4	Alappuzha	8	8	0
5	Kottayam	14	14	0
6	ldukki	3	2	1
7	Ernakulam	23	23	0
8	Thrissur	7	7	0
9	Palakkad	6	6	0
10	Malappuram	5	5	0
11	Kozhikode	22	22	0
12	Wayanad	3	3	0
13	Kannur	14	14	0
14	Kasaragode	6	6	0
	Total	383	380	3

Source: Directorate of Health Services

Appendix 12.17
Distirct wise details of Leptospyrosis - 2008

(Nos.)

SI.No.	District	Patients Treated	Patients Cured	Death
1	2	3	4	5
1	Thiruvananthapuram	258	255	3
2	Kollam	34	30	4
3	Pathanamthitta	9	6	3
4	Alappuzha	255	237	18
5	Kottayam	37	30	7
6	ldukki	46	42	4
7	Ernakulam	107	98	9
8	Thrissur	56	44	12
9	Palakkad	16	12	4
10	Malappuram	34	32	2
11	Kozhikode	53	49	4
12	Wayanad	48	48	0
13	Kannur	42	38	4
14	Kasaragode	28	25	3
	Total	1023	946	77

Appendix 12.18

District wise Patients treated and death reported - Dengue Fever and Leptospirosis 2008

(Nos.)

		Dengue	Fever	Leptos	pirosis
SI.			Death		Death
No.	District	Treated	reported	Treated	reported
1	2	3	4	5	6
1	Thiruvananthapuram	258	2	258	3
2	Kollam	10	0	34	4
3	Pathanamthitta	4	0	9	3
4	Alappuzha	8	0	255	18
5	Kottayam	14	0	37	7
6	Idukki	3	1	46	4
7	Ernakulam	23	0	107	9
8	Thrissur	7	0	56	12
9	Palakkad	6	0	16	4
10	Malappuram	5	0	34	2
11	Kozhikode	22	0	53	4
12	Wayanad	3	0	48	0
13	Kannur	14	0	42	4
14	Kasaragode	6	0	28	3
	State	383	3	1023	77

Source: Directorate of Health Services

Appendix 12.19
District wise Patients treated for Chikungunia and Viral
Fever 2008

(Nos.)

			(Nos.)
SI. No.	District	Chickungunia	Viral Fever
1	2	3	4
1	Thiruvananthapuram	3	101413
2	Kollam	1	60157
3	Pathanamthitta	0	71064
4	Alappuzha	2	92937
5	Kottayam	1	87415
6	Idukki	0	104167
7	Ernakulam	4	172107
8	Thrissur	36	209598
9	Palakkad	107	160596
10	Malappuram	421	198035
11	Kozhikode	527	190244
12	Wayanad	35	102214
13	Kannur	90	115653
14	Kasaragode	23413	164714
	State	24640	1830314

Appendix 12.2

District -wise details of IP,OP, major/minor operations conducted in hospitals/dispensaries under DHS (2006-07 and 2007-08)

		2007						8	
SI.		Operations conducted						Operations conducted	
No.	District	IP	OP	Major	Minor	IP	OP	Major	Minor
1	2	3	4	5	6	7	8	9	10
1	Thiruvananthapuram	223645	6494996	31215	15442	138112	5577066	18559	28537
2	Kollam	131741	2254089	8516	19095	140428	2951799	8304	7728
3	Pathanamthitta	83564	2257686	8552	6826	65707	2755054	5147	5764
4	Alappuzha	89622	4507604	18880	5227	118907	4768420	6913	5736
5	Kottayam	132271	3351341	6424	2059	122912	4963037	4113	14299
6	ldukki	34902	1678475	4898	1905	29116	1246171	202	108
7	Ernakulam	100024	3611459	10532	6617	157701	6093340	9434	9485
8	Thrissur	143752	4228592	35096	4857	129576	4509470	41432	7361
9	Palakkad	250894	3143851	8950	4440	170661	3467186	3768	9198
10	Malappuram	143963	3377687	13792	5597	177070	5851921	7415	5209
11	Kozhikode	108376	3792981	25684	3678	92294	4188800	3577	17140
12	Wayanad	67988	961063	2325	2479	69329	980238	2525	1783
13	Kannur	117527	2874341	7462	6445	86366	2738505	7153	8748
14	Kasargode	29877	1328903	4524	2616	33234	1323144	2268	4386
	TOTAL:	1658146	43863068	186850	87283	1531413	51414151	120810	125482

Source: Directorate of Health Services

Appendix 12.3
DETAILS OF BLOOD UNITS COLLECTED IN BLOOD BANKS KERALA

SI.	Name of Category Blood units collected (No.)				
No	Name of Category =	2005	2006	2007	2008(12/08)
1	2	3	4	5	6
Α	GOVERNMENT SECTOR				
1	Medical College Hospitals	77707	66997	73880	54057
2	General Hospitals	7088	6380	6770	4815
3	District Hospitals	13513	12330	9765	8716
4	Women and Children				
	Hospitals	1176	1400	2826	2517
5	Taluk Head Quarters	0000	0005	47007	4.5707
_	Hospitals	6063	6895	17687	15767
6	Other Hospitals	23602	16262	N.A	N.A.
	SUB TOTAL:	129149	110264	110928	85872
В	AUTONOMOUS				
	INSTITUTIONS				
1	Regional Cancer Centre	9450	11000	15446	14465
2	Sree Chitra thirunal Institute				
	of Science and Technology	6176	5100	6012	4868
	SUB TOTAL :	15626	16100	21458	19333
С	PRIVATE SECTOR	160738	158259	141079	107347
D	Charity and others			54291	34844
	TOTAL : (A+B+C)	305513	284623	327756	247396

Source: Kerala State Aids Control Society

Appendix 12.20
Achievement of Family Welfare Programme (2007-08) District -wise

SI.No.	District	Vascectomy	PPS	Minilap	Lapro scopic	Total (3+4+5)	Cu -T	Nirodh supplied	Oral pills	Induced Abortion
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	54	13579	386	4068	18087	4851	1397175	12284	2442
2	Kollam	26	6745	275	369	7415	4421	940030	17412	935
3	Pathanamthitta	29	2913	541	213	3696	2617	548161	5558	1343
4	Alappuzha	32	5007	458	501	5998	2384	548075	5781	1656
5	Kottayam	370	6300	182	971	7823	6088	503423	22359	1357
6	ldukki	353	5765	356	418	6892	4570	212273	7036	773
7	Ernakulam	94	15663	272	2265	18294	6539	875173	24068	864
8	Thrissur	195	7506	540	2657	10898	5827	144359	13651	877
9	Palakkad	26	8686	487	1934	11133	5663	674993	15501	999
10	Malappuram	9	7978	256	195	8438	5351	985962	23263	119
11	Kozhikode	128	8644	689	734	10195	5053	465100	11090	423
12	Wayanad	33	3016	236	407	3692	2009	611902	7094	241
13	Kannur	192	7782	455	361	8790	5399	481668	11357	1551
14	Kasargode	56	1969	62	687	2774	2420	40912	4577	619
	TOTAL:	1597	101553	5195	15780	124125	63192	8429206	181031	14199

Source: Directorate of Health Services

Appendix 12.21
District wise Couple protection rate 2008

	2008	
SI.No.	District	Couple protection rate
1	2	3
1	Thiruvananthapuram	55.86
2	Kollam	43.87
3	Pathanamthitta	39.88
4	Alappuzha	34.55
5	Kottayam	59.56
6	Idukki	80.83
7	Ernakulam	66.42
8	Thrissur	43.45
9	Palakkad	52.54
10	Malappuram	30.82
11	Kozhikode	38.13
12	Wayanad	61.23
13	Kannur	43.29
14	Kasaragode	35.28
	State Average	47.22%

Appendix 12.22

District wise medical institutions and beds - Government sector (2008)

(Nos.)

		Allopa	thy	Ayur	/eda	Homoe	opathy	То	tal	Beds per
						Institut		Institut		lakh of
SI.No.	District	Institutions	Beds	nstitutions	Beds	ions	Beds	ions	Beds	populatio
1	2	3	4	5	6	7	8	9	10	11
1	Thiruvananthapuram	116	4804	81	923	56	285	253	6012	292
2	Kollam	89	2289	62	190	40	75	191	2554	95
3	Pathanamthitta	64	1861	45	150	26	25	135	2036	157
4	Alappuzha	87	3293	66	180	44	75	197	3548	217
5	Kottayam	82	2524	52	160	47	175	181	2859	212
6	Idukki	64	1235	37	160	37	50	138	1445	128
7	Ernakulam	115	4550	75	485	54	85	244	5120	165
8	Thrissur	122	3527	96	446	40	25	258	3998	168
9	Palakkad	112	2474	81	160	40	25	233	2659	101
10	Malappuram	123	2520	80	370	44	50	247	2940	81
11	Kozhikode	94	2790	60	210	49	175	203	3175	193
12	Wayanad	41	913	26	170	20	25	87	1108	140
13	Kannur	105	2768	69	316	40	25	214	3109	129
14	Kasaragode	60	1094	41	100	24	75	125	1269	106
	TOTAL	1274	36642	871	4020	561	1170	2706	41832	159

NB.(1)Including medical college hospitals

(2)Population based on 2001 Cencus

Appendix 12.23
Registered Medical Practitioners (Numbers cum)

01.11	•	Class of		222	
SI.No.		Registration	2006	2007	2008
1	2	3	4	5	6
1	Modern Medicine	Α	916	933	1591
2	Homoeopathy	Α	182	217	338
3	Ayurveda	Α	346	345	381
4	Siddha	Α	0	0	0
5	Unani	Α	5	0	0

Source: Travancore-Cochin Medical Council

Appendix 12.24
Registered para medical practitioners

SI.No	Category	2006	2007	2008
1	2	3	4	5
1	Nurse	0	12539	12609
2	Midwife	0 4736(inside)	0 1450(inside)	0
3	Nurses and Midwives	2713(outside)	4000(outside)	0
4	AuxillaryNurse	214	230	213
5	Health Visitors	0	0	0

Source: Travancore-Cochin Medical Council

Appendix 12.4

Annual intake in different Nursing courses - 2008

(Nos.)

		(Nos.
SI.No.	Name of Institutions	
	Integrated General Nurse-cum-Midwives	
	(3 year course)	Annual intake
1	2	3
	Thiruvananthapuram	28
_	Kollam	25
	Pathanamthitta	20
	Alappuzha	20
	Kottayam	23
-	ldukki	20
7	Ernakulam	20
8	Thrissur	30
9	Palakkad	25
10	Malappuram	26
11	Kozhikode	28
12	Wayanad	26
13	Kannur	20
14	Kasaragode	23
	SC/ST - Nursing School Kollam	20
	Sub Total	354
	Junior Public Health Nurses	
	(18 months)	
1	Thiruvananthapuram	45
	Kottayam	45
	Palakkad	45
4	Kasaragode	45
•	Sub Total	180
	Government Nursing Colleges-B.Sc.	
П	Nursing	
	Thiruvananthapuram	60
	Alappuzha	60
	Kottayam	60
	Thrissur	60
5	Kozhikode	60
	Sub Total Government Nursing Colleges-M.Sc.	300
III	Nursing	40
1		16
2	Kozhikode	8
	Sub Total	24
	Grand Total	858

Appendix 12.5

District-wise details of Medical and Paramedical Personnel under DHS - 2008

SI.No.	District	Medical Officers	Dentists	Senior Nurses	Junior Nurses	Lady Health Inspectors	Pharm acists	JPHN (ANMS)	Junior Health Inspectors	Health Inspectors	Population for one doctor
1	2	3	4	5	6	7	8	9	10	11	12
1	Thiruvananthapuram	557	8	315	1122	75	194	517	296	75	5807
2	Kollam	254	6	87	366	79	103	427	284	73	10174
3	Pathanamthitta	196	5	47	288	44	74	266	180	42	6284
4	Alappuzha	277	8	158	637	71	133	381	215	53	7601
5	Kottayam	269	5	175	667	61	113	339	223	53	7260
6	Idukki	152	3	24	172	59	65	315	223	56	7425
7	Ernakulam	337	9	178	685	76	148	427	276	64	9194
8	Thrissur	345	7	162	659	99	160	499	328	79	8624
9	Palakkad	291	5	73	413	80	127	515	294	71	8993
10	Malappuram	320	7	74	421	97	100	589	334	83	11343
11	Kozhikode	122	5	222	163	67	156	419	126	66	10661
12	Wayanad	270	4	33	913	34	46	205	272	30	6448
13	Kannur	312	4	120	475	83	132	423	290	74	7732
14	Kasaragode	160	4	31	182	41	61	249	168	38	7521
	TOTAL:	3862	80	1699	7163	966	1612	5571	3509	857	8244

Source: Directorate of Health Services

NB: Population Based on 2001 census

Appendix 12.6

Medical and Para-medical courses conducted in Govt. Medical Colleges with annual intake of Students

Name of Courses		of seats in N			
	Thiruvananthapuram	Kozhikode	•	Alappuzha	Thrissur
1	2	3	4	5	6
Degree Courses					
1. M.B.B.S.	200	200	150	150	150
2. B.D.S	40	40	40		
3. B.Sc. Nursing	60	60	60	60	60
4. B.Pharm	66	20			
5.B.Sc. MLT	24				
Sub - Total	390	320	250	210	210
Post Graduate Courses					
1. M.Sc. Nursing	28	30	22		
2. M.D.S.	23	16			
3. M.D.Anaesthesia	8	5	3	1	
4. M.D.Biochemistry	2	2			
5. M.D.Forensic medicine	2	2			
6. M.D.Dermatology and	_	_			
Venerology	3	4	3	2	
7. M.D.General Medicine	13	12	8	6	4
8. M.D.Microbiology	2	2			
9. M.D.Obstetrics and					
Gynaecology	8	8	4	1	3
10. M.D.Pathology	6	2	3	1	
11. M.D.Pharmacology	4	2			
12. M.D.Physiology	2	3	2		
13.Physical Medicine &					
Rehabilitation	2	1			
14. M.D.Paediatric	6	5	3	3	2
15. M.D.Psychiatry	1	2	2		1
16. M.D.Radio Diagnosis	2	2			2
17.M.D.Radiotherapy	2		2		
18. M.D. Community Medicine	3	2	2		
19.M.D.T.B. And Respiratory					
Diseases	3	3	2		
20.M.D.Transfusion Medcine	2	0			
21. M.S. Anatomy	2	2	2		2
22. M.S.Orthinolaryngology	2	2	2		2
23. M.S.General Surgery	20	12	8	2	4
24. M.S Orthopaedics	4	4	3		3
25. M.S.Ophthalmology	6	4	2		2
26. M.O.Physical Medicine	2	1			
Sub - Total	158	128	73	16	25
Super Speciality					
course					
1. Mch.Paediatric Surgery	2	2	0		
2. Mch.Plastic Surgery	2	2	1		
3. Mch. Genito Urinary					
surgery	2	2	1		
4. Mch. Thorasic Surgery	2	2			

Name of Courses	No	of seats in N	Medical Coll	eges	
Ivaille of Courses	Thiruvananthapuram	Kozhikode	Kottayam	Alappuzha	Thrissur
1	2	3	4	5	6
5. Mch. Neuro Surgery	2	1	2		
6. D.M.Gastro Enterology	1				
7. D.M.Neurology	1	2	1		
8. D.M.Cardiology	2	2	2		
Mch.Gastro Enterology	2	2			
10. D.M.Nephrology	1	2	1		
Sub - Total	17	17	8	0	0
Diploma Courses					
Diploma in Anaesthesia	8	6	6	2	
Diploma in child Health	6	12	6	2	
3. Diploma in Clinical Pathology	3	6			
4. Diploma in Dermatology and	3	3			
Venerology		2			
5. Diploma in Larynology and					
Otology	8	6	1		
6. D.M.R.D	2	2			
7. D.M.R.T.	2	2			
Diploma in Obstetrics and					
Gynaecology	12	12	2	2	
9. Diploma in Ophthalmology	3	6	4		
10. Diploma in Orthopaedic	0	0	0		
Surgery	8	6	6		
11. Diploma in Physical Medicine andRehabilitation	2	4			
12. Diploma in Psychiatric	2	7			
Medicine	5				
13.Diploma in Public Health	12				
14. D.T.C.D	3	3			
Sub - Total	74	67	25	6	0
Diploma / Certificate					
Courses.					
MLT Certificate(2 years)	60	50	15	15	15
Diploma in Radiological					
Technology (2 Years)	10	30	15	15	10
3. Ophthalmic Assistant			. –	_	-
Certificate(2 Years)	10	20	15	5	5
4. D.Pharm(2 years)	60	50	30	40	
5. Dental Mechanic Certificate	F	10			
course(2 years) 6. Dental Hygienist Certificate	5	10			
Course	10				
Sub - Total	155	160	75	75	30
TOTAL:	794	692	431	307	265
IOIAL.	1 34	UJZ	401	3U <i>I</i>	200

Source: Directorate of Medical Education

Appendix 12.7

Details of Personnel (Clinical/Non-clinical) in Medical Colleges -2000-2007

	Category -			No.	of Clinic	al/Non Cl	inical pers	sonnel		
SI.No.		2000	2001	2002	2003	2004	2005	2006	2007	2008
1	2	3	4	5	6	7	8	9	10	11
			Medic	al Educa	tion					
1	Director and Professor									
2	Professor	202	207	207	189	189	189	219	219	164
3	Associate Professor	242	236	236	236	236	236	266	266	185
4	Assistant Professor	449	490	490	431	431	431	517	517	389
5	Tutor/Lecturer	711	1877	1877		613	613	854	854	624
	Sub Total	1604	2810	2810	856	1469	1469	1856	1856	1362
			Nursir	ng Educa	tion					
6	Director									
7	Professor	7	7	7	8	8	8	11	11	11
8	Associate Professor	18	17	17	16	16	16	21	21	20
9	Assistant Professor	27	25	25	23	23	23	29	29	29
10	Tutor	40	29	29	32	32	32	52	52	65
	Sub Total	92	78	78	79	79	79	113	113	125
			M.L.	T. Cours	e					
11	Director									
12	Assistant Professor	3						3	3	3
13	Tutor	5	3	5	9			5	5	5
14	Tutor Technician	14				9	9			15
	Sub Total	22	3	5	9	9	9	8	8	23
				Dental						
15	Principal	2	3	3	3	3	3			
16	Professor	16	16	16	17	17	17	30	30	27
17	Associate Professor	12	4	4	8	8	8	10	10	9
18	Assistant Professor	25	24	24	20	20	20	36	36	38
19	Tutor/Lecturer	44	43	43	45	45	45	66	66	66
	Sub Total	99	90	90	93	93	93	142	142	140
				harmacy		_	_			
20	Director	1	5	5	5	5	5	•	•	_
21	Professor	3	4	4	4	4	4	6	6	7
22	Associate Professor	7	5	5	4	4	4	9	9	9
23	Assistant Professor	13	12	12	12	12	12	14	14	14
24	Lecturer	30	27 52	27 52	28	28	28	35	35	36
	Sub Total	54	53	53	53	53	53	64	64	66
	TOTAL:	1871	3034	3036	1090	1703	1703	2183	2183	1716

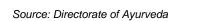
Source: Directorate of Medical Education

Appendix 12.8

District-wise distribution of Institutions, Beds and Patients treated under Ayurvedic system of Medicine in Kerala (2007-08)

(Nos.)

													2008(till	/
SI.	District	Hosp	oitals	Ве	eds	Dispen	saries	Instit	utions	Hos	spitals	Dispensary	September)	_ Doctors-
No.		2007	2008	2007	2008	2007	2008	2007	2008	Inpatients	Outpatients	Outpatients	IP+OP	2008(9/08)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Thiruvananthapuram	14	14	285	285	64	64	78	78	5229	533631	1776740	4932	95
2	Kollam	9	9	190	190	53	53	62	62	4061	568770	1485187	3018	70
3	Pathanamthitta	5	5	150	150	40	40	45	45	2306	267584	884512	2027	54
4	Alappuzha	10	10	180	180	56	56	66	66	2975	499325	1450005	2205	76
5	Kottayam	9	9	160	160	43	43	52	52	2858	365948	1252736	2916	62
6	Idukki	3	3	160	160	34	34	37	37	3288	154400	648227	1731	46
7	Ernakulam	13	13	280	280	61	61	74	74	4215	546926	1644489	3112	90
8	Thrissur	16	16	293	293	79	79	95	95	5441	645724	1652562	3518	112
9	Palakkad	6	6	150	150	75	75	81	81	3258	202321	1354012	1561	95
10	Malappuram	11	11	220	220	68	68	79	79	3264	346195	1282701	2186	84
11	Kozhikode	7	7	210	210	53	53	60	60	1864	246672	1525020	1469	79
12	Wayanad	3	3	170	170	23	23	26	26	3837	247789	1103165	3181	37
13	Kannur	6	6	216	216	62	62	68	68	6481	147843	461557	2967	76
14	Kasaragode	5	5	100	100	36	36	41	41	1998	159011	639369	992	47
	TOTAL:	117	117	2764	2764	747	747	864	864	51075	4932139	17160282	35815	1023



Appendix 12.9

Annual intake of students and courses in Ayurveda Colleges

		Annual inta	ke of students
SI.No.	Name of College	BAMS	P.G.Degree
1	2	3	4
	Government		
	Ayurveda Medical College,		
1	Thiruvananthapuram	70	57
2	Ayurveda Medical College, Trippunnithura	50	21
3	Ayurveda Medical College, Kannur	40	10
	Government aided		
4	Vaidyaratnam Ayurveda college, Ollur	40	
	Vaidyaratnam P.S.Varrier Ayurveda		
5	College, Kottakkal	50	10
	Total	250	98
	Self-financing		
6	Pankajakasthuri Ayurveda Medical college, Kattakkada, Thiruvananthapuram	50	
7	Parassinikadavu Ayurveda Medical		
,	College, Pappinisseri	50	
8	Vishnu Ayurveda College, Shornur Santhigiri Ayurveda Medical College,	50	
9	Palakkad	50	
10	Nangelil Ayurveda Medical College,		
	Kothamangalam	40	
11	Santhigiri Siddha Medical College, Pothencode, Thiruvananthapuram	50	
40	Amritha Ayurveda Medical College,	50	
12	Kollam	60	
13	Sreenarayana Institute of Ayurveda studies and Research, Puthoor, Kollam	50	
14	Mannam Sugar Mill Co-operative		
14	Ayurveda College, Pandalam	50	
	Total	450	
	Grand Total	700	82

Source: Directorate of Ayurveda Medical Education

Appendix 13.1
Achievements under Major Housing Schemes (Nos) by Different Housing Agencies in Kerala

SI No	Name of Schemes	2004-05	2005-06	2006-07	2007-08	2008-09(up to 30-09-08)
1	Kerala State SC/ST Dev. Corporation	24	33	14		
2	SC Dev. Dept.	5471	11978		8077	702
3	Fisheries dept.	1500	4000	1500	1159	1500(target)
4	KS Co-op. Agril & RDB	16389	17495	17087	14225	7256
5	Sainik Welfare	9	13	41	10	7
6	LIC Housing Finance	4396	4309	3346	1376	678
7	GIC Housing Finance	398	93	238	272	175
8	Commissionerate of Rural Dev.	43291	12990	30817	37094	19393
9	Canfin Homes	149	80	157		
10	HOUSE FED	6996	5119	5839	6400	2328
11	KSHB	2414	93	145	1547	1008
12	Nationalised Scheduled Bank	74327	25095	398686		553847
13	HUDCO	370	28681		249	46
14	Nirmithi Kendra (KESNIC)	91	134	201	1525	3999(target)
15	ST Dev. Dept.	104	508	1455	615	356
16	Kudumbashree				9199	2621
	Total	155929	110621	459526	81748	588417

Source: Housing Commissioner

Appendix13. 2
Houses Assisted and Amount Disbursed by Kerala State Co-operative Housing Federation

		Am	ount distril	buted (Rs	Lakh)	Houses Assisted (Numbers)			
SI No	Category	2004-05	2005-06	2006-07 (Revised)	2007-08 (up to 30-09-08)	2004-05	2005-06	2006-07 (Revised)	2007-08 (up to 30-09-08)
1	EWS	782	685.16	304.97	311.17	1747	1508	665	662
2	LIG	1994.46	2710.78	1580.15	2051.92	2286	3094	1799	2323
3	MIG	1579.39	3428.07	2860.7	6470.56	744	1642	1389	2952
4	Others	1817.21	3154.93	2160.98	3318.38	1915	3054	1986	2791
	Total	6173.06	9978.94	6906.8	12152.03	6692	9298	5839	8728

Source: Kerala State Co-operative Housing Federation

Appendix 13. 3
Interest Rates of Different Financial Institutions on Housing Loan as on 30/11/2008

SI No	Name of Institutions	Floating rate	Fixed rate
1	2	3	4
1	STATE BANK OF INDIA	0.50/	
	upto 30L upto 5 years	9.5%	
	5 to 15 years	10.00%	
	15 to 25 years	10.25%	
	above 30L upto 5 years	11.25%	
	5 to 15 years	11.50%	
	15 to 25 years	11.75%	
2	STATE BANK OF TRAVANCORE		
	upto 30 L upto 5 years	10.25%	12.50%
	5 to 15 years	10.50%	12.50%
	15 to 20 years	10.75%	
	above 30 L upto 5 years	11.00%	
	5 to 15 years	11.25%	
	15 to 20 years	11.50%	
3	SYNDICATE BANK		
	20L Upto 5 years	10.00%	
	5 to 10 years	10.50%	
	10 to 20 years	10.75%	
	20 to 25 years	11.00%	
	20L to 30 L upto 5 years	10.75%	
	5 to 10 years	11.25%	
	10 to 20 years	11.50%	
	20 to 25 years	11.75%	
	above 30 L upto 5 years	11.25%	
	5 to 10 years	11.75%	
	10 to 20 years	12.00%	
	20 to 25 years	12.25%	
4	CORPORATION BANK	12.2070	
	upto 30L upto 5 years	9.75%	12.00%
	5 to 15 years	10.00%	12.00%
	15 to 25 years	10.50%	12.00%
	above 30 L upto 5 years	10.50%	12.5%
	5 to 15 years	10.75% 11.00%	12.50%
	15 to 25 years	11.00%	12.50%
5	HDFC	44.050/	4.4.000/
	upto 30L	11.25%	14.00%
6	above 30 L	11.75%	14%
6	HUDCO		
	A EWS housing by all borrowers		
	(i) Housing projects for widows,		
	SC/STs, legally handicapped,		
	single woman above 35 years		
	of age and natural calamities		
	affected areas	12.25%	13.25%
	(ii) Others and action plan projects	12.75%	13.75%
	B LIG housing projects by all		
	borrowers	13.50%	14.50%
	C Direct borrowing by Govt.Police		
	Organisation and Govt/Public		
	borrowers	13.75%	14.75%
	D Other borrowers		
	(i) Not rated	15.00%	16.00%

SI No	Name of Institutions	Floating rate	Fixed rate
1	2	3	4
	(ii) 'AAA' rated proposals/		
	borrowers by CRISIL,ICRA,		
	CARE & FITCH	14.75%	15.75%
	(ii) 'AA' but below rated proposals/		
	borrowers by CRISIL,ICRA etc.	14.75%	15.75%
	HUDCO Niwas(Upto 1 Cr. 5 yrs.)	11.50%	13.00%
	(Above 5 yrs.)	11.75%	13.00%
7	LIC HOUSING FINANCE LTD.		
	flexi 2 (2 years fixed)	12.00%	13.00%
	flexi 5 (5yrs. Fixed)		14%
8	GIC HOUSING FINANCE		
	Upto 5 years	11.50%	
	upto 10 yrs years	11.75%	
	upto 15 yrs	12.00%	
	upto 20 yrs	12.25%	
9	CANFIN HOMES	12.2570	
<u> </u>	CANFIN HOWES	11.50%	14%
10	DUANAI EKCUMI DANK	11.50%	14%
10	DHANALEKSHMI BANK	44.50/	
	upto 20 L Upto 5 years	11.5%	
	5 to 10 years	12.0%	
	Above 10 years	12.50%	
	above 20L	13.00%	
11	BANK OF INDIA		
	30 L upto 5 years	8.75%	
	5 to 10 years	9.00%	
	above10 years	9.25%	
	above 30 L upto 5 years	9.50%	
	5 to 10 years	9.75%	
12	KERALA STATE CO-OP:BANK		
	upto 1,00,000		9%
	1 to 3 L		10.00%
	3L to 5 L		11%
	5L TO 10 L		13%
	10 L 15 L		14%
	Above 15 L		15%
13	KERALA STATE CO-OP:AGRI:		
	& RURAL DEVELOPMENT BANK		I.
	NABARD		
	Constuction/purchase of new		
	houses/flats		
	Upto Rs. 50000/-		12.00%
	Rs. 50000/-		13.25%
	Repairs of houses		13.2370
	·		12.000/
	Upto Rs. 50000/-		12.00%
1.1	Above Rs. 50000/- to 3,00,000		13.25%
14	KSHB		44.0/ 44.50
	LIG		11 %-14.5%
	MIG		13% - 15.5%
	HIG		13.5%-16.5%
15	Bank of Baroda		
	30 L Upto 5 years	9.25%	10.25%
	5 to 15 years	9.50%	10.50%
	15 to 25 years	9.75%	10.75%
	above 30 L upto 5 years	10.00%	11.00%
	5 to 15 years	10.25%	11.25%
_	15 to 25 years	10.50%	11.50%
16	Indian Overseas Bank		
	30L upto 5 years	10.25%	10.75%

SI No	Name of Institutions	Floating rate	Fixed rate
1	2	3	44.25%
	5 to 10 years	10.50%	11.25%
	10 to 20 years	10.75%	40.050/
	above 30L upto 5 years	11.75%	13.25%
	5 to 10 years	12.25%	13.75%
17	10 to 20 years Federal Bank	12.25%	
17		11.50%	
	Upto 30 L Salaried class Non Salaried	11.75%	
	above 30 L Salaried class	12.00%	
	Non Salaried	12.25%	
18	South Indian Bank	12.2370	
-10	30L upto 5 years	12.50%	
	above 5 years	13%	
	above 30L upto 5 years	13.50%	
	above 5 years	14%	
19	ICICI Bank	1170	
	upto 20 years	11.5%	
20	Indus Ind Bank		
	upto 20 yrs	12.50%	
21	Indian Bank		
	upto 5 years	9.5%	
	5 to 10 years	9.75%	
	10 to 15 years	10.50%	
22	Bank of Maharashtra		
	30L upto 5 years	9.75%	10.50%
	5 to 10 years	10.00%	11.00%
	above 10 years	10.50%	
	above 30L upto 5 years	10.00%	10.75%
	5 to 10 years	10.50%	11.50%
	above 10 years	10.75%	
23	Catholic Syrian Bank		
	upto 5 years	11.25%	
	5 to 15 years	11.75%	
	above 15 years	12.25%	
24	TN Merchantile Bank		
	upto 16 months	12.25%	
	16 months to 15 yrs	12.75%	
0.5	above 15 yrs	13.25%	
25	Central Bank of India	0.000/	40.000/
	30L upto 5 years	9.00%	10.00%
	5 to 10 years 10 to 25 years	9.50%	
	above 30L upto 5 years	10.00% 10.25%	11.25%
	5 to 10 years	10.25%	11.23%
	aove 10 years	10.75%	
26	Canara Bank	11.4J/0	
20	30Lupto 5 years	9.50%	
	5 to 10 years	9.75%	
	10 to 25 years	10.00%	
	above 30L upto 5 years	10.25%	
	5 to 10 years	10.50%	
	10 to 25 years	10.75%	
27y	Dena Bank	10.1070	
<i>y</i>	15L upto 5 years	9.50%	
	upto 10 years	10.00%	
	above 10 years	10.25%	
	15 Lto 20 L upto 5 years	10.00%	
	5 to 10 years	10.50%	

SI No	Name of Institutions	Floating rate	Fixed rate
1	2	3	4
	above 10 years	10.50%	
28y	Andhra Bank		
	upto 5 years upto 20 L	10.50%	
	5 to 10 years	10.75%	
	10 to 20 years	11.00%	
29	UCO Bank		
	upto 10 years below 30 L	9.75%	
	10 to 20 years	10.25%	
	upto 10 years above 30 L	10.75%	
	10 to 20 years	11.50%	
30	Vijaya Bank		
	upto 5 years upto 30 L	9.75%	11.25%
	5 to 10 years	10.00%	
	10 to 15 years	10.25%	
	above 15 years	10.50%	
31	Union Bank		
	30 L upto 5 years	10.00%	11.00%
	5 to 10 years	10.25%	
	10 to 15 years	10.50%	
	15 to 20 yrs	10.75%	
	above 30 L upto 5 years	11.00%	11.75%
	5 to 10 years	11.5%	
	10 to 15 years	11.75%	
	above 15 yrs	11.75%	

Appendix 13. 4
Fund Flow to Kerala State Co-operative Housing Federation

(Rs Lakh)

Year	Institutions	Borro	owing
Tear	mattutions	Funds Flow	Amount Disbursed
	NHB	4500	6173.06
2004-05	Canara Bank	5000	
	Canara Bank	4000	9978.94
2005-06	Federal Bank	2500	2500
2006-07	LIC	4000	4000
2007-08			
(up to 30-09-08)	LIC	4000	4000

Source: Kerala State Co-operative Housing Federation

Appendix 14.1
Poverty Projection for 2007-08

		Rura	al	Urba	ın	Comb	ined
SI.No	State/Union Territories	Percentage of poor	No. of Poor (lakh)	Percentage of poor	No. of Poor (lakh)	Percentage of poor	No. of Poor (lakh)
1	2	3	4	5	6	7	8
1	Andhra Pradesh	4.58	26.97		41.75	8.49	68.72
2	Arunachal Pradesh	37.89	3.54		0.14	29.33	3.68
3	Assam	37.89	95.36		1.78	33.33	97.14
4	Bihar	44.81	482.16		54.74	43.18	536.90
5	Goa	NA	NA		NA	NA	NA
6	Gujarat	2.00	6.88		4.38	2.00	11.26
7	Haryana	2.00	3.30		1.51	2.00	4.81
8	Himachal Pradesh	2.00	1.18		0.14	2.00	1.32
9	Jemmu Kashmir	NA	NA		NA	NA	NA
10	Karnataka	7.77	28.66		16.34	7.85	45.00
11	Kerala	1.63	4.03	9.34	8.01	3.61	12.04
12	Madhya Pradesh	28.73	192.07		74.46	29.52	266.53
13	Maharastra	16.96	101.61		72.68	16.18	174.29
14	Manipur	37.89	8.10	4.48	0.27	30.52	8.37
15	Meghalaya	37.89	7.99	4.48	0.24	31.14	8.23
16	Mizoram	37.89	1.88	4.48	0.23	20.76	2.11
17	Nagaland	37.89	8.01	4.48	0.21	31.86	8.22
18	Orissa	41.72	139.12	37.46	23.57	41.04	161.69
19	Punjab	2.00	3.40	2.00	1.95	2.00	5.35
20	Rajastan	11.09	54.41	15.42	23.44	2.11	77.85
21	Sikkim	37.89	2.08	4.48	0.03	33.78	2.11
22	Tamil Nadu	3.68	12.46	9.64	31.61	6.61	44.07
23	Tripura	37.89	10.70	4.48	0.28	31.88	10.98
24	Utter Pradesh	24.25	373.16	26.17	111.25	24.67	484.41
25	West Bengal	21.98	137.53	8.98	22.21	18.30	159.74
26	A&N Island	3.68	0.10	9.64	0.14	5.82	0.24
27	Chandigarh	2.00	0.02	2.00	0.19	2.00	0.21
28	Dadra & Nagar Haveli	NA	NA	. NA	NA	NA	NA
29	Daman& Diu	NA	NA	. NA	NA	NA	NA
30	Delhi	NA	NA	. NA	NA	NA	NA
31	Lekshadeweep	1.63	0.01		0.02	4.59	0.03
32	Pondicherry	3.68	0.13		0.70	7.72	0.83
	All India	21.09	1704.86		492.27	19.33	2197.13

Source: India's Five Year Plan (Complete Document) First Five Year Plan 1951 - 56 to Tenth Five Year Plan 2002-07 - Mid Term Appraisal June 28, 2005. Planning Commission, Government of India.

Appendix 14.11
District-wise distributions of surplus land as on 31.10.2008

Name of District	Nι	ımber of	beneficiarie	<u> </u>	Land	Distributed (Area in accre	s)
	SC	ST	OTHERS	TOTAL	SC	ST	OTHERS	TOTAL
Thiruvanathapuram	2562	0	2146	4708	116.01	0.00	116.10	232.11
Kollam	3092	59	2982	6133	272.27	5.27	270.96	548.50
Pathanamthitta	60	8	450	518	6.94	0.54	51.84	59.32
Alappuzha	3452	77	4456	7985	780.26	1.66	1096.94	1878.86
Kottayam	1918	90	2183	4191	394.57	27.28	436.97	858.82
Idukki	90	14	3865	3969	8.28	2.50	1376.82	1387.60
Ernakulam	2408	90	2891	5389	358.21	1.92	279.43	639.56
Thrissur	4889	187	17335	22411	278.80	10.34	1001.59	1290.73
Palakkad	11536	1374	13210	26120	2380.09	602.35	2463.50	5445.94
Malappuram	10358	126	9899	20383	1325.62	27.90	1437.52	2791.04
Kozhikkode	3596	21	5153	8770	355.76	1.56	466.27	823.59
Wayanad	1286	2372	3570	7228	361.35	974.01	695.18	2030.54
Kannur	9146	2150	15361	26657	2009.53	510.66	3482.71	6002.90
Kasaragode	4348	887	7654	12889	1343.17	276.48	2388.11	4007.76
Total	58741	7455	91155	157351	9990.86	2442.47	15563.94	27997.27

Source: Survey and Land Records Department

Appendix 14.12
District wise Urban Thrift & Credit Operation - as on 30-11-2008

SI. No	Name of District	No. of NHG	No. of ADS	No. of CDS	Amount of Thrift (Rs)	Amount of Loan (Rs)	No. of families started Thrift
1	Thiruvananthapuram	2214	120	5	103266215	56233407	59714
2	Kollam	1605	110	3	75397844	80400357	38774
3	Pathanamthitta	410	34	3	14315434	10120514	17420
4	Alappuzha	1080	102	5	96781353	101141696	33269
5	Kottayam	431	46	4	21066098	22000932	12855
6	ldukki	60	5	1	4146460	3015530	2100
7	Ernakulam	1901	154	10	115802038	182183304	54636
8	Thrissur	1078	105	7	47946017	62315435	22758
9	Palakkad	1355	127	4	259935029	83842262	28201
10	Malappuram	926	126	5	38078647	25670651	24817
11	Kozhikkode	1400	73	3	49515814	63103376	28220
12	Wayanad	79	11	1	4216650	4195350	2471
13	Kannur	612	128	6	19154264	18896776	15132
14	Kasaragod	475	67	2	20736638	13420900	9100
	Total	13626	1208	59	870358501	726540490	349467

Source: Kudumbashree, Thiruvananthapuram

Appendix 14.13 List of Micro Enterprises (District wise)

As on 30-11-08

1			AS ON 30-11-08
SI.No	Name of District	DWCUA	USEP
1	Thiruvananthapuram	280	2754
2	Kollam	110	2277
3	Pathanamthitta	45	938
4	Alappuzha	180	2740
5	Kottayam	105	1168
6	ldukki	18	111
7	Ernakulam	520	2802
8	Thrissur	230	1622
9	Palakkad	136	2222
10	Malappuram	98	1110
11	Kozhikkode	234	2270
12	Wayanad	18	175
13	Kannur	105	2040
14	Kasargod	55	785
	Total	2134	23014

Source: Kudumbashree, Thiruvananthapuram

Appendix 14.14
List of Group Micro Enterprises in Urban Area

SI. No.	Name of Project	No. of Units
1	Direct Marketing	150
2	IT unit	80
3	Soap making unit	75
4	Canteen	90
5	Catering Service	85
6	Dairy unit	74
7	Ethnic Delicacies	60
8	IT @ School	53
9	Garments/Readymade	68
10	Hotel	71
11	Tender Coconut selling unit	36
12	Provision Store	40
13	Paper Cover & Paper Bag	55
14	Kerashree (Coconut processing/Oil extraction unit)	34
15	Mat Weaving/Cover making unit	30
16	Super Market	40
17	Curry Powder unit	38
18	Umbrella Manufacturing	38
19	Mobile market (Pick up van)	22
20	Laundry unit	26
21	Solid waste processing unit	65
22	Remedial Education Centre	19
23	Bakery/Sweet stall unit	37
24	Tailoring unit	24
25	Book Binding unit	36
26	Food Products	22
27	Agricultural Nursery	26
28	Sanitation unit	28
29	Clean Kerala Business	95
30	Grinding unit	17
31	KSRTC Canteen	17
32	Fish vending unit	18
33	Palm mat unit	13
34	Consumer Store/Traders	16
35	Pickles making	26
36	Bag manufacturing	22
37	Coir Yarn/Products	10
38	Vanila Nursery	15
39	Cloth Bag unit	20
40	Bamboo unit	9
41	Chappel making	10
42	Coconut Products	10
43	Metal crushing unit	10
44	Neighbours - Support Services to Friends	8
45	Note Book Manufacturing	33
46	Beauty parlour	15
47	Bricks/Hollow bricks	16
48	Flowers & Garland	7
49	Handicrafts	16
50	Toy manufacturing	9
51	Computer Hardware unit	12
52	Hospital Restaurant	15
53	Telephone Repair	5
54	Herbal Nursery	14
55	Hosiery unit	4

SI. No.	Name of Project	No. of Unit
56	Prasoothika	4
57	Rice/Rice powder business	13
58	Chicken Stall	6
59	Cooking mate/Gas light/Decoration (Hiring service)	3
60	Electronic unit	5
61	Fish/Sea shell processing	6
62	Instant Mix manufacturing unit (Palada)	4
63	Paddy Cultivation	4
64	Pappad making unit	15
65	United Services	3
66	Water Meter Repair unit	3
67	Multi Purpose Job Club	4
68	·	6
	Agarbathi/Candle unit	
69	Atta packing	3
70	Chips unit	5
71	Construction work of women	6
72	Courier Service	10
73	Day Care centre	5
74	Documentation/File works unit	4
75	Electronic Choke Assembling unit	2
76	Furniture manufacturing	9
77	Ice Cream Parlour	6
78	Marketing unit	16
79	Ornaments Manufacturing unit	2
80	Painting unit	2
81	Pandhal unit	2
82	Poultry farm	18
83	Printing unit	5
84	Shawl/Pardha Making	2
	•	
85	Tarpolin production/Chackuviri	2
86	Women Hostel	3
87	Fire wood	2
88	Photo Album	2
89	Sound system	2
90	Bio Technology	1
91	Cashew nut processing	1
92	Cement products	1
93	Handloom weaving	1
94	Home Nursing unit	1
95	Net works	1
96	Plastic chair & mat	2
97	Pottery unit	2
98	Soda making	5
99	Solar Cooker	2
100	Vegetable Vending	5
101	Vehicle Service	1
102	Wire Coir Carpet making unit	1
102	Fancy and rental	2
103	Fashion designing	2
	<u> </u>	
105	Goat rearing	25
106	Hyring service	1
107	Jwellery designing	2
109	Mosquito control unit	6
111	Pipe bending	2
113	Waste paper collection	1
114	Women's source group	1

Appendix 14.15
Details of projects under IHSDP

(Rs.in Lakh)

SI.No	Name of Local Body	Total Project	State share	Central share
		cost	released to ULB	released
	2006-07			
1	Attingal	156.42	4.62	62.565
2	South Paravur	264.32	8.285	105.73
3	Changanassery	347.17	17.36	134.405
4	Thodupuzha	390.48	18.34	156.19
5	Kunnamkulam	178.64	8.935	71.46
6	Chittur-Thattamangalam	1230.92	42.325	488.63
7	Shornur	994.78	49.735	244.398
8	Malappuram	1045.58	52.28	418.23
9	Kozhikode	696.62	24.88	136.87
10	Koyialandy	308.1	8.135	123.24
11	Koothuparamba	82.3	3.92	32.92
12	Mattanur	131.1	6.555	52.44
13	Taliparamba	243.43	12.17	97.37
14	Kanhangad	205.72	10.285	82.29
15	Kasaragod	127.54 4.06		51.02
	Sub Total	6403.12	271.885	2257.758
	2007-08			
16	Punalur	892.96	40.44	357.18
17	Alappuzha	1003.85	50.19	377.45
18	Chavakkad	158.89	5.415	63.55
19	Ottapalam	898.59	34.16	337.12
20	Perinthalmanna	579.67	25.74	222.99
21	Kannur	194.91	8.55	73.29
22	Thalassery	189.21	9.115	67.26
23	North Paravur	288.81	8.31	114.46
24	Iringalakuda	109.18	3.675	43.67
25	Ponnani	439.74	16.53	175.895
26	Palakkad	2112.67	62.305	346.93
	Sub Total	6868.48	264.43	2179.795
	2008-09	0000110		
27	Neyyattinkara	797.27		
28	Nedumangad	540.18		
	Sub Total	1337.45	500.045	4407 777
	Total	14609.05	536.315	4437.553

Source: Kudumbashree

Appendix 14.16

Details of projects under BSUP -Thiruvananthapuram Corporation

(Rs.in lakh)

		Pł	nase wise split u	ıb	
SI.No	Project Components	I Phase (2006-07)	II Phase (2006-07)	IIIPhase (2007-08)	Total
1	New Housing	218.71	3422.69	10628.95	14270.35
2	Housing Upgradation	26.75			26.75
3	Community facilities	61.00	50.78	594.37	706.15
4	Roads	19.47	41.69	437.39	498.55
5	Solid waste Management	3.80	1.91	48.51	54.22
6	Storm Water drains	152.70	113.27	330.14	596.11
7	Electrification	1.96	6.50	16.11	24.57
8	Retaining wall	7.80			7.80
9	Sewerage	2.75	9.14	2.31	14.20
10	Water supply	8.30	64.13	416.55	488.98
11	Retaining Wall/land scaping/ others		19.29	112.45	131.74
	Total	503.24	3729.40	12586.78	16819.42

Source:Kudumbashree,Tvpm

Appendix 14.17

Details of projects under BSUP -Kochi Corporation

(Rs.in lakh)

		Pł			
SI.No	Project Components	I Phase (2006-07)	II Phase (2007-08)	III Phase (2007-08)	Total
1	New Housing	2007.74	10150.45	165.68	12323.87
2	Housing Upgradation	99.68		48.27	147.95
3	Community facilities	26.7	54.15	25.6	106.45
4	Roads	32.04	15.83	8.86	56.73
5	Solid waste Management	72.02	60.83	33.8	166.65
6	Land Scaping	1.48	5.58	1.47	8.53
7	Electrification	12.89	27.01	1.06	40.96
8	Community building	325.66			325.66
9	Water supply	83.03	75.87	41.21	200.11
10	Drainage		55.21	77.2	132.41
11	Sanitation			56.84	56.84
	Total	2661.24	10444.93	459.99	13566.16

Source:Kudumbashree,Tvpm

Appendix 14.18

District-wise Number of beneficiaries in Welfare Institutions - 2008

Lota 17 3 454	8 Sanctioned strength
-	18
3 454	
	1075
99	150
9	25
44	100
75	150
144	150
21	50
31	50
39	50
10	25
4	25
12	200
102	250
100	100
7 224	300
31	50
	9 2750
1	102 100 17 224

Source: Social Welfare Department

Appendix 14.19

Major Pension Schemes In Kerala through Revenue Deprtment - District-wise Beneficiaries 2008

SI.No	Name of Scheme	Thiruvananthapuram	Kollam	Alappuzha	Pathanamthitta	Kottayam	ldukki	Ernakulam	Thrissur	Palakkad	Malappuram	Kozhikode	Wayanad	Kannur	Kasargod	State Total
1	Special Pension															
	for persons with Disabilities	23571	18763	6564	14312	9744	4373	16885	17799	16473	21719	18465	3849	13545	7761	193823
2	Widow/Destitute	2007 1	10700	0001	11012	0711	1070	10000	11100	10170	21710	10 100	0010	100 10	7701	100020
	Pension Scheme	45750	39498	9767	16662	14158	4837	29908	28778	29370	36132	26594	7994	22097	14366	325911
3	National Old															
	Age Pension	26963	14336	3897	6905	8560	5841	13088	11549	22162	17110	6738	2817	10804	6101	156871
4	Pension for															
	Unmarried women		4000		0.4.0 -		400			0=10	0-4-		4-0			
_	above 50 years	3024	1382	706	3197	1472	136	3238	6908	3713	2517	5185	159	5516	862	38015
5	Kerla Freedom	1450	764	24	1070	66	100	205	207	244	402	020	26	1150	150	7400
6	Fighters Pension Financial	1453	761	34	1278	66	102	395	287	244	403	839	26	1150	152	7190
Ö	Assistance to															
	Leprosy,															
	Cancer patients	2490	2210	314	603	137	62	419	339	117	337	462	104	92	58	7744

Source:Land Revenue Department

Appendix 14.2 Community based organisation status in Rural Areas as on 31-10-2008

SI.No.	District	No. of GPs	Total NHGs	Families Covered (nos)	Thrift (Rs)	Thrift Loans (Rs)
1	2	3	4	5	6	7
1	Thiruvanathapuram	78	18539	324880	1098390636	2524862227
2	Kollam	71	12345	227839	728973172	1643613236
3	Pathanamthitta	54	6602	136670	136405	305338332
4	Alappuzha	73	13428	265039	856929664	1923728628
5	Kottayam	75	11105	223760	577440910	1108018379
6	ldukki	52	9147	166607	631102282	1573327376
7	Ernakulam	88	14565	214508	43153349	234441942
8	Thrissur	92	15631	232614	944311121	3414013840
9	Palakkad	91	20307	345459	1067500031	2917187913
10	Malappuram	102	14956	339343	925238272	1442600480
11	Kozhikkode	78	14904	295718	1073900000	2862900000
12	Wayanad	25	7404	96593	343548767	1261035987
13	Kannur	81	11154	212611	706129277	2259300745
14	Kasargode	39	6113	128751	403796500	1569025454
	Total	999	176200	3210392	9400550386	25039394539

Source: Kudumbashree, Government of Kerala

Note: Tribal NHGs are separately tracked, these are not reflected in the District wise data.

Appendix 14.3
District wise details of Linkage Banking as on 31-10-2008

SI.		Cumula	tive
No.	Name of District	NHGs linked	Amount (Rs Lakh)
1	Thiruvanathapuram	10969	8277.59
2	Kollam	9318	7115.48
3	Pathanamthitta	2697	3858.58
4	Alappuzha	10204	5916.12
5	Kottayam	4400	3083.66
6	ldukki	533	5466.26
7	Ernakulam	9687	4939.94
8	Thrissur	472	486.64
9	Palakkad	12424	6457.00
10	Malappuram	5099	2081.75
11	Kozhikkode	6124	3442.00
12	Wayanad	6544	4539.41
13	Kannur	1913	1518.78
14	Kasaragode	3224	1735.73
	Total	83608	58918.95

Source: Kudumbashree Government of Kerala

Note: In case of the second and subsequent linkages of the NHGs, only the amount is accounted.

Appendix 14.20

Details of Rates per person on Social Security Pension Schemes in Kerala - 2008

SI. No.	Welfare Institution	Qualifying conditon	Year			Year of Revision a	nd Rate of assistancae			
1	2	3	4	5	6	7	8	9	10	
1	Agricultural Workers Welfare Scheme	1. Pension - Above 60 years. Annual family income Rs.11,000	1980	Rs.40/m	Rs.45/m(1985)	Rs.60/m(1987)	Rs.70/m(1991)	Rs.80/m(199 6)	Rs.100/m (1997)	Rs120/m (2000) Nil (2008)
	Wellate Scheme	Retirement benefi - minimum one year membershipt	1990	Rs5000 to Rs25000						
2	Kerala Widow Pension Scheme	Death of husband/divorsed/not remarried. Income below Rs.300/m	1973	Rs.55/m	Rs.65/m(1991)	Rs.80/m(1995)	Rs.110/-(1996)	Rs. 120/m (2007)	Rs. 200/m (2008)	
3	Special Pension for the Disabled and Mentally Retarded Persons	40% Disability. Medical Certificate. Family Income below 500/m.	1982	Rs.75/m	Rs.100/m(1995)	Rs. 110/m(1996)	Rs. 140/m(2005)	Rs. 160/m (2007)	Rs. 200/m (2008)	
				Below 60myrsRs10 0/m	Below 60 yrs Rs.200/m(1993)	Belowm60 yrs Rs.400/m(1998)	Between 55 to 60 yrs Rs. 600/m(2006)			
4	Pension to Sportsmen	Income Rs.20000 per annum. Inter District/State level paraticipation	1978	60 to 70 yrs Rs.150/m	60 to 70 yrs Rs.300/m	60 to 70 yrs Rs.600/m	Between 60 to 70 yrs Rs. 750/m(2006)			
				70 yrs and above Rs.200/m	70 yrs and above Rs400/m	70 yrs and above Rs800/m	70 yrs and above Rs. 1000/m(2006)			
5	IInd World War Veterens	Participated in the 2nd World War. Non recipient of any other assistance. Annual income Rs.6000.	1997	Rs.200/m	Rs.300/m(2000)	Rs.400/m(2003)	Rs.600/m			
6	Freedom fighters Pension Scheme	Particiapted in the National Movement.	1971	Rs.350/m	Rs.400/m(1990) Rs. 500/m(1991)	Rs. 750/m(1995) Rs. 1000/m(1996)	Rs.1500/m(1997) Rs.2000/m(1998)	Rs.3000/m (2000)	Rs. 3900/m (2006)	5500+ 30%DA (2008)
7	Financial Assistance to Leprosy and Cancer Patients	Certificate from hospitals. Income Rs. 200/m.	1976	Rs.50/m	Rs.200/m(1997)					
		Living Journalist who are unemployed due to illhealth and over age	1976	Rs.300/m	Rs.500/m(1997)	Rs.750/m(2007)				
8	8 Pension to Journalists/ Dependents -	2. Pension to journalist who retired after 10 year service	1993	Rs.1000/m	Rs.1400/m(2001)					
		3. Pension to daily workers. Minimum 10 year service for full pension, 50% pension for 5 year service.	1993	Rs.1000/m (1993)						

Appendix 14.20

Details of Rates per person on Social Security Pension Schemes in Kerala - 2008

C:		ı	•							
SI. No.	Welfare Institution	Qualifying conditon	Year			Year of Revision a	nd Rate of assistancae			
1	2	3	4	5	6	7	8	9	10	
9	Welfare Fund for Cine Artists*	Cine Artists in distress, Annual family income Rs.12000/-	1981	Rs.300/m	Rs.400/m(1997)	Rs.500/m(1998)				
10	Kerala Cashew Workers Welfare Schemes	Cashew Workers above the age of 60. Incapicity to dowork.	1989	Rs.75/m	Rs.100/m(1992)	Rs.125 to 200/m(1996)	Rs.200/m(2008)			
		2. Death benefit to nominees	1991	Rs.250/m	Rs.500/m(1995)	Rs.1000(1998)				
11	Kerala Coir Workers	Pension - Workers above the age of 60 years.	1989	Rs.75/m	Rs100/m(1997)	Rs. 110/m (2007)	Rs.200/m (2008)			
	Welfare Scheme	Family Pension - Death of the member worker	1989	Rs.75/m	Rs. 100/m (2006)					
	Kerala Construction	Pension - Workers having one year service, 60 years of age.	1991	Rs.75/m	Rs.100/m(1995)	Rs.150/m(1996)	Rs.200/m(2000)			
12	Workers Welfare Scheme	Disability pension - Medical Certificate	1993	Rs.150/m						
		3. Family Pension - Death of the Pensioner	1996	Rs.100/m						
13	Kerala Khadi Workers Welfare Scheme	10 years service, 60 years of age	1990	Rs.60/m	Rs.180/m(1991)	Rs.100 to Rs.300(1999)	Rs.300/m (2005)			
14	Kerala Handloom Workers Welfare Scheme	Pension - Above the age of 60 years, atleast 3 years service	1989	Rs.75/m	Rs100/m(1997)	Rs. 110/m(2007)				
	Workers Wellare Scheine	2. Self employed person	1998	Rs.100/m		Rs. 110/m(2007)				
		3. Death Benefit	1990	Rs.1000/m	Rs.5000/m(1999)					
15	Kerala Abkari Workers	Pension - 60 years. Completed 3 years continous service	1993	Rs.115/m	Rs.200/m(1995)					
10	Welfare Scheme	2. Death benefit		Rs.10000						
		Permanent Disability Benefit		Rs.5000						
16	Kerala Toddy Workers	Pension - Not lessthan 10 years membrship	1997	Rs.100/m	Rs. 150/m (2004)					
	Welfare Scheme	Assistance to Disabled workers	1988	Rs.100/m	Rs.125/m(1992)	Rs.150/m(1994)	Rs.300/m (2008)			
17	Kerala Head Load Workers Welfare Scheme	1. Death benefit	1987	Normal death Rs.10000 Accidental death Rs.20000	Rs.15000 and Rs.30000 respectively					
		2. Invalid Pension	1990	Rs.150/m	Rs.200 to Rs.2400(2000)					

Appendix 14.20
Details of Rates per person on Social Security Pension Schemes in Kerala - 2008

SI. No.	Welfare Institution	Qualifying conditon	Year		• • • • • • • • • • • • • • • • • •		nd Rate of assistancae			
1	2	3	4	5	6	7	8	9	10	
		Death benefit - 3 months continuous service	1986	Rs.5000	Rs.25000(2000)					
18	Kerala Motor Workers Welfare Scheme	2. Retirement benefit		Rs.12000 for 5years service and Rs.60000 for 15 years service						
		Pension - Completed 60 years. Annual Income Rs.5000	1987	Rs.75/m	Rs.85/m(1992)	Rs.100/m(1996)	Rs.120/m(2000)			
19	Kerala Fishermen Welfare Scheme	2. Accidental death/missing - 18 to 70 years.	1986	Rs.15000	Rs.21000(1990)	Rs.25000(1992)	Rs.50000(1996)	Rs.100000 (1999)		
		3. Permanent disability	1986	Rs.7500	Rs.10500(1990)	Rs.25000(1992)	Rs.50000(1996)	Rs.100000 (1999)		
20	Kerala Tailoring Workers Welfare Scheme	Pension - Completed 60 years. Minimum 9 years service.	2000	Rs.100 to Rs.430/m	Rs. 200 to 860/m (2008)					
		2. Disability Pension	1997	Rs.100/m	Rs. 200/m (2008)					
21	Kerala Artisans & Skilled Workers Welfare Scheme	1. 60 years and above and is a member	1986	Rs.50000 for 40 years of service. Rs.600 for 2 yrs service						
		2. Death Benefit		Rs.10000						
		3. Permanent disability		Rs.1000						
22	Financial Assistance to Widows for the marriage of their daughter	Family annual Income Rs.10000, Individual Income Rs.6000.	1978	Rs.1000	Rs.1250(1991)	Rs.2000(1995)	Rs.2500(1998)	Rs.5000 (2002)	Rs.10,000 (2008)	
23	Tree Climbers Welfare Scheme	Workers in the event of total accidents and permanent total disability following the accidents	1980	Rs.10000						

Appendix 14.20

Details of Rates per person on Social Security Pension Schemes in Kerala - 2008

SI. No.	Welfare Institution	Qualifying conditon	Year			Year of Revision a	nd Rate of assistancae			
1	2	3	4	5	6	7	8	9	10	
24	Kerala National Employment Services	Unemployment Assistance Passed SSLC registrant of employment exchange for more than 3 years. Age limit 18-35 years. Family Annual Income Rs.12000/-, Should not be a student.	1982	Rs.50/m	Rs.60/m(1987)	Rs.70/m(1991)	Rs.80/m(1996)	Rs.90/m (1997)	Rs.100/m(19 98)	Rs.120/m (2000)
		Self Employment Scheme for the registered unemployed Persons between 21-40 years. Annual Family Income Rs.24000	1999	up to Rs. 1,00,000/- loan(20% of loan amount subsidy)						
25	National Old Age Pension Scheme	Above 65 years. Annual Family Income below Rs.11000	1995	Rs.110/m	Rs.110/m(1996)	Rs. 235/m(2006)	Rs. 250/m (2008)			
26	Ration Dealers Welfare Fund Scheme	1. Pension - completed 65 years/ Minimum 10 years of service	2000	Rs.150/m	500/m (2003)					
		Death Benefit - one year minimum membership	2000	Rs.10000 to the nominee	Rs. 40,000 to the nominee					
27	Beedi and Cigar Workers Welfare Scheme	Pension - Completion of 60 years/Minimum 3 years service	1997	Rs.100/m	Rs.200/m (2008)					
		2. Retirement benefit	1997	Rs.10000						
28	Pension to unmarried women	Above 50 years. Annual family income below Rs.6000. Not covered under any other social security schemes	2001	Rs.110/m	Rs.120/m (2007)	Rs.200/m (2008)				
29	Kerala Bamboo, Kattuvalli & Pandas Leaf Workers Welfare Fund Board	Retired after 60 years of age	2007	Rs.120/m (2007)	Rs.200/m (2008)					
30	Kerala Diary Farmers Welfare Fund	Pension- Dairy farmer above 60 yrs Family pension-Nominee to the deceased dairry farmer	2005	Pension Rs.250/m. Family pension Rs. 125/m						

^{*}Report of 2008 not received.

Source: Based on information received from Defferent Welfare Fund Boards/Departments.

Appendix 14.21

COMPLAINTS RECEIVED BY KERALA WOMEN'S COMMISSION
(January to December 2008)

No.	(January to Decen	No. of complaints
_	Harassment of Women	2291
	Dowry Harassment	133
	Harassment by Husband	1394
	Cheating	302
	Divorced by Husband	18
	Suspicious death	104
	Property related	532
	Job related	137
9	Threatening to life	119
	Sexual Harassment	109
11	Use of abusive language	73
12	Neighbour's nuisance	571
	Atrocities	55
14	Against Police	68
15	Theft	1
16	Beating	96
17	Nuisance of anti-social elements	33
18	To get divorce	40
	Nuisance after drinking	24
	Alimony	17
	Economic help	111
	Path problems	79
	Doctor's negligence	1
	Child marriage	3
	Rape	4
	Harassment- below 18 years	9
	Domestic violence	1
	Family problems	1
	Harassment at work place	14
	Problems of nun	1
	DNA Test	1
32	Miscellaneous	319
	Total	6661

Source:Kerala Women's Commission

Appendix 14.22 Major Welfare Measures in the Welfare Fund Boards in Kerala - 2007

SI. No.		Maternity benefits	Marriage	Medical Assistance	Death Relief	Pension (per month)	Family Pension (per month)	Superannua tion benefits		Educational Assistance	House Building Advance
1	2	3	4	5	6	7	8	9	10	11	12
1	Kerala Agricultural Workers Welfare Fund Board	1000	2000	1000	1000	0	0	25000	0	NA	0
	Kerala Building and Other Construction Workers Welfare Board	3000	3000 (Daughters) 2500(Sons)	400 to 5000	15000 to 200000	250	125 Maximum	0	1,00,000	NA	1,00,000
	Kerala Handloom Workers Welfare Fund Board	500	2000	5000	5000	200	0	0	5000	300 to 2100	0
4	Kerala Fishermen's Welfare Fund Board	0	0	NA	100000	0	0	0	100000	10,000	0
5	Kerala Toddy Workers Welfare Fund Board	0	0	15000 (cancer, heart, kidney)	25000	150	0	20 months wage (maximum)	300 per month	0	0
	Kerala Ration Dealers Welfare Fund	0	0	5000 to 15000	40,000 (Maximum)	500	0	0	0	2500 to 3 students	0
7	Kerala Beedi, Cigar Workers Welfare Fund Board	0	2000	0	1000	100	0	0	NA	0	0
8	Kerala Tailoring Workers Welfare Scheme	2000	2000 (female) 1000 (male)	5000	10000	200	200	0	200 per month	600 to 1000	0
9	Kerala Anganwadi Workers and Helpers Welfare Fund	2000 (loan)	0	5000 (maximum)	10000			0	0	1000 (loan)	1,00,000
10	Kerala Coir Workers Welfare Fund Board	1000	2000	1000	5000	100	100	0	2500 + 300 per month	1500 /year (maxium)	0
11	Kerala Cashew Workers Relief Welfare Fund Board	1000	1000	0	Member 1000 pensioner- 500	200 to 210	0	0	2500	500 to 2000	0
12	Kerala Advocates'/Clerks Welfare Fund Committee	5000 to 10,000	0	0	15000	0	0	2 lakhs	0	0	0
	Kerala Diary Farmers Welfare Fund	0	1000	0	1000	250	125	0	0	0	

Source: Based on Information received from Different Welfare Fund Boards.

Appendix 14.23
District-wise ICDS beneficiaries in Kerala-2008

		porting	oviding s in a	Total popula		No. of	SNP Bene	ficiaries
SI. No	Name of ICDS Project(R/T/U)	No. of AWCs reporting	No. of Aws providing SNP for 21+ days in a month	0-6 years	Preg. & Lact women	0-3 years	3-6 years	Preg. & Lact women
1	2	3	4	5	6	7	8	9
1	Thiruvananthapuram	2982	2982	283124	39491	41315	42944	20792
2	Kollam	2653	2592	215150	30460	44769	34526	18283
3	Pathanamthitta	1355	230	18729	2657	3236	2686	1307
4	Alappuzha	2107	161	14650	2458	1169	2057	1550
5	Kottayam	1996	238	20096	2980	3481	2206	1706
6	ldukki	1481	1475	92955	15377	29793	25010	10804
7	Ernakulam	2824	2824	225417	32041	47011	39719	15641
8	Thrissur	2966	2966	241051	35480	48796	39046	15214
9	Palakkad	2745	2745	211032	36395	60031	38267	20330
10	Malappuram	3702	3702	473724	73126	94473	65527	27256
11	Kozhikkode	809	809	79281	12609	25677	10334	7912
12	Wayanad	2869	2869	358090	42293	62672	45724	25803
13	Kannur	2438	2437	211089	33516	54419	36438	15792
14	Kasaragod	1275	1275	118023	18564	22485	21505	8195
	Total	32202	27305	2562411	377447	539327	405989	190585

Source: Social Welfare Department

Appendix 14.24 ICDS PROJECTS (GENERAL) -2007

		,	No. of AWC s	
SI.No	Name of Project	Sanctioned	Operational	Reporting
1	2			5
THIRU	VANANTHAPURAM			
1	Thiruvananthapuram U1	154	154	154
2	Perumkadavila	252	252	252
3	Athiyannoor	240	240	240
4	Nemom	288	281	281
5	Chirayinkeezh	219	219	219
6	Thiruvananthapuram (R)	162	162	162
7	Vamanapuram	227	227	227
8	Varkala	195	195	195
9	Kilimanoor	220	220	220
10	Kazhakuttam	255	255	255
11	Thiruvananthapuram (U2)	140	140	140
12	Nedumangad	219	219	219
13	Vellanad	239	239	239
14	Parassala	194	194	194
	Total	3004	2997	2997
KOLLA	AM			
15	Anchal	230	230	230
16	Anchalummoodu	161	161	161
17	Chadayamangalam	238	238	238
18	Chavara	162	162	162
19	Chittumala	130	130	130
20	Ithikara	241	241	241
21	Karunagappally	153	153	153
22	Kollam Punalur	230	230	230
23	Kottarakara	172	172	172
24	Mukhathala	283	283	283
25	Oachira	129	129	129
26	Pathanapuram	179	179	179
27	Sasthamkotta	152	152	152
28	Vettikavala	193	193	193
	Total	2653	2653	2653
PATH/	NAMTHITTA			
29	Parakode	216	216	216
30	Pulikeezhu	155	155	155
31	Konni	198	198	198
32	Kulanada	89	89	89
33	Pandalam	109	109	109
34	Ranni	220	220	220
35	Elanthoor	112	112	112
36	Mallappally	127	127	127
37	Koipram	129	129	129
	Total	1355	1355	1355
ALAPF				
38	Thykattussery	116	116	116
39	Pattanacadu	207	207	207
40	Ambalappuzha	132	132	132
41	Alappuzha (U)	177	177	177
42	Harippad	157	157	157

			No. of AWC s	
SI.No	Name of Project	Sanctioned	Operational	Reporting
1	2			5
43	Kanjikuzhi	201	201	201
44	Campakulam	129	129	129
45	Muthukulam	202	202	202
46	Mavelikkara	153	153	153
47	Bharanikkavu	206	206	206
48	Chengannur	201	201	201
49	Ariyad	126	126	126
50	Veliyanad	100	100	100
	Total	2107	2107	2107
KOTTA				
51	Lalam	135	135	135
52	Pampady	141	141	141
53	Madappally	263	263	263
54	Kanjirappally	230	230	230
55	Vaikom	140	140	140
56	Pallam	305	305	305
57	Vazhoor	120	120	120
58	Kaduthuruthy	167	167	167
59	Uzhavoor	152	152	152
60	Ethumanoor	207	207	207
61	Erattupetta	136	136	136
	Total	1996	1996	1996
IDUKK				
62	Adimali	187	187	187
63	Azutha	230	230	230
64	Devikulam	213	187	187
65	Elamdesam	134	134	134
66	Idukki	159	159	159
67	Kattappana	240	240	240
68	Nedumkandam	198	198	198
69	Thodupuzha	137	137	137
	Total	1498	1472	1472
ERNA	(ULAM			
70	Vadavucode	155	155	155
71	Vytilla	68	68	68
72	Mulamthuruthy	193	193	193
73	Mattanchery	126	126	126
74	Kochi(U)	200	200	200
75	Vypin	198	198	198
76	North Paravur	175	175	175
77	Pampakuda	139	139	139
78	Koovappady	169	169	169
79	Parakadavu	139	138	138
80	Vazhakkulam	245	245	245
81	Moovattupuzha	176	176	176
82	Kothamangalam	236	236	236
83		236 164	236 164	236 164
	Alangad	164 226	226	226
84 95	Angamali			
85 86	Palluruthy	65 167	65 147	65 147
86	Edappally	167	147	147
I	Total	2841	2820	2820

0	Marrie of Built of		No. of AWC s	
SI.No	Name of Project	Sanctioned	Operational	Reporting
1	2			5
THRIS	SUR			
87	Anthikad	108	108	108
88	Mala	142	142	142
89	Chavakkad	230	230	230
90	Chalakkudy	201	201	201
91	Thalikulam	129	129	129
92	Pazhayanoor	172	172	172
93	Irinjalakkuda	151	151	151
94	Mullassery	100	100	100
95	Vadakkanchery	222	222	222
96	Vellangallur	111	111	111
97	Chowannoor	191	191	191
98	Puzhakkal	275	275	275
99	Ollukkara	262	262	262
100	Cherpu	179	179	179
101	Kodakara	208	208	208
102	Kodungalloor	139	139	139
103	Mathilakam	146	146	146
	Total	2966	2966	2966
PALAK				
104	Attappady	159	159	159
105	Malampuzha	221	221	221
106	Nenmara	100	100	100
107	Kollengode	162	162	162
108	Sreekrishnapuram	168	168	168
109	Ottappalam	227	227	227
110	Thrithala	194	194	194
111	Pattambi	264	263	263
112	Alathur	270	270	270
113	Chittur	186	186	186
114	Kuzhalmannam	162	162	162
115	Mannarkad	299	299	299
116	Palakkad	333	333	333
NAAL AE	Total	2745	2744	2744
117	PPURAM Manjeri (Areacode)	272	272	272
117	, ,	272 240	272 240	272 240
119	Kondotty Kuttipuram	240 221	240 221	240
120	Malappuram®	213	213	213
120	Malappuram(U)	213 157	213 157	213 157
121	Mankada	284	284	284
123	Nilambur	315	315	315
123	Perinthalmanna	237	237	237
125	Perumpadappa	154	154	154
126	Ponnani	201	201	201
127	Tanur	285	285	285
128	Tirur	250	250	250
129	Thirurangadi	262	261	261
130	Vengra	266	266	266
131	Wandoor	350	350	350
	Total	3707	3706	3706
1	* ***			-

OL NI -	Name of Bushest		No. of AWC s		
SI.No	Name of Project	Sanctioned	Operational	Reporting	
1	2			5	
WAYAI	NADU				
132	Mananthavadi	247	247	247	
133	Kalpatta	280	280	280	
134	Sulthan Bethery	282	282	282	
ı	Total	809	809	809	
KOZHI	KODE				
135	Balussery	240	240	240	
136	Chelannur	206	206	206	
137	Koduvally	258	258	258	
138	Kozhikode (R0	297	297	297	
139	Kozhikode(UI)	118	118	118	
140	Kozhikode (UII)	148	148	148	
141	Kunnamangalam	327	327	327	
142	Kunnummal	206	206	206	
143	Meladi	124	124	124	
144	Pathalayani	179	179	179	
145	Perambra	165	165	165	
146	Thodannur	125	125	125	
147	Tuneri	153	153	153	
148	Vadakara	121	121	121	
149	Kozhikode U3	202	202	202	
143	Total	2869	2869	2869	
IZ A NINII					
KANNU 150	Kannur (Urban)	63	63	63	
151	Kuthuparambu	263	263	263	
152	Peravoor	153	153	153	
153	Irikkur	239	239	239	
154	Edakkadu	251	251	251	
155	Iritty	217	217	217	
156	Kannur(Rural)	156	156	156	
157	Payyanur	386	386	386	
158	Thalassery	311	311	311	
159	Thaliparambu	403	403	403	
139	Total	2442	2442	2442	
KASAF		<u> </u>	E-17E	<u> </u>	
160	Kasargod	346	346	346	
161	Kanhangad	331	331	331	
162	Manjeswaram	313	313	313	
163	Neeleswaram	285	285	285	
. 50	Total	1275	1275	1275	
	Grand Total	32267	32211	32211	

Appendix.14.25
District-wise Details of SC/ST population Census 2001

SI.No	India/State/District	Total Population			Sch	Scheduled Caste			Scheduled Tribe		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
1	2	3	4	5	6	7	8	9	10	11	
1	Kasargod	588083	615995	1204078	44904	45314	90218	15132	15206	30338	
2	Kannur	1152817	1256139	2408956	48275	50716	98991	9793	10176	19969	
3	Wayanad	391273	389346	780619	16738	16626	33364	67394	68668	136062	
4	Kozhikkode	1399358	1479773	2879131	98386	102597	200983	2924	3016	5940	
5	Malappuram	1754576	1870895	3625471	140535	144907	285442	5996	6271	12267	
6	Palakkad	1266985	1350497	2617482	210624	221954	432578	19990	19675	39665	
7	Thrissur	1422052	1552180	2974232	171443	182783	354226	2293	2533	4826	
8	Ernakulam	1538397	1567401	3105798	129706	133812	263518	5079	4967	10046	
9	ldukki	566682	562539	1129221	79389	79973	159362	25510	25463	50973	
10	Kottayam	964926	988720	1953646	73885	76397	150282	8972	9368	18340	
11	Alappuzha	1014529	1094631	2109160	96900	102331	199231	1565	1566	3131	
12	Pathanamthitta	589398	644618	1234016	78731	83271	162002	3184	3365	6549	
13	Kollam	1249621	1335587	2585208	156880	166007	322887	2447	2743	5190	
14	Thiruvananthapuram	1569917	1664439	3234356	178718	192139	370857	9890	11003	20893	
	Kerala	15468614	16372760	31841374	1525114	1598827	3123941	180169	184020	364189	
	Share of Kerala							·			
	(Per cent)	2.91	3.31	3.1	1.77	1.98	1.88	0.43	0.45	0.44	

Source: Census 2001

Appendix.14.26
Standardwise Strength of SC/ST Students 2008-09

Standard —	Govt	.Schools		Private	Aided Sch	ools	Private Unaided Schools			
Standard —	Total	SC	ST	Total	SC	ST	Total	SC	ST	
1	2	3	4	5	6	7	8	9	10	
1	112234	16222	4392	218876	22792	3846	41497	1687	103	
II	125398	18076	4478	241727	25995	3935	41934	1749	110	
III	137637	20070	4571	256102	27856	3955	42551	1749	113	
IV	143670	20715	4399	261790	29027	3792	42577	1570	87	
V	129955	17517	4556	299001	32471	4089	36403	994	162	
VI	137174	18574	4285	316065	35561	3728	35716	1067	154	
VII	140250	18805	3938	324706	35331	3385	33270	923	152	
VIII	155396	20075	3691	305207	31151	2421	31575	832	140	
IX	153446	19106	3022	302822	29363	2280	30994	781	109	
X	142181	16785	2439	275529	25233	1666	30143	708	114	
Total	1377341	185945	39771	2801825	294780	33097	366660	12060	1244	

Source: Director of Public Instructions

Appendix 14.27

DETAILS OF SCHEDULED CASTE/SCHEDULED TRIBE STUDENTS IN THE ARTS AND SCIENCE COLLEGES DURING 2007- 08 (UPTO OCTOBER)

SI. No.	Name of Course	Number of Students								
31. NO.	Name of Course	Schedule	ed Caste	Schedul	ed Tribe	То	Total			
		Boys	Girls	Boys	Girls	Boys	Girls			
1	M.Phil	6	7	-	-	6	7			
2	M.A	232	828	57	94	289	922			
3	M. Sc	225	718	37	76	262	794			
4	M. Com	248	362	31	28	279	390			
5	M. S. W	9	18	10	10	19	28			
6	M.B.A	12	6	1	-	13	6			
7	M.C.A	6	6	-	1	6	7			
8	B.B.A	58	65	15	15	73	80			
9	B.B.S	8	12	2	2	10	14			
10	B.P.E	13	2	1	1	14	3			
11	B.B.M	26	8	2	2	28	10			
12	B.C.A	20	17	4	3	24	20			
13	B.A	4466	7589	590	925	5056	8514			
14	B.Sc	2500	5181	200	330	2700	5511			
15	B.Com	1583	2078	240	262	1823	2340			
16	B.Ed	85	180	69	18	154	198			
17	M.Ed	2	4	-	1	2	5			
18	Others (Specify)			-	-	-	-			
	Total	9499	17081	1259	1768	10758	18849			

Source: Directorate of Collegiate Education

Appendix. 14.28

Cotogory	2004			2005			2006			2007		
Category	Total	SC	ST									
1	2	3	4	5	6	7	8	9	10	13	11	12
1.Gazatted	30974	3286	282	30622	3320	291	32701	3536	306	33272	3743	322
2. Non-Gazatted												
(Excluding Last	255537	75162	3176	250424	24219	3289	251020	24005	3625			
Grade)										247026	23457	3783
3. Last Grade	38227	4798	731	37459	4768	817	37688	4840	821	38722	4267	721
Total	324738	83246	4189	318505	32307	4397	321409	32381	4752	319020	31467	4826

Source: General Administration (Employment Cell-A) Department

Appendix 14.29 SCP through Local Self Govt. Institutions - Kerala Physical Achievements 2002-2003 to 2006-07(Provisional)

SI.No	SCP through Local Self Govt. Institutions - Keral	Unit	2002-03	2003-04	2003 10 2000	2005-06	2006-07
51.NO	ltem 2	3	4	2003-04 5	2004-05 6	7	8
							103.22
1	Area brought under cultivation	Ha	1494.46	4121	803.84	559 18130	
2	Beneficiaries of vegetable cultivation	No	6472	9034	5966	18130	1268
3	Benifeciaries who received Planting materials						
	distributed through integrated agricultural	No		16393	7542	7028	840
	development programmes						
4	Pumpset distributed through integrated agricultural	No	174	753	396	591	283
	development programmes	140	., .	700	000	001	200
5	Sprayers distributed through integrated agricultural	No		165	94	140	12
	development programmes	140					
6	Poultry-egg rearing units	No	544	5151	959	785	227
7	Fresh water fish culture(Area)	Ha	-	0	37	0	
8	Construction of cattlesheds	No	537	1212	691	670	447
9	Watershed development projects	No	22	127	121	39	4
10	Land brought under cultivation through watershed			00=	4.00	40=	
	development projects	Ha	220.53	305	169	195	0.06
11	New industrial units	No	66	95	217	25	106
12	Rehabilitation of traditional industrial units	No	21	50	51	29	27
13	Persons who received industrial entrepreneurship	. 10			0.	20	
10	training	No	884	36	1068	341	25
4.4	<u> </u>	No	2892	4764	6583	1942	1428
14	Skill development(Persons trained)						97
15	Micro enterprises started	No	276	523	230	240	67
16	Self employment units started	No	784	328	321	441	759
17	Self employed persons	No	1248	1938	4581	1260	759
18	Employment training programme for destitutes	No	12	69	211	19	70
19	Self employment units started by poor people	No	6	826	62	310	73
20	Self employment units for destitutes	No	1	20	336	29	2
21	Destitutes trained (Persons)	No	58		187	66	04700
22	Computer training (Persons trained)	No	2076	4019	15313	11559	21768
23	Area of land distributed to landless	Ha	2482.11	1732	5622	2757	30
24	Distribution of house plots	No	1480	4030	4257	1737	399
25	Houses constructed	No	9016	12309	15040	12478	10680
26	Distribution of land to land less(beneficiaries)	No	2424	8038	2011	3724	1972
27	Renovation of houses	No	6718	10020	9135	10866	6488
28	Shelter upgradation	No	1234	2160	1125	1510	1390
29	Renovation of SC houses	No	10551	6534	7251	4985	1319
30	Integrated development SC habitats	No	324	1176	521	442	9
31	Electric wiring of houses	No	6753	3875	2954	2605	1730
32	Construction of sanitation units	No	8946	21883	11167	9716	3351
33	New wells	No	2044	3942	2674	2922	2332
34	New public water tap connection installed	No	1088	1618	1835	838	121
35	New water tap connection to households	No	28	91	256	309	199
36	Renovation of ponds	No	45	195	40	64	1
37	Pump sets	No	17.4	343	184	331	79
38	Ordinary roads (Number)	No	427	2818	1369	1189	314
39	Ordinary roads (Length)	Km	7510.53	6854	7398.14	2118	105.68
40	Roads above 8M width(Number)	No	3	110	11	66	
41	Roads above 8M width(Length)	Km	29	1957	15.89	52	4.15
42	Roads between 6 and 8 M width(Number)	No	33	573	303	228	
43	Roads between 6 and 8 M width(Length)	Km	39.27	960	373.75	1607	36.482
44	Roads below 6M width(Number)	No	517	752	567	255	3
45	Roads below 6M width(Length)	Km	432	3570	536.10	582	2075.179
46	New culverts	No	52	69	46	87	8
47	New bridges	No	9	37	11	32	3
48	Anganwadi Buildings	No	27	36	25	16	12
40 49	Rehabilitation of puramboke dwellers (projects)	No	17	294	28	91	5
50	Slum development projects	No	77	29 4 13	20 71	22	185
51	Drinking Water Projects	No	11	13	/ 1	44	565
							1419
52	Beneficiaries of Drinking Water	No					פודו

Estimated from Annual expenditure statement of Local Governments Source : Information Kerala Mission

Appendix 14.30
TSP through Local Self Govt. Institutions - Kerala Physical Achievements 2002-03 to 2006-2007 (Provisional)

SI.No	TSP through Local Self Govt. Institutions - Kerala Physic	Unit	2002-03	2003-04	2004-05	2005-06	2006-07
1	2	3	4	5	5	6	7
1	Area brought under cultivation	На	137.75	240	251.52	25	
2	Beneficiaries of vegetable cultivation	No	323	1295	123	242	1
3	Benifeciaries who received Planting materials distributed	No		1360	1520	236	
	through integrated agricultural development programmes	INO		1360	1530	230	102
4	Pumpset distributed through integrated agricultural	No	22	44	24	22	
	development programmes	No	33	41	24	33	9
5	Sprayers distributed through integrated agricultural	No		70	^	0	
	development programmes	No		73	0	0	
6	Poultry-egg rearing units	No	2	547	0	50	
7	Fresh water fish culture(Area)	Ha	-	-	0	0	
8	Construction of cattlesheds	No	43	58	23	32	18
9	Watershed development projects	No	1	16	176	2	
10	Land brought under cultivation through watershed	Uо	5 0	24	100	100	
	development projects	На	50	24	102	100	
11	New industrial units	No	1	11	4	0	
12	Rehabilitation of traditional industrial units	No	0	-	16	0	
13	Persons who received industrial entrepreneurship training	No	239	16	193	100	
14	Skill development(Persons trained)	No	368	284	25	611	19
15	Micro enterprises started	No	49	48	35	6	2
16	Self employment units started	No	23	36	28	44	15
17	Self employed persons	No	240	696	116	196	82
18	Employment training programme for destitutes	No	-	6	0	0	
19	Self employment units started by poor people	No		106	0	29	5
20	Self employment units for destitutes	No	1	2	0	0	
21	Destitutes trained (Persons)	No	35		0	0	
22	Computer training (Persons trained)	No	707	60	0	1278	30
23	Area of land distributed to landless	Ha	104	69	132	169	
24	Distribution of house plots	No	20	264	245	241	15
25	Houses constructed	No	1051	1377	1922	2117	1512
26	Distribution of land to land less(beneficiaries)	No	161.03	132	294	229	21
27	Renovation of houses	No	594	1067	1119	1200	609
28	Shelter upgradation	No	60	150	144	222	10
29	Renovation of ST houses	No	203	1116	787	596	24
30	Integrated development ST habitats	No	-	4	39	2	
31	Electric wiring of houses	No	375	1259	1323	1158	598
32	Construction of sanitation units	No	1690	2262	1009	394	1874
33	New wells	No	93	422	103	134	120
34	New public water tap connection installed	No	110	233	43	147	120
35	New water tap connection to households	No	2	14	0	31	
36	Renovation of ponds	No	1	8	0	11	
37	Pump sets	No	33	25	4	4	1
38	Ordinary roads (Number)	No	33 11	332	70	4 26	4
39	Ordinary roads (Length)	Km	51539	1258	407.59	103	3
40	Roads above 8M width(Number)	No	0	3	407.59 0	0	3
41	Roads above 8M width(Length)	Km	9.38	751	0.00	0	
42	Roads between 6 and 8 M width(Number)	No	9.36	14	15	5	
42	Roads between 6 and 8 M width(Length)			14 1278	7.14		
	Roads below 6M width(Number)	Km No	0 15			8	
44 45	Roads below 6M width(Length)	No Km	15 24	64 552	38	4	
45 46	New culverts	Km	24	553	19.02	3	
46		No	6	11	0	8	4
47	New bridges	No	2	5	7	3	1
48	Anganwadi Buildings	No	8	14	4	5	1
49	Rehabilitation of puramboke dwellers (projects)	No	5	2	0	3	
50	Slum development projects	No	5	2	0	7	70
51	Drinking Water Project	No					70
52	Beneficiaries of Drinking Water Projects						562

Estimated from Annual expenditure statement of Local Governments

Source : Information Kerala Mission

Appendix 14.31 Schemewise Outlay and Expenditure of Welfare of SCs and OBCs for 2007-08 and 2008-09 (As on 31.12.2008)

Rs.lakh

	Т	Implementing			Rs.lakh		
SI.	Major Head/ Minor Head of Development (Scheme-		Annual Pl	an - 2007-08	Annual P	lan - 2008-09	
No.	wise)		B.E	Actual Expenditure	B.E	Expenditure (As on 31.12.08)	
0	1	2	3	4	5	6	
	WELFARE OF SCHEDULED CASTES						
1.1	State Schemes/State Sponsored Schemes						
1	Industrial Training Centres	State Govt. (SC dept)	100.00	62.85	75.00	40.29	
2	Kerala State Development Corporation for Scheduled Castes/Scheduled Tribes Ltd - Share Capital (51%SS)	State Govt.	357.00	182.07	408.00	408.00	
	Education						
3	Pre-Primary Education	Local Body	25.00	23.96	25.00	3.24	
4	Pre-Matric Studies(Scholarships and Stipends)	State Govt. (SC dept)	40.00	38.27	50.00	37.67	
5	Special Incentives to Talented Students/Award to Schools/Ayyankali Memmorial Talent Search & Special Incentive schemes.	"	100.00	69.68	100.00	83.72	
6	Better Education to Bright Scheduled Caste Students	Local Body	25.00	12.72	25.00	0.50	
7	Upgradation of Performance level of Scheduled Caste Students in Sports and Games/Ayyankali Memorial Sports School	State Govt. (SC dept)	100.00	99.79	100.00	56.15	
8	Financial Assistance to Failed SC Students to Continue Education (special coaching)	"	40.00	4.85	40.00	0.50	
9	Bharat Darshan/Excursion & Study Tour	"	15.00	13.35	20.00	14.01	
10	Boarding Grants	Local Body	25.00	11.64	25.00	0.00	
11	Coaching and Allied Schemes(50%SS)	State Govt. (SC dept)	70.00	15.18	75.00	6.09	
12	Post Matric Hostels	"	250.00	225.30	300.00	105.89	
13	Construction of Girls' Hostels(50%SS)	"	50.00	27.58	75.00	0.00	
14	Construction of Boys' Hostel(50%SS)	"	70.00	0.00	100.00	0.00	
15	Tuition System in Pre-Matric Hostels	Local Body	25.00	21.26	25.00	2.28	
16	Land and Buildings for Hostels and Industrial Training Centres/Infrastructure of training centres, shopping complex etc./ Dr. Ambedkar Bhavanam	State Govt. (SC dept)	650.00	649.99	650.00		
17	Pre-Examination Training/Construction of Buildings	ıı ı	50.00	0.00	50.00	0.00	
18	Running of Model Residential School	"	400.00	244.87	400.00	173.48	
19	Construction of Model Residential School	"	600.00	539.00	600.00		
20	Grant to Civil Service Examination Society	"	30.00	30.00	30.00		
21	Educational Assistance to Students of Self Financing Colleges	ıı ı	750.00	744.28	750.00		
	Sub Total - Education		3772.00	3016.64	3923.00	1301.96	
	Other Schemes						
22	Development of Vulnerable Communities	"	100.00	66.45	100.00	16.01	
23	Protection of Civil Rights and Enforcement of PCR Act and PA Act (50%SS)	"	100.00	81.11	200.00		
24	Planning and Monitoring Cell/ Modernisation of Offices and Audio-Visual Equipments	"	100.00	67.18	75.00	28.02	
25	Assistance to the Dependance of Safai Karmacharis (50%SS)	"	10.00	14.01	10.00	5.04	

0	1	2	3	4	5	6
	Office Complex for Directorate of SC and ST		450.00	0.00	-	-
/h	Development		150.00	0.00	250.00	0.00
27	Centre of Excellence	"	100.00	100.00	100.00	0.00
28	National Trade and Arts Fair of SCs and STs	"	10.00	10.24	10.00	8.39
29	Honorarium and Training to SC Promoters	"	250.00	262.28	300.00	179.73
30	Para-medical studies	"	200.00	131.95	200.00	43.25
31	Self Employment	"	200.00	181.67	200.00	102.17
	Apprenticeship to ITI/ITC Diploma/Degree Holders in Technical Branches	"	40.00	26.00	75.00	14.91
33	Assistance to the Seriously ill	ш	400.00	399.13	500.00	370.00
34	Assistance to Marriage of SC Girls	п	50.00	112.70	100.00	58.30
35	Assistance to Co-operatives through LSGI's	"	25.00	10.00	30.00	0.00
36	Promotion of Women Enterprises through SHG	"	100.00	0.00	100.00	0.00
	Financial Assistance to Co-operative Societies for Promoting Cluster Development.	11	50.00	0.00	25.00	0.00
38	Land to Agricultural Labourers	ш	50.00	7.00	50.00	0.00
	Training to the Officers of SC Department	"	10.00	9.93	5.00	0.00
	House to Houseless	"			1000.00	257.64
	Land to Landless	"			500.00	8.10
42	Rehabilitation of vulnerable/primitive SC's (One- Time ACA)	"			932.00	0.00
	Sub Total - Other Schemes		1945.00	1479.65	4762.00	1159.87
	Total 1.1 (State Schems/State Sponsored Schemes)		5717.00	4496.29	8685.00	2461.83
4 3	1.2Corpus Fund Under Special	State Govt. (SC	6791.00	6791.31	7428.80	3800.52
	ComponentPlan	dept)	0101100	0.01.01	20.00	
	1.3 Rural Development Schemes					
1	Sampoorna Gramin Rozgar Yojana (25% SS)	State Govt(RD Dept)	472.00	723.01	1.00	0.00
2	Indira Awaz Youana (25% State Share)	State Govt(RD Dept)	792.00	1361.95	1150.00	839.83
3	Swarnjayanthi Gram Swarozgar Yojana (25%SS)	State Govt(RD Dept)	537.00	322.47	667.20	177.24
	Total 1.3(Rural Development Schemes)		1801.00	2407.43	1818.20	1017.07
	Total (1.1+1.2+1.3)- Welfare of Scheduled Castes		14309.00	13695.03	17932.00	7279.42
	OTHER BACKWARD CLASSES					
	Assistance to Public Sector Undertakings					
1	Kerala State Development Corporation for Christian Converts from Scheduled Castes and Recommended Communities	State Govt (SC Dept)	340.00	340.00	350.00	0.00
	Kerala State Backward Classes Development Corporation	"	440.00	440.00	700.00	233.00
	-Share Capital Grant					
	-Share Capital Grant Post-Matric Studies(Concessions)/Post Matriculation Studies	"	113.00	422.12	300.00	179.40
3	Post-Matric Studies(Concessions)/Post	"	113.00 350.00	422.12 8.89	300.00 125.00	179.40 0.00
4	Post-Matric Studies(Concessions)/Post Matriculation Studies					
3 4 5	Post-Matric Studies(Concessions)/Post Matriculation Studies Construction of Hostels for Girls (50% SS) Pre-Matric Concessions /Pre-matriculation	"	350.00	8.89	125.00	0.00
3 4 5 6	Post-Matric Studies(Concessions)/Post Matriculation Studies Construction of Hostels for Girls (50% SS) Pre-Matric Concessions /Pre-matriculation Studies Kerala State Backward Classes Development	11	350.00 50.00	8.89 45.74	125.00	0.00

Source: Directorate of SC Development and CPMU

Appendix 14.32

Physical achievement of schemes for

Scheduled Caste Development for 2007-08 and 2008-09(As on 31.12.2008)

	Ocheduled Gaste Development for 2007-00	- u.i.u	7.10 011 0 111.2	12000)
SI.No	Name of the Scheme	Unit	Achievement 2007-08	Achievement 2008-09 (As on 31.12.2008)
1	2	3	4	5
	are of Scheduled Castes			
	Schemes/State Sponsored Schemes			
1	Pre-Primary Education	students	1494	128
2	Pre-Matric Scholarships and Stipends	students	452795	416928
3	Special Incentives to Talented Students	students	5070	7338
4	Better Education Award to Schools and Bright Scheduled Caste Students	students	338	88
5	Financial Assistance to Failed Scheduled Caste Students to Continue Education (Special Coaching)	students	573	89
6	Bharat Darshan	sudents	60	
7	Post-Matric Hostels	students	878	798
8	Tuition System in Pre-Matric Hostels	students	2204	305
9	Model Residential School	students Admitted	1057	946
10	Grants to Civil Services Examination Society	students	30	30
11	Educational Assistance to Students of Self Financing Colleges	students	3109	2740
12	Development of Vulnerable Communities	beneficiaries	9	51
13	Protection of Civil Rights and Enforcement of POA Act			
i)	Inter caste marriage		798	506
ii)	Financial assistance to the victims due to atorocities	Nos	55	54
14	Assistance to the Development of Dependance of Safai Karmacharis	students	597	1162
15	Centre of Excellence	students	80	-
16	Honorarium and Training to SCP Promoters	Promoters	1175	1068
17	Paramedical Studies	students	340	290
18	Upgradation of performance level of SC students in Sports and Games	students	180	204
19	Apprenticeship to ITI/ITC Diploma holders	Trainees	365	357
20	Financial Assistance to seriously ill	No. of persons	3956	5020
21	Assistance to marriage of SC girls	No. of persons	1531	1319
22	Self Employment	No of persons	239	224
23	Educational assistance to Self Financing Colleges	students	3109	2740
24	Corpus Fund(SCP)	families	2544	9662
Welfa	are of OBCs			
1	Post matriculation studies OBC/OEC	students	36111	11015
2	Prematriculation studies OBC/OEC	students	130005	42081

Source:Directorate of SC Development

Appendix 14.33

Details of Lumpsum grant, stipends, scholarships etc. to Scheduled Castes Student during 2007-08

(in Rs.)

	(in Rs. Number of students benefited and amount sanctioned								(in Rs.)
SI	Name of Octor								
No:	Name of Sector		um grant		pend		larship		money
		Students	Amount	Students	Amount			Students	Amount
1	2 Lower Primary	3 177881	4 21303352	5	6 315665	7	8	9 38	10 17130
1	-			980		_	_		
2	Upper Primary	146162	21978158	613	250140	0	72000		41400
3	High Schools	131823	34044164	1247	332125	404	73800	40	18000
	Sub Total	455866	77325674	2840	897930	404	73800		76530
4	Higher Secondary	55377	33159945	50929	152866176	24660	23226187		370437
5	VHS	7655	7798294	7192	29558257	2433	1185116		92344
6	ITI	2966	902666.8	1405	1873985	513	1201778	230	184827
7	ITC	532	156060	532	847292	119	93100		0
8	Polytechnics	2169	951381.2	1790	6049215	1417	4495222		171047
9	Degree	29275	20449622.4	22034	58450532	18618	52383537		1440362
10	PG	4884	4156367.8	3741	11764172	3036	19272066	587	619694
	Sub Total	102858	67574337.2	87623	261409629	50796	101857006	7309	2878711
11	Engineering								
٠,	Government Aided	4188	4339735	3666	9545204	2353	13040345	479	487775
` '	Self Financing	2232	2567544.2	1135	6508752	1299	27894935	935	775022
12	Medical								
` '	Government	391	536175	143	698690	160	1019058	252	200407
	Co-operation	6	83000	2	7500	6	85000		3000
(c) 13	Self Financing Others(specify)	149	210804	21	131287	123	4433935	128	92137
. •	B.Ed	906	466425	635	3482523	408	11010179	61	43005
	TTC	255	72754	203	793941	163	161360		17395
	Para Medical	690	461596.8	179	2045665	158	2638173		98184
	Nursing	504	21892655	221	26802769	424	61547987		8816927
	BDS	61	83875	36	113400	42	1064523	35	27820
	LLB	235	235000	132	606400	135	441000		18000
	PHARMACY	134	22647360	16	27195254	129	543988625	132	9067558
	B.PHAM	38	27000	14	44100	28	449600		17400
	Phd.	150	1197000	150	14316000	99	164450		0
	PGDCA/DCA	20	7875	20	74852	20	102000		0
	JDC/HDC	143	47450	143	418973	143	683810	_	0
	GNM	32	17175	21	71956	23	83065	14	10985
	BVSC	11	11000	11	109555	11	35300		11840
	M Phil.	87	652500	87	7830000	55	101750		0
	Ayurveda	123	92250	76	239400	73	240900		37600
	BHMS	29	29000	13	40950	17	56100		12800
	DIPLOMA	110	39550	42	470736	42	175200		9000
	FP&FB	110	4200	12	32019	12	102000		9000
	IHRD/MTHSS								02444
	PARALLEL COLLEGE	209	270034.9	90	516242	195	1846484	119	92414
		601	188800	601	1601650	601	940019	-	0
	DHI	3	1050	3	162000	43	58000	-	0
	GCI	43	16000	43	162000	43	58000		0
	Others Code Total	1024	481600	859	2551770	43	164970	165	106210
	Sub Total	12386	56679408.9	8574	106573588	6848	672586768		19945479
	Total	571110	201579420.1	99037	368881147	58048	774517574	10416	22900720

Appendix 14.34

Details of Lumpsum grant, stipends, scholarships etc. to Scheduled Castes Student during 2008-09 up to 31/10/08

(in Rs.)

<u> </u>	Number of students benefited and amount sanctioned							(III RS.)	
SI	Name of Sector	Lumpsun		Stipe		schola		Pocket m	oney
No:		Students	Amount	Students	Amount	Students	Amount	Students	Amount
1	Lower Primary	141865	14493109	625	194109	0	0	38.00	10260
2	Upper Primary	116064	25905963	19016	2806385	5	2000	92.00	24840
3	High Schools	133143	39809574	1264	455250	590	265500	175	65840
	Sub Total	391072	80208646	20905	3455744	595	267500	305	100940
4	Higher Secondary	42980	31843847	31874	89825890	31804	19693904	205	160487
5	VHS	3254	14284736	3108	55054746	1034	481330	52	49400
6	ITI	711	2672823	682	1064102	398	8976604	4	879595
7	ITC	487	294260	487	306600	157	507795	36	22800
8	Polytechnics	1743	1221525	1470	3927335	902	3711403	108	69600
9	Degree	20403	67958748	16926	55215370	10023	48101823	1521	985319
10	PG	3109	4546360	2459	8183335	2129	6984589	321	164647
	Sub Total	72687	122822299	57006	213577378	46447	88457448	2247	2331848
11	Engineering								
(a)	Government	1874	26950000	1481	5351670	944	7771056	331	384124
(b)	Self Financing	1324	1624500	784	3015068	613	25301217	279	237160
12	Medical								
(a)	Government	177	230455	83	512329	108	979839	127	92322
(b)	Co-operation								
(c)	Self Financing	27	37125	2	4320	27	2645034	25	18860
13	Others(specify)								
	B.Ed.	134	112910	67	338345	65	1371348	17	11800
	TTC	340	133825	292	1033685	209	503753	27	22000
	Para Medical	170	136625	93	340865	97	141197	69	64700
	Nursing	114	94980	31	156800	93	1522572	85.00	77550
	BDS	32	66070	15	161560	25	979440	17.00	14800
	LLB	174	174250	162	307850	174	1076110	12.00	12000
	PHARMACY	5	4325	5	21375	5	270250	0	C
	B.PHAM	103	70830	63	228000	75	619731	40.00	37600
	Phd	220	2242500	220	19133000	160	14831250	0	C
	PGDCA/DCA	239	41625	239	634545	239	2983500	0	C
	JDC/HDC	116	61450	116	247750	78	474132	0	C
	GNM	25	18300	19	100750	20	115113	10.00	4000
	BVSC	15	22500	15	75000	15	40000	15.00	15000
	M Phil	35	375000	35	3150000	24	2467500	0	(
	Ayurveda	30	33750	26	93348	21	88968	4.00	40000
	OTHERS	74	58430	74	179445	0	0	0	(
	Sub Total	5228	32489450	3822	35085705	2992	64182010	1058	1031916
	Total	468987	235520395	81733	252118827	50034	152906958	3610	3464704

Appendix 14.35
Model Residential Schools under SCDD

		Daniel Woman		Total S	trength 2	007-08	2007-08		
District	School	Rented/Own building	STD	Boys	Girls	Total	Students in Std X	Students passed	
1	2	3	4	5	6	7	8	9	
Alappuzha	MRS, Punnapra	Own building	V to X	-	201	201	35	35	
Idukki	MRS, Peerumedu	Own building	VIII to X	55	57	112	36	36	
Ernakulam	MRS, Aluva	Own building	V to X	195	-	195	33	33	
Thrissur	MRS, Thiruvilluamala	Own building	V to X	77	-	77	19	19	
Palakkad	MRS, Thrithala	Own building	V to X	-	197	197	33	33	
Kozhikode	MRS, Kozhikkode	Own building Rented	V to X	109	-	109	21	21	
Kasargode	MRS, Kasargod	Building	V to X	171	-	171	28	28	
	Total						205	205	

Source: Directorate of SC Development

Appendix 14.36

Number of Houses sanctioned and constructed by the SCDevelopment
Department during 2007-08 and 2008-09 (as on 31-12-2008)

	paramont daring 200				<u>/</u>
		Houses	Houses	Houses sanction	Houses complete
SI.No	District	sanctioned	completed	ed	d up to
		during 2007-08	up to 31-12-2008	during	31-12-
			31-12-2006	2008-09	2008
1	2	3	4	5	6
1	Thiruvananthapuram	1760	1080	572	1
2	Kollam	1379	787	511	8
3	Pathanamthitta	1033	477	260	
4	Alappuzha	764	381	345	
5	Kottayam	623	320	255	
6	ldukki	922	364	279	
7	Eranakulam	1770	927	450	1
8	Thrissur	1116	554	460	1
9	Palakkad	1873	998	725	4
10	Malappuram	1760	586	474	
11	Kozhikode	973	321	278	
12	Wayanad	250	115	62	
13	Kannur	547	117	170	
14	Kasargode	329	243	159	
	Total	15099	7270	5000	15

Appendix 14.37
Achievements under major Housing schemes to SC Population by different Housing Agencies in Kerala

(Nos)

SI.No	District	Name of Agency	Houses sanctioned during 2006-07	Houses completed during 2006 07	Houses completed 2007-08	Houses completed during 2008-09	Total number of houses completed as on 30-09-2008
1	Thiruvananthapuram	KSHB	595	NIL	374	58	432
2	Kollam	KESNIK	515	NIL	364	115	479
3	Pathanamthitta	KESNIK	240	NIL	156	66	222
4	Alappuzha	KSHB	320	NIL	109	58	167
5	Kottayam	KSHB	260	NIL	93	70	163
6	Idukki	KESNIK	255	NIL	198	43	241
7	Eranakulam	KESNIK	420	NIL	196	41	237
8	Thrissur	KSHB	565	NIL	96	81	177
9	Palakkad	KESNIK	700	NIL	369	56	425
10	Malappuram	KSHB	320	NIL	156	66	222
11	Kozhikode	KESNIK	455	NIL	215	21	236
12	Wayanad	KESNIK	50	NIL	42	4	46
13	Kannur	KSHB	160	NIL	86	13	99
14	Kasargode	KSHB	145	NIL	116	10	126
	Total		5000	NIL	2570	702	3272

Source: Directorate of Scheduled Caste Development Department

KSHB - Kerala State Housing Board KESNIK - Kerala State Nirmithi Kendra

Appendix 14.38 Consolidated statement of two agencies

(Nos.)

		, ,
Item	KSHB	KESNIK
Houses sanctioned to two agencies	2500	2500
No. of houses transferred to KESNIK by KSHB	279	
Remaining houses as on 1.4.2008	2221	2779
Amount of 407 houses refunded by KSHB. Therefore number of houses left with KSHB	1814	
No. of houses completed as on 30-9-2008	1386	1886
Houses under construction	428	893

Source: Directorate of SC Development

Appendix 14.39

Number of SC persons benefitted under Self Employment Schemes during 2008-09

SI.No	District	Outlay (in lakhs)	Expenditure (31-12-08)	Persons benefitted (Nos.)
1	2	3	4	5
1	Thiruvananthapuram	18.74	14.35	36.00
2	Kollam	20.68	18.42	41.00
3	Pathanamthitta	10.38	1.73	6.00
4	Alappuzha	12.74	10.45	21.00
5	Kottayam	9.62	2.95	8.00
6	Idukki	10.20	1.70	5.00
7	Eranakulam	16.88	13.74	20.00
8	Thrissur	22.68	7.00	20.00
9	Palakkad	27.70	4.90	14.00
10	Malappuram	18.28	10.00	11.00
11	Kozhikode	12.86	3.03	6.00
12	Wayanad	2.14	0.33	7.00
13	Kannur	6.34	2.33	5.00
14	Kasargode	10.76	11.24	24.00
	Total	200	102.17	224

Appendix 14.4 District wise details of Lease Land Farming as on 31-10-2008

SI. No.	Name of District	No. of GPs	No. of NHGs	No. of Covered families	Area in Acres
1	Thiruvanathapuram	73	2019	21159	2624.38
2	Kollam	66	699	2212	733.35
3	Pathanamthitta	54	2812	19244	4171.40
4	Alappuzha	38	2418	20204	3185.61
5	Kottayam	61	1334	8636	3430.97
6	ldukki	47	4283	10359	1902.95
7	Ernakulam	88	3186	26850	12623.00
8	Thrissur	53	451	3280	62878.00
9	Palakkad	87	2628	20472	6194.29
10	Malappuram	89	3729	20956	5915.00
11	Kozhikkode	54	876	1210	1638.50
12	Wayanad	25	2200	17600	4300.00
13	Kannur	81	163	348	374.00
14	Kasaragod	39	1907	11454	1692.35
	Total	855	28705	183984	111663.80

Source: Kudumbashree Government of Kerala

Appendix 14.5

District wise details of Balasabha - Children's NHG as on 31-10-2008

	2007-08		7-08	Cı	umulative		
SI.No.	District	No. of GPs	No. of Balasabha	No. of Children	No. of Balasabha	No. of Children	Thrift (Rs)
1	2	3	4	5	6	7	8
1	Thiruvanathapuram	78	4250	70890	4706	75643	3412074
2	Kollam	69	31	563	1792	37960	505315
3	Pathanamthitta	54	393	3970	2096	35966	1279793
4	Alappuzha	73	1642	17769	4416	67381	351086
5	Kottayam	75	3063	55706	3070	56576	2008907
6	Idukki	52	2247	40364	2164	38355	7332793
7	Ernakulam	91	91	1592	3735	68334	4823858
8	Thrissur	92	2642	50248	2692	50716	1805383
9	Palakkad	91	3689	64086	3900	66924	240305
10	Malappuram	102	776	74396	4921	94654	7010656
11	Kozhikkode	78	260	3590	4033	73048	642000
12	Wayanad	25	2375	29550	2510	33323	1492943
13	Kannur	81	3074	56486	2820	49222	2669192
14	Kasargode	39	154	3184	2136	40087	5376684
	Total	1000	24687	472394	44991	788189	38950989

Source: Kudumbashree Government of Kerala

Appendix 14.40
Schemewise Outlay and Expenditure of Welfare of Scheduled Tribes for 2007-08 and 2008-09 (As on 31.12.2008)

Rs. lakh

	Major Hood/Minor Hood of Davidonment (S-1	Implementing	Annual P	lan - 2007-08	Rs. lakh Annual Plan - 2008-09	
SI. No.	Major Head/ Minor Head of Development (Scheme- wise)	Agency	B.E	Actual Expenditure	B.E	Expenditure (As on 31.12.08)
0	1	2	3	4	5	6
	1.1 State Schemes/State Sponsored Schemes Education					
1	Tribal Hostels/ Improvement of Tribal Hostels	State Govt (ST Dept)	40.00	39.98	50.00	11.00
2	Construction of Boys' Hostels(50%SS)	"	90.00	27.58	100.00	4.82
3	Construction of Girls' Hostels(50%SS)	"	50.00	12.57	50.00	0.00
4	Scheme for Purchase of Land for Construction of Tribal Hostels	II	50.00	1.01	50.00	0.00
5	Management cost for the running of MRS	II .	750.00	847.22	950.00	726.68
6	Construction of Building for MRS/Ashram Schools(50 % State Share)	11	400.00	364.13	450.00	31.94
7	Tutorial Scheme for School Going Students and Failed Students	11	50.00	49.06	100.00	32.48
8	Special Incentives to Brilliant Students	II .	30.00	25.91	30.00	25.44
9	Bharat Darshan/Excursion & Study Tour	II	8.00	1.63	8.00	2.42
10	Post Matric Hostels for Tribal Students	II .	30.00	30.78	35.00	17.80
11	Peripatetic education to the Primitive Tribes	п	50.00	35.49	40.00	17.35
12	Grant-in-aid to Ambedkar Memorial Rural Institute for Development, Wayanad (AMRID)	n	3.00	3.00	3.00	3.00
13	Ayyankali Memorial Talent Search and Development Scheme	II.	40.00	34.63	30.00	20.53
14	Publicity Wing/Information Education and Communication Project(IEC)	п	30.00	16.01	40.00	23.21
15	Coaching and Allied Scheme (50%SS) Sub Total - Education	11	1.00 1622.00	0.48 1489.48	2.00 1938.00	0.00 916.67
16	Health Project-Mananthawady Idukki and Attappady	II	60.00	16.91	20.00	10.18
17	Providing Health Care Packages to Tribal Individuals affected by diseases	п	100.00	94.22	50.00	44.04
	Sub Total - Health Housing		160.00	111.13	70.00	54.22
18	Housing Programme Sub Total - Housing Other Schemes	η	200.00 200.00	199.98 199.98	400.00 400.00	167.59 167.59
19	Share Capital Contribution to KSDC for SC/ST for Implementing Schemes Benefiting Scheduled Tribes(SS 51%)	II	5.00	5.00	5.00	5.00
20	Support to Group Farms/ Grant-in-aid to Attappadi Co-operative Farming Society(ACFS) for Conducting a School and Hospital	п	150.00	150.00	100.00	100.00
21	Kerala Institute for Research, Training and Development Studies for SC/ST / (50%	п	20.00	15.43	20.00	2.95
22	SS)/Grant-in-aid to KIRTADS Assistance to Adikala Kendram	II	10.00	8.50	10.00	

0	1	2	3	4	5	6
	Strengthening of Planning and Monitoring					
23	Cell/Modernisation of Tribal Development	"	20.00	20.00	25.00	15.82
23	DepartmentMonitoring of schemes under		20.00	20.00	25.00	13.02
	TSP					
24	Assistance to Marriage of Scheduled Tribe	н	10.00	10.00	10.00	8.50
	girls Enforcement of Prevention of Atrocities Act					
25	(50%SS)	II	10.00	5.33	10.00	1.52
	Implementation of Kerala State Restriction in					
26	Transfer of Lands and Restoration of	n .	0.05	0.00	0.05	0.00
	Alienated Lands Act,1999					
27	Food support programmes	"	100.00	98.74	100.00	70.83
28	Special Programme for Primitive Tribal	н	85.00	81.82	100.00	53.62
20	Groups - Adiyans & Paniyans					
29	Tribal Promoters	II	200.00	165.00	240.00	168.26
30	National Trade and Arts Festival	II C	10.00	10.00	20.00	5.55
31	Extension of Kudumbasree to Tribal Areas	"	25.00	25.00	50.00	0.00
32	Organisation of Oorukootams	II .	10.00	8.42	5.00	2.33
33	Development of Tribes Living in Forest	II	100.00	100.00	200.00	0.00
34	Renovation / Revamping of Tribal Societies	"	20.00	20.00	20.00	0.00
35	Resettlement of Landless Tribals	State Govt (TRDM)	1300.00	1300.00	1500.00	0.00
36	Support to tribal Mission for Resettlement of Landless Tribals- One Time ACA	II			120.00	0.00
37	Enhancement of Facilities in Tribal areas (second phase)-One Time ACA	п		0.00	20.00	57.92
38	Improving Facilities and Renovation of Pre- Matric and Post-Matric Hosetles (ACA)	II			30.00	1.43
39	Drinking Water Supply to Tribal areas of Idukki District - One Time ACA	II			20.00	
	Sub Total-OTHER SCHEMES		2075.05	2023.24	2605.05	493.73
	Total 1.1 (State Schemes/State Sponsored		4057.05	3823.83	5013.05	1632.21
	Schemes)	State Govt				
40	1.2 Corpus Fund Under TSP	(ST Dept)	664.95	648.39	813.15	363.41
	1.3 Rural Development Schemes					
1	Sampoorna Gramin Rozgar Yojana (25%	State Govt (RD	95.00	67.17	1.00	0.00
1	SS)	Dept)	9 5.00	07.17	1.00	0.00
2	Indira Awaz Youana (25% State Share)	State Govt (RD Dept)	158.00	129.14	230.00	85.67
3	Swarnjayanthi Gram Swarozgar Yojana (25%SS)	State Govt (RD Dept)	107.00	40.51	132.80	18.20
	Total 1.3 (Rural Development Schemes)		360.00	236.82	363.80	103.87
	Total (1.1+1.2+1.3) (Welfare of Scheduled Tribes)		5082.00	4709.04	6190.00	2099.49

Source: Directorate of ST Development and CPMU

Appendix 14.41
Physical Achievements of Schemes for Scheduled Tribes Development Department for the period 2002-03 to 2008-09(upto 31-12-2008)

	2002-03 to 2006		Xth Plan		2008-09
SI.No	Name of Scheme	Unit	Total 2002-2007	2007-08	(up to 31.12.2008)
1	2	3	4	5	6
	1. State Sector Schemes				
1	IEC Project [Information, Education & Communication	Project	55	1	1
2	Improvement of Tribal Hostels	Hostel	100	18	1
3	Tutorial scheme for schoolGoing students and failedstudents	student	17712	731	541
4	Girls Hostels [50% State share]	Hostels	6	2	0
5	Boys Hostels [50% State share]	Hostels	5	3	0
6	Purchase of land for construction of tribal hostels	No. of plots	3	0	0
7	Special Central Assistance	families		3143	945
8	Bharat Darshan	students	268	49	87
9	Health project Mananthavady under Article 275[1]	project	1	4	3
10	Support to Group Farms	families	745	475	475
11	Grant in Aid to Ambedkar Memorial Rural Institute for Development [AMRID], Wayanad	beneficiaries	72	53	50
12	Modernisation of Tribal Development Department	Project	3	1	1
13	Share capital contribution toKerala State Development Corporation for SC/ST forImplementing Schemes benefitting Scheduled Tribes [State share 51%]	Share Capital	0	4 lakhs	4 lakhs
14	Grant in aid to Kerala Institute forResearch Training and Developmentstudies for SC/ST [State share 50%]	Project	6	1	1
15	Special Programme for Primitive TribalGroups · Adiyas and Paniyas	Beneficiaries	35833	6436	1937
16	Tribal promoters	promoter	4907	985	534
17	Housing Programme[including Spillover]	Nos.		615	356
18	Special Incentive to Brilliant students	students	3420	910	432
19	Assistance for Marriage of Scheduled Tribe Girls	beneficiary		100	45
20	Enforcement of Prevention of Atrocities Act 1989 [State Share 50%]	Persons	64	31	3
21	Providing Health Care Package toTribal Individuals affected by diseases	Beneficiary	28927	19416	4312
22	Food Support Programme	families	249676	39990	4920
23	Assistance to Adikala Kendram	Project	2	1	1
24	Post-matric Hostels for Tribals	students	7576	119	134
25	Extension of Kudumbasree in Tribal Areas	families		2000	0
26	Ayyankali Memorial Talent Search and Development Scheme	students	2704	834	362
27	Organisation of Oorukuttom	Oorukkoottam	3740	993	400
28	Resettlement of Landless Tribals	families	1766	1717	0
29	Model Residential Schools [18 Nos] [Revenue]	students	14044	3945	4258
30	Corpus Fund for Tribal Sub Plan	Project	4532	74	58

			Xth Plan		2008-09
SI.No	Name of Scheme	Unit	Total	2007-08	(up to
			2002-2007		31.12.2008)
1	2	3	4	5	6
31	Trade & Arts Festivals	Nos.		2	1
32	Peripatetic Edcuation to the Primitive Tribes	Centres	21	27	27
33	Construction of building for Ashram Schools [50%CSS]	Nos.		8	4
34	Improving facilities in ST Hostels[ACA]	Hostels		27	0
35	Enhancement of Facilities in Tribal Areas[ACA]			0	0
36	Provision of basic needs to PTG's [ACA]	Houses		475	225
37	Guaranteeing Quality Education to Tribal students [ACA]			0	0
38	Vocational Training Institute [100% CSS]	students	81	61	45
39	Upgradation of Merits of ST students [100% CSS]	students	29	9	7
40	Coaching & Allied Scheme[50% CSS]	students		9	0
41	Development of tribes living in forest			0	0
42	Revamping of Tribal Society	Nos.		5	0
43	Health Insurance[ACA]			0	0
44	Drinking Water schemes in Idukki [ACA]	Settlement		13	0
45	Post Matric Scholarship [100% CSS]	Students	8211	8107	4228
46	Construction of MRS, Idukki	School	2	1	1
47	Construction of Attappady Health project Hospital	Project	2	1	1
48	Construction of MRS, Njaraneeli, Art. 275[1]	School	2	1	1
49	Construction of building for Tribal complex			0	0
50	Grant-in-aid to Federation			0	0
51	New Central Sector Scheme for PTG's [100% CSS] [Insurance coverage]	Families	500	142	0

Source :Scheduled Tribe Development Department

Appendix 14.42(A) DETAILS OF LUMPSUM GRANT, STIPEND ETC. TO SCHEDULED TRIBES STUDENTS DURING THE YEAR 2007-08

(Rs)

		N	umber of stude	nts benefitte	ed and amou	ınt sanctione	(R s)	
			sum Grant		pend	Pocket Money		
SI.No.	Name of Sector	No. of Students	Amount	No. of Students	Amount	No. of Students	Amount	
1	2	3	4	5	6	9	10	
1	Lower Primary	32601	3097095	32000	1120000	48	12600	
2	Upper Primary	22022	3413410	21392	855680	33	14850	
3	High School	14803	3256660	13852	623340	39	17550	
4	Plus two Vocational Higher	5212	2475700	5133	1503969	157	439437	
5	Secondary	165	78375	156	45708	9	15775	
6	I.T.I	130	40040	133	29260			
7	I.T.C	73	22484	73	16060			
8	Polytechnics	109	61585	79	23147	73	33639	
9	Degree	531	228775	328	96104	376	894504	
10	Post Graduation	313	211275	242	70906	132	318890	
11	Engineering							
a)	Government Aided	280	280000	181	53033	148	635398	
b)	Self Financing	72	72000	48	14064	33	237224	
12	Medical							
a)	Government	217	298375	81	23733	128	439481	
b)	Co-operation	9	12375	9	2637	9	6547	
c)	Self financing	102	140280	70	20510	59	240444	
13	Others(specify)	1609	456085	1563	457959	146	676451	
	Total	78248	14144514	75340	4956110	1390	3982790	

Appendix 14.42(B) DETAILS OF LUMPSUM GRANT, STIPENDETC. TO SCHEDULED TRIBES STUDENTS DURING THE YEAR 2008-09 (Up to 31-10-2008)

(Rs)

		Nun	nber of studen	ts benefitte	d and amou	unt sanction	(Rs) ned
		Lumps	um Grant	Sti	oend	Pocket	Money
SI.No.	Name of Sector	No. of Students	Amount	No. of Students	Amount	No. of Students	Amount
1	2	3	4	5	6	9	10
1	Lower Primary	38114	5335960	37506	2062830	35	10380
2	Upper Primary	24433	5863920	23978	1438680	73	16550
3	High School	16167	5335110	15485	1083950	61	24110
4	Plus two Vocational Higher	4433	3169595	4418	1943920	130	79687
5	Secondary	167	119405	167	73480	10	3897
6	I.T.I	83	43990	83	33200		
7	I.T.C	90	47700	90	36000		
8	Polytechnics	190	107350	167	73480	33	42568
9	Degree	1909	1508110	1744	767360	203	247694
10	Post Graduation	205	207050	159	69960	50	523942
11	Engineering						
a)	Government Aided	234	351000	166	73040	74	193811
b)	Self Financing	55	82500	27	11880	24	120807
12	Medical						
a)	Government	70	144550	58	25520	35	210284
b)	Co-operation	5	10325	5	2200	5	2140
c)	Self Financing	56	115640	28	12320	29	249055
13	Others(specify)	1396	337790	1292	568480	68	224755
							1949680

Appendix 14.43

Number of Houses constructed by the ST Development Department

		200	6-07	200	7-08	2008-09[up	2008-09[upto 31.10.08]	
	District	No. of Houses undertaken in different Schemes	No of Houses completed including spillover	No. of Houses undertaken in different Schemes	No of Houses completed including spillover	No. of Houses undertaken in different Schemes	No of Houses completed including spillover	
Thiruvananthapurar	n	10	Nil	16	7	9	4	
Kollam		5	Nil	6	3	15	2	
Pathanamthitta		19	14	25	5	5	2	
Alappuzha		Nil	Nil	5	5	Nil	Nil	
Kottayam		5	5	16	10	8	2	
Idukki		44	43	33	20	14	12	
Ernakulam		5	5	8	8	10		
Thrissur		61	1	12	19	6	22	
	Palakkad	175	9	18	4	24	43	
Palakkad	Attappady	130	11	20	25	20	85	
Malappuram		166	10	20	98	11	20	
Kozhikode		14	14	15	15	15		
	ITDP Wayanad	161	28	45	92	55	29	
Wayanad	TDO , Sulthan Bathery	354	43	56	125	61	58	
	TDO, Mananthavady	202	52	48	118	69	35	
Kannur		16	8	14	4	10	4	
Kasargod		143		11	57	15	38	
Total		1510	243	368	615	347	356	

Source: Directorate of ST Development

Appendix 14.44 Statement showing the Land Distributed to Landless tribals by the TRDM [as on 31.3.08]

		Extent/fa	1.0.00		
District	Location	acre	No of families	Total[acre]	Type of land
Kasaragad	[Dotty omolo]		19	3.18	(Pattayam)
Kasaragod	[Pattyamela]	1.00	50	70.25	(Pattayam)
Wayanad	Kunnathidavaka	1.00	39	39	Revenue
		RR.5.00	305	1525	
	Sugandhagiri	RR 2.00	30	60	Project land
	Sugariuriagiii	RR.5.00	65	325	Frojectiand
		RR.1.00	22	22	
		RR	34	170	
	Pookot	5.00	8	40	Project land
		RR. 2.00	30	60	
	Karapuzha	RR. 0.75 RR 1.00	84 21	63 21	Project land given in possession to displaced families document not given
	(Pattayamela)	100	23	1.9	Surplus land
	Cheengeri		100	135	Existing possession
			118		
Kannur	Pazhassi	1.1	132	145.2	Irrigation P
	Koodali Kolayad Chruvancherry	1.00	17	17	Surplus land
	Kandamkunnu		6	5.80	Surplus land
	Neerveli				
	Trippangottur	1.00	10	10.00	Surplus land
	Mokeri	1.00	5	5	Surplus land
	Kolayad		6	1.00	Surplus land
	Surplus land distribution [I acre each to 10 fa given on 7.11.03 reduced from report of 29.10.04]		224	120.37	Surplus land
	Alakkode	1.00	340	340.00	Revenue
	Aralam Farm	1.00	840	840	Revenue
		1.00	1717	1717.00	

		Extent/fa			
District	Location	acre	No of families	Total[acre]	Type of land
Malappuram	Surplus land		61	46.38	Surplus land
Palakkad	Malampuzha II		10	4.44	Surplus land
raiakkau	village		10	4.44	Surpius iariu
	Muthukad	1.00	41	41.00	Estate land
	Vattachira farm	5.00	39	195.00	
Kozhikode		5.00	6	30.00	Tribal
		1.00	30	30.00	Project
	Perambra	1.00	202	202.00	Revenue
		1.00	102	102.00	revenue
Thrissur	Thalappilly	0.25	20	5.68	Revenue
Ernakulam	Kuttumpuzha		168	400	Tribal settlement
	Neriamangalam	0.1-0.2	128	18.9	Agricultural Farm land
ldukki	Marayur	1.50	242	363	Revenue
	Kundala	5.00	72	360	Revenue
	Pooppara	1.00	47	47	Revenue
	Alakkode	1.00	3	3	Revenue
	Chinnakkanal	1.00	301	471	
		2.50	68	77.1	
		1.00	32	32	Revenue
		1.00	30	30	
		1.00	277	277	
Alappuzha	Cherthala	25 cent	33	7.62	Surplus land
	Kallada IP		79	20.08	Irrigation P
	(Pattayamela)		2	0.05	(Pattayam)
Kottayam	Madukka	1	19	19	Revenue
Pathanamthitta	(Pattayamela)		14	1.39	Record of rights
	Tharamarappally estate	avg 80 cents	14	10.80	Surplus land
Kollam	Kuriottumala	-	128	100.00	AH Dept.
	Kottarakkara		0	14.68	Surplus land
	[Mankode, Veliyam, Kumil and Chithra villages]		6413	8568.72	

Source: Directorate of ST Development

Appendix 14.45
District-wise distributions of surplus land to SC/ST as on 31.10.2008

	Number of be	Number of beneficiaries Land Distribu		
Name of District			(Area in	acres)
	SC	ST	SC	ST
Thiruvananthapuram	2562	0	116.01	0
Kollam	3092	59	272.27	5.27
Pathanamthitta	60	8	6.94	0.54
Alappuzha	3452	77	780.26	1.66
Kottayam	1918	90	394.57	27.28
Idukki	90	14	8.28	2.5
Ernakulam	2408	90	358.21	1.92
Trissur	4889	187	278.8	10.34
Palakkad	11536	1374	2380.09	602.35
Malappuram	10358	126	1325.62	27.9
Kozhikode	3596	21	355.76	1.56
Wayanad	1286	2372	361.35	974.01
Kannur	9146	2150	2009.53	510.66
Kasargod	4348	887	1343.17	276.48
Total	58741	7455	9990.86	2442.47

Source: Survey and Land Records Department

Appendix 14.45
District-wise distributions of surplus land to SC/ST as on 31.10.2008

	Number of be	Number of beneficiaries Land Distribu		
Name of District			(Area in	acres)
	SC	ST	SC	ST
Thiruvananthapuram	2562	0	116.01	0
Kollam	3092	59	272.27	5.27
Pathanamthitta	60	8	6.94	0.54
Alappuzha	3452	77	780.26	1.66
Kottayam	1918	90	394.57	27.28
Idukki	90	14	8.28	2.5
Ernakulam	2408	90	358.21	1.92
Trissur	4889	187	278.8	10.34
Palakkad	11536	1374	2380.09	602.35
Malappuram	10358	126	1325.62	27.9
Kozhikode	3596	21	355.76	1.56
Wayanad	1286	2372	361.35	974.01
Kannur	9146	2150	2009.53	510.66
Kasargod	4348	887	1343.17	276.48
Total	58741	7455	9990.86	2442.47

Source: Survey and Land Records Department

Appendix 14.46

Details of Schemes under Corpus Fund [2008-09] undertaken by ST Development Department

(Rs.lakh)

SI. **Physical** Name of Scheme Outlav **Expenditure** Unit No **Target** 4 5 1 6 ST youths office Management Training programme 2008-09 27.36 13.68 76 **Trainees** ST beneficiary contribution to Anakatty Kottathara water supply 2 11.23 11.23 families 703 schemes at Sholayur Panchayat, [Jalanidhi Project] Purchase of furniture to the MRS, Noolpuzha[+2 course] 25.6 25.6 students 105 Purchase of furniture to the MRS Kannur[+2course] 20.95 20.95 students 105 4 Water suppy scheme in Nellipathy ST colony, Agali Grama 6.25 6.25 families 131 Panchayat Water supply scheme at Sungam Tribal settlement, Parambikulam Forest Division, Muthalamada, Panchayat, 14.00 14.00 families 102 Palakkad Water supply scheme to the Moonady ST colony, Edapatta 12.20 12.20 families 16 Grama Panchayat, Malappuram District Electification of seven ST colonies in different families districts[63,78,795/-] Thavinhal ST colony Pananchery Panchayat, Thrissur 12.80 12.80 families 34 0.47 Kanivayal settlement, Kanjirapuzha panchayat, Palakkad District 0.47 families 5 Vettilachola ST colony, Kanjirappuzha panchayat, Palakkad 20.49 20.49 families 57 С District Gandhinagar Karimpa ST colony thavinjal Panchayat, Wayanad 1.82 1.82 families 37 Irumanthour-Kalimandam ST colony, Thavinjal Panchayat, 19.03 19.03 families 68 е Wayanad Mullumala ST colony in Piravanthoor Panchayat, Kollam District 7.69 7.69 families 55 Kolimoola Kattunaika colony, Sulthan Bathery Wayanad District 1.50 1.50 families 16 Training and skill development of Adiya and Paniya of Mananthavady panchayat, through Kerala State Bamboo 11.85 11.85 families 50 corporation Ltd. Entire ST 10 Tribal Survey 2008-09 through KILA 30.37 30.37 families families in the State Spillover Housing [sanctioned during 2007-08] 33.68 33.68 families 132 Drinking Water Supply Scheme, Poolakunnu ST colony, 12 3.45 3.45 families 12 Meppady, Wayanad Drinking Water supply scheme at Vattkkudy Kattunaikan colony, 6.33 6.33 families 50 Vythiri panchayat, Wayanad Drimking Water Supply scheme to the Kallumala Rattakolly St 13.00 13.00 families 47 colony, Meppady Panchayat, Wayanad District Improvements of Ukkini ST colony Road Padiyarattu Panchayat 15.00 15.00 families 34 Wayanad Drinking water supply scheme to the Kuniyimal, kuttivayal ST 13.63 13.63 families 33 colony, Thavinhal Panchayat, Wayanad Electrification of 4 ST colonies in Kasaragod District 17 Pollakkade-Kanam ST colony, Pullar Periya Panchayat 0.31 0.31 families 6 а h Kurumannam ST colony Balal Panchayat 7.78 7.78 families 20 Panangad ST colony, KodamBelur Panchayat 1.04 1.04 families 26 С Athikoth A.C. nagar ST colony Kanhangad Mincipality 1.41 1.41 families 22

SI. No	Name of Scheme	Outlay	Expenditure	Unit	Physical Target
1	2	3	4	5	6
18	Electrification of Vattakundu Kattunaika ST colony, Vythiri Wayanad	14.67	14.67	families	50
19	Improvement of Vellara Muthappan colony road in Thirunelli panchayat Wayanad	13.28	13.28	families	36
20	Improvements of Mankani Karakkamala Road in Panamaram Panchayat, Wayanad	14.6	14.6	families	31
21	Drinking Water Supply scheme in Manjakuzhy Muthuvan colony, Rajakumari Panchayat, Idukki	12.84	12.84	families	60
22	Improvements of Koikkadudi Chinnaparakudi road in Adimali panchayat , Idukki	13.84	13.84	families	243
23	Improvements of Peringassery- Thazhethe Moolakkadu road Udumbannor Panchayat, Idukki	10.52	10.52	families	60
24	Improvements of Kattilakuzhy Kallana ST colony road in Peringamala Panchayat Thiruvananthapuram District	18.82	18.82	families	203
25	Improvements of Kottoor-Mankode-Chonampara Road in Kuttichal Panchayat, Thiruvananthapuram District.	16.00	16.00	families	400
26	Construction of Footpath at Cheengavallam ST colony in Ambalavayal Panchayat, Wayanad District	6.17	6.17	families	40
27	Construction of side protenction wall to Nelliyodi Paniya colony, Kottiyour panchayat, kannur District	8.50	8.50	families	26
28	Improvements of Arullakkodu Plachikkan road in Kinananor Karinathalam Grama Panchayat Kasargod district	5.45	5.45	families	49
29	Improvements of Namburmala ST colony road in Balal Panchayat kasargod	6.05	6.05	families	16
30	Improvements to the Chali ST colony road in Edakkan Panchayat Malappuram	5.50	5.50	families	13
31	Construction of side protection works to Akambadam Paniya St colony, chaliyar Panchayat Malappuram	6.55	6.55	families	20
32	12 months job oriented para medical certificate course in Ayurveda for Adiya, Paniya and Kattunaika youth in Wayanad District through Kerala Ayurvedic studies & Research society Kottakkal.	24.75	24.75	Trainees	90
33	Improvements of Kalappara ST colony road in Chelakkara Panchayat, Kollam District	8.85	8.85	families	35
34	Improvements of Vullumala Attumanpuram ST colony road in Kulathupuzha panchayat Kollam District	5.5	5.5	families	50
35	Construction of culvert at Thekkamthony ST colony in Kanjikuzhy Panchayat, Idukki	12.5	12.5	families	37
36	Constructing of Plamoottilpady 10acre colony road in Erumeli Panchayat, Kottayam	3.9	3.9	families	43
37	Construction of Drain, side Protection and foor path at Kayakunnu, Kattunaika colony, Nenmeni Panchayat, Wayanad	4.00	4.00	families	27
38	Formation of Kelamangalam Kuruma Kattunaika colony road, Poothady Panchayat, Wayanad	10.95	10.95	families	28
39	Construction of Drainage, side protection works at Chundapadi Paniya colony, Noorpuzha Panchayat, Wayanad District	4.45	4.45	families	53
40	Construction of side protection works and drainage at Marukara Kattunaika colony in Noolpuzha Panchayat, Wayanad	4.00	4.00	families	14
41	Tarring and side protection works to Kurisummoodu, Pampini road in Chittar Panchayat, Pathanamthitta District	13.54	13.54	families	30
42	Concreting of Ayammoottipadi-Sive temple road in Erumeli Panchayat, Kottayam District	5.15	5.15	families	52

SI. No	Name of Scheme	Outlay	Expenditure	Unit	Physical Target
1	2	3	4	5	6
43	Concreting of Kalaketty-Azhuthakadavu sive temple road in Erumeli Panchayat, Kottayam	4.00	4.00	families	59
44	Payment of cash portion of the SGRY[SCP] road works[six] implemented in Idukki District during 2003-04 [Order of the Kerala Lok Ayukta]	15.88	15.88	families	
45	Funds sanctioned to the MRS Nilambur for the construction of semi permananent building [Tender excess]	6.27	6.27	students	306
46	Construction of 25 Houses to the Malavettuva tribal families in Balal Grama Panchayat, Kasaragod District	25	25	families	25
47	Electrification of 4 ST colonies in Kasargod District [735390]				
а	Poliyamkunnu ST colony Bedadka Panchayat, Kasaragod	1.68	1.68	families	21
b	Peralam ST colony Bedadka Panchayath, Kasaragod	2.92	2.92	families	15
С	Maruthalam ST colony Bedadka Panchayat, Kasaragod	1.15	1.15	families	9
d	Kuttiyanam ST colony Bedadka Panchayat, Kasaragod	1.61	1.61	families	12
48	Concreting of footpath of Thazheyidam Paniya colony Thariode Panchayat, Wayanad	1.3	1.3	families	15
49	Additional amounts to the Elaveezha Poonchira Drinking Water supply scheme in Melukavu Panchayat, Kottayam District	15.78	15.78	families	420
50	Improvements to Kesavampady Kohiyalakudy road, Mankulam Panchayat, Idukki District	25.00	25.00	families	60
51	Construction of 50 houses to the Employees in the Priyadarshini Tea Estate	50.00	50.00	families	50

Source: Directorate of ST Development

Appendix 14.47
Kerala State Development Corporation for SCs/STs Limited

(Rs.in lakh)

			tlay lakhs)	Expen (Rs. in		Ph		& Achieveme of persons)	nts
SI.No	Scheme	2007-08	2008-09	2007-08	2008-09 -	200	7-08	2008-09(U Decen	
		2007 00	2000 03	2007 00	2000 00	Target	Achiev- ement	Target	Achie- vement
	Generating Schemes								
KSDC S									
	ary Oriented Scheme	106.00	115.00	122.95	222.91	212	254	230	409
2 Profession	onal Service Scheme	5.00	5.00	0.00	2.50	5	0	5	3
3 Foreign I	Employment Scheme	3.75	3.75	2.00	2.25	15	8	15	7
4 Petrol Aι	uto for Women	13.50	12.60	4.37	7.31	15	5	14	10
5 Scheme	for Tribnal Medicine Practitioners	0.00	0.00	1.60	1.55	0	1	0	2
6 Readyma	ade Garments Unit	0.00	0.00	0.75	0.00	0	1	0	2
NSFDC :	Schemes								
7 Mini Ven	nture Schemes	37.50	90.00	13.30	14.26	25	14	60	13
8 Transpor	rt Scheme (3 W Auto Pick up Van)	18.20	13.00	12.72	5.26	14	10	10	6
	rchase Scheme for Agri. Labourers	240.00	337.50	117.42	221.63	160	90	225	159
•	redit Finance Scheme	87.50	62.50	71.43	115.73	350	334	250	456
	redit Finance Scheme(SGSY)	0.00	25.00	0.00		0	0	100	(
12 Mahila S	Samridhi Yojana	15.00	40.00	8.98	53.65	100	61	160	166
	C Schemes								
	rt Scheme (Petrol Auto)	25.40	13.01	22.24	10.88	30	27	15	15
•	rt Scheme (3W Auto Pick Up Van)								
	nterprises Loans	14.50	3.75	10.74	16.21	45	30	13	24
	i Mahila Sasakthikaran Yojana	12.50	5.00	8.06	15.33	25	19	10	32
17 Loan to	Tribal Enterpreneurs	12.50	7.50	0.00		25	0	15	(
Other So	ocial Welfare Schemes								
18 Educatio	nal Loan	53.00	27.00	25.20	24.65	106	51	54	48
19 Foreign I	Education Loan	10.00	30.00	0.00	0.00	1	0	3	(
20 Marriage	e Assistance Loan	178.50	140.00	178.66	136.13	357	376	280	288
21 Personal	I Computer Loan	40.00	60.00	25.73	57.06	100	67	150	149
22 Personal	I Loan to Government Employees belonging to ST	0.00	62.50	0.00	0.00	0	0	125	(
23 Two Who	eeler loan to Government Employees belonging to SC	0.00	50.00	0.00	0.00	0	0	100	(
Training	Programmes								
_	ponsored programmes	0.00	0.00	0.00	1.00	0	0	0	50
	Sponsored programmes	8.00	20.00	8.76	1.10	200	204	550	23
	C sponsored programmes	0.00	0.79	0.13	0.17	0	37	30	1
	Y(given to the beneficiaries assisted during the year								
	under the income Generating Schemes)			106.30	12.03				
Total	<u>.</u>	880.85	1123.90	741.34	921.61	1785	1589	2414	187

Source: KSDC for SC/ST

Appendix 14.48
Kerala State Backward Classes Development Corporation Ltd.

Physical and Financial Achievements 2007-08 and 2008-09 (up to 31.12.2008)

		Fund re	ceived	Expen	diture	Physical Target and Achievements (Nos)				
SI No.	Source of Fund					200	7-08	2008-09		
		2007-08	2008-09*	2007-08	2008-09*	Target	Achieve ment	Target	Achievem ent *	
0	1	2	3	4	5	6	7	8	9	
1	Government of Kerala	440.00	233.00	3578.00	2940.00	8225	4577	4857	4423	
2	Fund Incurred by KSBCDC**	3032.85	2999.88	4432.00	3534.00	6725	24210	8360	5102	
3	NBCFDC	3427.00	3000.00	3943.00	3098.00	4415	6812	6710	4184	
4	NMDFC	2700.00	2900.00							
5	Opening Balance	1914.03	439.12							
	Total	11513.88	9572.00	11953.00	9572.00	19365	35599	19927	13709	

Source: Kerala State Backward Classes Development Corporation Ltd

Appendix 14.49

KERALA STATE DEVELOPMENT CORPORATION FOR CHRISTIAN CONVERTS FROM SCHEDULED CASTES AND THE RECOMMENDED COMMUNITIES LTD., KOTTAYAM

(Rs. lakh)

		Out	lay	Expen	diture		Targets and ment(Nos.)
SI.No	Scheme	2007-08	2008-09	2007-08	2008-09 (Upto 31.10.08)	2007-08	2008- 09(uptp 31.10.2008)
	1	2	3	4	5	6	7
1	Agricultural Land						
'	Purchase Scheme	200	150	13.07	11.43	19	14
2	House Construction	100	100				
	1st Instalment			13.5	15.6	90	97
	2nd Instalment			24	22.63	96	82
	3rd Instalment			11.1	8.15	111	77
3	House Revamping	60	7.5	0.10	0.75	1	3
4	Foreign Employment	5	7.5				
5	Marriage Loan	75	15	5.61	5.08	23	14
6	Incentive Grant	10	10	10.53	9.83	1165	1072
7	Landless/House less	100	60				3
	1st Instalment				0.18		1
	2nd Instalment				0.2		1
	3rd Instalment				0.35		1
8	Self Employment						
0	Scheme	265			24.18		50
	1st Instalment			17.86		37	
	2nd Instalment			0.51		2	
9	Education				1.4		2
	1st Instalment			0.13		1	
	2nd Instalment			0.13		1	
	3rd Instalment			0.3		1	
10	Administrative expenditu	ire		62.99	55.23		
	Total	815	350.00*	159.83	155.01	1547	1417

* State Govt. assistance only Source: KSDC for Christian Converts

^{*} Up to 31st October 2008, ** Own Accruals

Appendix 14.6

District wise details of Rural Micro Enterprises(RME)

Programme- Status of Individual Enterprises as on 31-10-2008

SI.		200	7-08	Cumula	ative
No.	District	No. of	Subsidy	No. of	Subsidy
		enterprises(I)	(Rs)	enterprises (I)	(Rs)
1	Trivandrum	7	47500	249	1671400
2	Kollam	19	1425000	221	1939500
3	Pathanamthitta	1	7500	2	15000
4	Alapuzha	24	180000	82	386515
5	Kottayam	34	255000	35	262500
6	Idukki	41	390000	773	1902350
7	Eranakulam	0	0	13	97500
8	Thrissur	39	289500	53	387300
9	Palakkad	66	4920000	119	5317500
10	Malapuram	108	4675050	278	19460000
11	Kozhikkode	10	75000	12	90000
12	Wayanad	5	37500	6	45000
13	Kannur	35	262500	51	182500
14	Kasargod	0	0	67	2279500
	Total	389	12564550	1961	34036565

Source: Kudumbashree Government of Kerala

Appendix 14.7

District wise details of Rural Micro Enterprises(RME)

Programme- Status of Group Enterprises as on 31-10-2008

		2007	'-08	Cumulative			
SI. No.	District	No. of enterprises (G)	Subsidy (Rs)	No. of enterprises (G)	Subsidy (Rs)		
1	Trivandrum	267	14687469	348	17887469		
2	Kollam	120	4681000	380	16128500		
3	Pathanamthitta	274	24345000	406	27101000		
4	Alapuzha	34	1260000	450	19810000		
5	Kottayam	104	4820000	104	4820000		
6	ldukki	94	3748500	559	27305450		
7	Eranakulam	75	3232515	368	168282515		
8	Thrissur	72	4611245	165	11545495		
9	Palakkad	186	8018250	505	23457250		
10	Malapuram	128	889350	228	1710000		
11	Kozhikkode	84	3610000	138	5890000		
12	Wayanad	40	1971653	93	4249153		
13	Kannur	51	2379500	90	4004000		
14	Kasargod	34	2154000	179	10657600		
	Total	1563	80408482	4013	342848432		

Source: Kudumbashree Government of Kerala

Appendix 14.8

Financial Achievement under SGSY, IAY, JGSY, EAS/SGRY

(Rs in Lakhs)

SI		S	GSY		IAY		EAS	S	GRY	NREGA		To	otal
No	Year -	Total Fund	Expenditure	Fund	Expenditure								
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	2003-04	2127.44	2054.13	6245.27	5767.77	7535.14	5628.49	0.00	0.00	0.00	0.00	15907.85	13450.39
2	2004-05	2514.48	2445.14	8212.78	7839.16	0.00	0.00	16897.32	13565.39	0.00	0.00	27624.58	23849.69
3	2005-06	2491.03	2420.47	7765.82	7150.22	0.00	0.00	16563.85	15532.67	0.00	0.00	26820.70	25103.36
4	2006-07	2772.86	2717.76	7865.32	7062.58	0.00	0.00	11045.63	10241.71	4837.18	2789.73	26520.99	22811.78
5	2007-08	4112.51	3932.07	10899.09	10186.83	0.00	0.00	11835.40	9534.75	9900.68	8336.83	36747.68	31990.48
	2008-09 (Upto Novembe r 08)	2845.51	2119.46	9460.31	6445.48	0.00	0.00	0.00	0.00	16340.16	9147.36	28645.98	17712.30
	Total	16863.83	15689.03	50448.59	44452.04	7535.14	5628.49	56342.20	48874.52	31078.02	20273.92	162267.78	134918.00

Source: Commissionerate of Rural Development

Appendix 14.9
EMPLOYMENT GENERATION UNDER NREGA FURING THE YEAR 2006-07,2007-08 AND 2008-09(UPTO NOVEMBER 2008)

			ssued job card			ouseholds wh			ol.3number of p		Out of Col.No		
			ing month)			led wage empl			employment		4 No. Of	No of	Cumulative No.
Name of District	SCs		Others			(fresh)house hold demanded during the month	Total	upto the	(fresh) household provided employment during the month	Total	individual applicants provided employment during the month	No. of Women provided employment of Col.5	of households which have completed 100 days of employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	2006-	-07											
Wayanad	5007	13299	55840	74146	38423	9585	48008	35835	8122	43957	56195	30053	282
Palakkad	31639	5912	102133	139684	44168	12751	56919	41887	13263	55150	57038	42575	255
Total	36646	19211	157973	213830	82591	22336	104927	77722	21385	99107	113233	72628	537
	2007-	-08											
Wayanad	6710	32177	76121	115008	58907	5219	64126	62219	1856	64075	85527	56160	5235
Palakkad	40165	13076	137184	190425	69306	6874	76180	69306	6874	76180	79233	67321	3255
Kasaragod	5411	4553	68222	78186	16355	5262	21617	12476	5795	18271	19322	15274	23
Idukki	18418	10943	66000	95361	16058	10392	26450	10837	12666	23503	24034	21212	5
Total	70704	60749	347527	478980	160626	27747	188373	154838	27191	182029	208116	159967	8518
	2008	-09											
Alappuzha	21053	673	151960	173686	10074	4908	14982	9972	4879	14851		45770	0
Eranakulam	11600	635	64280	76515	14544	8685	23229	14229	8705	22934		52529	1
Idukki	20209	11842	98319	130370	39329	1437	40766	39111	1437	40548		44614	178
Kannur	3760	3960	95029	102749	19640	4824	24464	19471	4603	24074		61825	0
Kasaragode	5969	5044	73097	84110	21070	0	21070	19837	1195	21032	<u>o</u>	37900	129
Kollam	11451	176	67050	78677	10186	4538	14724	9408	4613	14021	Data Not Available	821000	0
Kottayam	6783	1207	50929	58919	7354	752	8106	6863	697	7560	Ava	80800	0
Kozhikode	9635	704	92834	103173	10519	3642	14161	10080	3237	13317	Not	172000	0
Malappuram	24053	2275	89423	115751	22768	7387	30155	22124	7701	29825	ata	1684525	4
Palakkad	43432	13564	146561	203557	64078	3947	68025	64065	3960	68025	Δ	91483	295
Pathanamthitta	12015	453	31551	44019	9486	4587	14073	9221	4758	13979		70060	0
Thiruvananthapuram	16194	1441	99461	117096	13043	13598	26641	12738	12401	25139		698010	0
Thrissur	25815	726	74790	101331	23890	8457	32347	22513	8663	31176		128200	0
Wayanad	7476	32878	82430	122784	38512	8147	46659	38376	8085	46461		420000	304
Total	219445	75578	1217714	1512737	304493	74909	379402	298008	74934	372942		4408716	911

Source: Commissionerate of Rural Development

Appendix 16.1

Merchandise trade, world, by region and selected country, 2007 (\$bn and %)

		Ex	orts				Imp	orts		
	Value		nnual % cl	hange		Value	Δ	ınnual % ch	ange	
	2007	2000- 07	2005	2006 2	2007	2007	2000-07	2005	2006	2007
World	13570	12	14	16	15	13940	11	14	15	14
North America	1854	6	12	13	11	2704	7	14	11	6
United States	1163	6	10	15	12	2017	7	14	11	5
Canada	418	6	14	8	8	390	7	15	11	9
Mexico	272	7	13	17	9	297	7	12	16	11
South and Central America										
a	496	14	25	21	15	455	12	23	22	26
Brazil	161	17	23	16	17	127	12	17	23	32
Other South and Central America a	335	13	26	24	14	328	12	25	21	23
Europe	5769	12	9	13	16	6055	12	10	15	16
European Union (27)	5314	12	8	13	16	5569	12	10	14	15
Germany	1 327	13	7	14	20	1 059	11	9	17	17
France	552	8	3	7	11	613	9	7	7	13
United Kingdom b	436	6	11	17	-3	617	9	9	17	3
Netherlands	551	13	14	14	19	491	12	14	15	18
Commonwealth of										
Independent States (CIS)	508	20	28	25	19	377	24	25	31	34
Russia	355	19	33	25	17	223	26	29	31	35
Africa	422	16	30	19	15	355	15	21	14	22
South Africa	70	13	12	13	20	91	17	17	24	18
Africa less South Africa	352	17	34	20	14	264	15	23	11	24
Oil exporters c	247	19	44	21	14	97	18	28	9	25
Non oil exporters	105	13	15	17	16	167	13	21	11	24
Middle East	721	15	35	21	10	462	16	21	13	23
Asia	3798	13	16	18	16	3528	13	17	16	14
China	1 218	25	28	27	26	956	23	18	20	21
Japan	713	6	5	9	10	621	7	13	13	7
India	145	19	30	21	20	217	23	43	23	24
Newly industrialized economies (4) d	936	10	12	15	11	935	9	13	16	12
Memorandum items:										
Developing economies	4967	15	22	20	16	4517	14	18	17	18
MERCOSUR e	224	15	21	16	18	184	11	20	23	31
ASEAN f	863	10	15	18	12	773	11	17	14	12
EU (27) extra-trade	1695	12	11	11	16	1949	11	15	16	15
Least Developed Countries	420	10	27	2.4	17	440	45	24	45	
(LDCs)	120	19	36	24	16	118	15	21	15	17

a. Includes the Caribbean. For composition of groups see the Technical Notes of WTO, International Trade Statistics, 2007. b. The 2007 annual change is affected by a reduction in trade associated with fraudulent VAT declaration. For further information, refer to the special notes of the monthly UK Trade First Release (c. Algeria, Angola, Cameroon, Chad, Congo, Equatorial Guinea, Gabon, Libya, Nigeria, Sudan.d. Hong Kong, China; Republic of Korea; Singapore and Chinese Taipei. e. Common Market of the Southern Cone: Argentina, Brazil, Paraguay, Uruguayf. Association of Southeast Asian Nations: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam Source: WTO Secretariat.

Appendix 16.11

Market-wise Export of Cashew Kernels from India - 2005-06 to 2007-08

(Qty. in Tonnes & Value in Rs. Crore)

SI.		2005	onnes & Val 5-06	2006		2007	'-08
No.	Countries	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7	8
1	U.S.A	43149	958.33	46245	969.51	42694	838.35
2	Netherland	18736	408.82	19360	385.07	13627	256.27
3	U.A.E	8274	184.41	9523	207.63	12692	275.68
4	U.K	6238	140.88	4715	95.50	3758	78.39
5	Japan	4685	110.2	4279	91.26	5114	106.52
6	France	3470	75.79	3558	73.17	4033	75.51
7	Saudi Arabia	2827	59.61	3357	66.55	3422	70.02
8	Spain	2648	61.09	2457	52.42	2831	58.73
9	Belgium	2378	54.48	2380	48.99	2387	46.18
10	Germany	1991	42.21	1770	32.79	1705	32.36
11	Russia	1990	38.77	1163	19.20	873	14.34
12	Greece	1859	42.61	1870	40.83	1867	40.2
13	Canada	1558	33.14	1308	26.04	659	12.68
14	Italy	1236	25.2	1208	26.18	636	12.87
15	Australia	1114	25.29	1344	25.85	2848	52.57
16	Norway	873	19.89	1105	22.72	1064	20.85
17	Kuwait	863	19.76	964	21.17	812	18.55
18	Hong Kong	788	17.28	659	16.66	628	15.53
19	Isreal	752	17.4	995	22.74	695	15.55
20	Singapore	694	13.61	318	6.90	395	8.55
21	Lebanon	470	9.61	483	10.35	342	8.08
22	Bahrain	393	7.8	479	9.42	470	9.63
23	Korea. Rep	255	5.85	397	8.50	742	15.88
24	New Zealand	204	4.62	212	4.23	420	7.84
25	Malaysia	191	4.05	161	3.11	299	6.16
26	Others	6505	134.17	8230	168.38	9330	191.64
	Total	114141	2514.87	118540	2455.17	114343	2288.93

Source: Cashew Board.

Appendix 16.13

Export of Coir and Coir Products from India 2004-05 to 2007-08

Quantity in Tonnes, Value in Rs. Lakh

SI.	Items	2004	1-05	2005	-06	2006-	06	2006-	07	2007	-08
No.	items	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1	2	3	4	5	6	7	8	9	10	11	12
1	Curled Coir	76.54	14.02	69	11.97	0	0	1804.03	208.34	1279.99	152.06
2	Coir Fibre	1120.75	142.44	1350.45	186.03	1552.98	196.05	9356.54	1075.8	11101.64	1224.14
3	Coir Rugs	1694.56	1071.36	1727.34	1002.64	1242.7	730.38	488.31	328.55	178.14	134.4
4	Coir Pith	29179.35	1975.92	43420.54	3042.41	53444.48	3872.6	67152.99	5382.07	83613.24	6384.77
5	Coir Rope	308.88	111.46	299.67	116.91	162.73	70.41	154.25	68.87	372.26	139.99
6	Coir Other Sorts	490.21	196.9	502.4	199.38	123.03	74.65	119.31	66.04	57.02	57.83
7	Coir Yarn	12364.43	3498.71	10987.59	3358.16	9582.52	3019	9691.17	3161.57	8407.09	2666.9
8	Geo-Textiles	2599.54	1184.74	2323.19	1049.76	2512.32	1140.56	3044.41	1335.22	3364.72	1444.65
9	Handloom Mats	36303.99	22133.69	40127.35	25129.27	42516.42	26698.73	42986.07	27370.67	40917.35	24299.85
10	Handloom Mattings	4545.56	2838.66	3518.9	2334.04	2915.91	1913.38	3642.27	2354.63	3013.71	1879.33
11	Powerloom Mats	1026.28	672.13	1433.22	931.16	1609.94	1027.1	246.21	168.84	75.06	52.69
12	Powerloom Mattings	309.04	215.44	188.94	138.92	155.95	118.89	104.75	85.11	115.82	88.3
13	Rubberised Coir	461.78	334.67	475.92	340.57	536.5	377.05	947.31	697.86	1120.35	852.19
14	Tufted Mats	11772.5	6359.52	16502.26	9499.05	19671.49	11605.96	29017.02	18213.02	33950.35	19910.98
	Total	102253.4	40749.66	122926.77	47340.27	136026.97	50844.76	168754.64	60516.59	187566.74	59288.08

Source:- Coir Board

Appendix 16.14 Major Country wise Export of Coir Product from India-2008 Export Statistics - COIR ALL ITEMS

(Quantity in Tonnes & Value in Rs. Lakhs)

SL.	COUNTRY	QUANTITY	VALUE	QTY%	VAL%
NO					
1	USA	38412.38	20050.44	20.48	33.82
2	NETHERLANDS	33642.72	4954.12	17.94	8.36
3	UK	10179.01	4950.75	5.43	8.35
4	GERMANY	7447.19	4200.78	3.97	7.09
5	ITALY	6614.23	2816.91	3.53	4.75
6	SPAIN	12453.84	2423.23	6.64	4.09
7	CANADA	4438.3	2049.71	2.37	3.46
8	FRANCE	3575.72	1969.37	1.91	3.32
9	AUSTRALIA	6959.47	1728.42	3.71	2.92
10	SOUTH KOREA	17380.32	1194.21	9.27	2.01
11	REPUBLIC OF CHINA	10169.71	1112.19	5.42	1.88
12	BELGIUM	2758.50	978.18	1.47	1.65
13	JAPAN	1351.28	799.5	0.72	1.35
14	BRAZIL	1561.32	773.06	0.83	1.3
15	SWEDEN	1256.76	732.68	0.67	1.24
16	GREECE	1274.42	687.84	0.68	1.16
17	TURKEY	1243.4	601.32	0.66	1.01
18	SOUTH AFRICA	1525.65	552.94	0.81	0.93
19	POLAND	1217.4	459.93	0.65	0.78
20	MEXICO	1501.15	435.13	0.8	0.73
21	UAE	2831.33	430.35	1.51	0.73
22	PORTUGAL	1053.02	397.86	0.56	0.67
23	IRAN	1047.06	303.69	0.56	0.51
24	ISRAEL	1981.15	260.69	1.06	0.44
25	FINLAND	347.66	260.44	0.19	0.44

Source: Coir Board

Appendix 16.2 Export of Principal Commodities India 2007-08

Values in US\$ Millions (P) Provisional

			Commodity	Apr-Sep 2007	Apr-Sep 2008(P)	%Growth	%Share
A)			PLANTATION	434.1	585.43	34.86	0.62
	01)		Tea	223.77	292.39	30.67	0.31
	02)		Coffee	210.33	293.04	39.33	0.31
B)			AGRI & ALLIED PRDTS	5,318.01	8,302.16	56.11	8.75
	01)		Cereal	1,252.41	2,001.76	59.83	2.11
		a)	Rice	1,169.72	1,336.99	14.3	1.41
		b)	Wheat	0.04	0.07	61.65	0
		c)	Others	82.66	664.7	704.18	0.7
	02)		Pulses	78.03	60.38	-22.62	0.06
	03)		Tobacco	227.26	383.85	68.91	0.4
		a)	Unmanufactured	172.75	318.95	84.63	0.34
		b)	Manufactured	54.51	64.9	19.06	0.07
	04)		Spices	636.35	756.37	18.86	0.8
	05)		Nuts & Seeds	437.53	743.87	70.01	0.78
		a)	Cashew incl CSNL	256.51	376.18	46.65	0.4
		b)	Sesame & Niger seed	99.2	211.57	113.28	0.22
		c)	Ground nut	81.83	156.11	90.79	0.16
	06)		Oil Meals	446.57	1,117.59	150.26	1.18
	07)		Guergum Meal	128.65	160.28	24.58	0.17
	08)		Castor Oil	156.89	290.66	85.26	0.31
	09)		Shellac	14.03	13.94	-0.65	0.01
	10)		Sugar & Mollasses	620.29	972.59	56.8	1.02
	11)		Processed Foods	682.94	877.33		0.92
	Í	a)	Fresh Fruits & Vegetables	309.41	432.36	39.74	0.46
		b)	Fruits/Vgetable seeds	18.43	13.35		
		c)	Processed & misc processed items	355.11	431.62	21.55	0.45
	12)		Meat & Preparations	470.97	624.24	32.54	0.66
	13)		Poultry & Dairy Products	78.44	199.94	154.88	0.21
	14)		Flouriculture Products	45.4	43.98		0.05
	15)		Spirit & Beverages	42.22	55.38	31.18	0.06
C)			MARINE PRODUCTS	854.07	767.85	-10.09	0.81
D)			ORES & MINERALS	3,487.91	4,415.03		4.65
	01)		Iron ore	1,863.07	2,507.68	34.6	2.64
	02)		Mica	9.58	15.36	60.35	0.02
	03)		Processed Minerals	631.79	809.26	28.09	0.85
	04)		Other ores & minerals	964.1	1,061.09		1.12
	05)		Coal	19.36	21.63		0.02
E)	1		LEATHER & MNFRS	1,713.75	1,972.53		2.08
	01)		Footwear	766.75	870.58		0.92
	02)		Leather & mfrs	947	1,101.95		1.16
F)			GEMS & JEWELLERY	9,579.32	10,029.90		10.57
G)			SPORTS GOODS	66.83	82.72		0.09
H)			CHEMICALS &	10,115.26	12,748.95		

ı	1	ĺ	Total	73,275.55	94,921.52	29.54	100
	-		EXPORTS		0.4.05.1.75	20.7	
Q)			UNCLASSIFIED	2,031.02	2,462.37	21.24	2.59
P)			PETROLEUM PRODUCTS	12,700.12	18,494.51	45.62	19.48
O)			WASTE	<i>4</i> 50.49	380.9	34.40	V.41
O)	03)		Silk carpets COTTON RAW INCL	7.88 250.49	3.55 386.9	-55.01 54.46	0.41
	02)		<u> </u>	7 00	2 55	55.01	ſ
			Mill-made excl silk	436.01	411.33	-0.22	0.43
N)	01)		Hand-made excl silk	446.49 438.61	414.89 411.35	-7.08 -6.22	0.4 4 0.43
M)			HANDICRAFTS CARPETS	263.59	157.06	-40.42	0.17
M	0/)			160.43	179.22		0.19
	06)		Coir & coir mfrs Jute mfrs	76.78 160.43	78.38	2.09	0.08
	05)		Wool & woolen mfrs	41.76	53.5		0.06
	04)		Natural Silk textiles Wood & wooden mfrs	189.25	176.36	-6.81 28.12	0.19
	04)		ups etc	190.25	176 26	6 01	Λ 10
	03)		Manmade textiles & made-	1,479.35	1,802.17	21.82	1.9
	02)		Cotton, yarn, fabrics, made- ups etc	2,178.94	2,311.54	6.09	2.44
	01)		Readymade garments	4,727.66	4,958.01	4.87	5.22
L)	01)		TEXTILES Desdumed a comments	8,854.17	9,559.20	7.96	10.07
K)			PROJECT GOODS	80.8	88.77	9.86	0.09
TZ\	1		physical form	00.0	00 ==	0.00	0.00
	02)		Computer Software in	82.13	68.67	-16.38	0.07
	01)		Electronics	1,511.15	2,262.49	49.72	2.38
J)	_		ELECTRONIC GOODS	1,593.27	2,331.17	46.31	2.46
		e)	Residual Engineering items	42.89	58.79	37.06	0.06
			Manufacture of metals	3,104.67	4,008.64	29.12	4.22
		c)	Non ferrous metals	1,587.38	1,408.09	-11.3	1.48
		-,	products				
		_	Aluminium other than	244.64	233.41	-4.59	0.25
		a)	Ferro Alloys	389.94	1,128.50	189.41	1.19
	03)		Other Engineering Items	5,369.52	6,837.43	27.34	7.2
		U)	Primary & semi-finished iron & steel	2,004.26	3,218.84	00.0	3.39
		_		658.61	706.42	7.26 60.6	0.74 3.39
	02)	٥)	Iron & Steel Iron & Steel Bar rod etc	2,662.87	3,925.26	47.41	4.14
	02)	c)	Transport equipments	3,135.32	5,647.68	80.13	5.95
			Machinery & Instruments	4,167.38	5,511.70	32.26	5.81
	1	a)	Machine tools	151.28	200.04	32.23	0.21
	01)		Machinery	7,453.99	11,359.41	52.39	11.97
I)			ENGINEERING GOODS	15,486.38	22,122.09	42.85	23.31
	,		products				
	04)		Residual chemls & allied	386.61	628.9	62.67	0.66
	03)		products	1,933.13	2,204.20	17.13	2.35
	02)		Rubber, glass & other	1,549.94 1,933.15	2,264.26	17.13	2.39
	02)		cosmetics Plastics & Linoleum	1 540 04	1,759.82	13.54	1.85
	01)		Basic chemls, Pharma &	6,245.55	8,095.97	29.63	8.53
	01)		RELATED PRODUCTS	6 245 55	9.005.07	20.62	0.51

Data Source: DGCIS, Kolkata

Appendix 16.3 Import of Principal Commodities India 2007-08

Values in US\$ Millions (P) Provisional

			Commodity	Apr-Sep 2007	Apr-Sep 2008(P)	%Growth	%Share
A)			BULK IMPORTS	50,274.42	85,565.93	70.2	52.7
	01)		Cereals & Preparations	56.23	21.29	-62.14	0.01
		a)	Rice	0.06	0.01	-78.13	0
		b)	Wheat	39.25			
		c)	Other cereals	2.07	3.89	88.24	0
		d)	Preparations	14.85	17.38	17.07	0.01
	02)		Fertilizers	2,267.24	7,919.79	249.31	4.88
		a)	Crude	211.78	512.56	142.02	0.32
		b)	Sulphur & Un-roasted pyrites	100.19	527.71	426.73	0.32
		c)	Manufactured	1,955.28	6,879.51	251.84	4.24
	03)		Edible Oil	1,392.47	1,448.60	4.03	0.89
	04)		Sugar	0.43	0.61	43.27	0
	05)		Pulp & waste paper	380.6	441.81	16.08	0.27
	06)		Paper board & mfrs	715.22	745.93	4.29	0.46
	07)		Newsprint	267.96	440.86	64.52	0.27
	08)		Crude rubber	363.59	566.69	55.86	0.35
	09)		Non-ferrous metals	1,595.35	1,883.29	18.05	1.16
	10)		Metalliferrous ores &	4,109.64	4,902.43	19.29	3.02
			products				
	11)		Iron & Steel	4,478.07	4,974.79	11.09	3.06
	12)		Petroleum crude & products	34,647.61	62,219.84	79.58	38.32
B)			PEARLS, PRECIOUS &	4,704.30	3,989.62	-15.19	2.46
			SEMI-PRECIOUS				
			STONES				
C)			MACHINERY	13,222.97	18,178.35		
	01)		Machine Tools	947.96	1,311.03		
	02)		Machinery other than electrical	8,229.77	11,769.91	43.02	7.25
	03)		Electrical machinery	1,232.11	1,773.01	43.9	1.09
	04)		Transport equipment	2,813.13	3,324.39		
D)	0.7		PROJECT GOODS	628.27	1,429.79		
E)			OTHERS	43,240.09	53,210.77		
	01)		Cashew Nuts	229	385.51		
	02)		Fruits & Nuts	178.09	232.67		
	03)		Wool raw	137.35	152.64		
	04)		Silk raw	98.91	105.24		

	Data Garage DCCIG Wallants	40.8797	42.7178		
	Exchange Rate: $(1US\$ = Rs.$,	,		
	Total	112,070.05			100
40)	Other Commodities	2,927.69	4,282.20		2.64
39)	Computer Soft.physical form	508.5	485.4		0.3
38)	Cement Cement	14.67	47.52		
37)	Essential oils & Cos.prep	104.29	132.39		0.08
36)	Cottow raw and waste	123.27	162.19		0.1
35)	Veg. & animal fats	1.46			
34)	Woollen & Cotton rags	12.8		-21.13	0.01
33)	Jute raw	22.28	7.77		0.01
32)	Oil seeds	8.58	13		0.00
31)	Spices	94.51	126.82		0.08
30)	Milk & Cream	4.09			
29)	Silk yarn and fabrics	111.66	98.6		0.04
28)	Ready made garments(wov.)	47.57	58.18		0.04
27)	Made up textile articles	38.94	66.58		
26)	Man made f'mnt spun yarn	289.78			0.09
25)	Cotton yarn and fabrics	162.78	144.45		0.01
23)	Wollen Yarn and Fabrics	28.66			
23)	Tea	16.25	22.61	39.13	0.83
22)	Gold & Silver	11,664.65	11,089.90		
20)	Wood and wood products	9,991.17 644.67	10,362.39 787.1	5.72 22.09	0.31
19) 20)	Profl. instruments, etc. Electronic goods		2,003.03 10,562.59		1.23 6.51
18)	Manufactures of metals Profl. instruments, etc.	999.19 1,425.95	1,563.97		0.96
17)	OtherTextile yarn,fabrics,etc	517.02	578.64		0.36
16)	Chemical products Other Taytile year febries ata	784.72	1,125.53		0.69
15)	Artf.resins, etc.	1,747.06	2,235.95		1.38
14)	Medicinal&Pharma.prds.	833.92	976.72		
13)	Dyeing,tanning matrl.	361.9	460.33		0.28
12)	Organic&Inorganic chmls.	4,739.25	7,460.96		4.59
11)	Other crude minerals	154.07	210.81		0.13
10)	Non-metallic mnl.mfrs.	464.64	632.47		0.39
09)	Coal,coke&briquettes	2,887.39	5,741.08		
08)	Leather	174.95	208.83		
07)	Raw Hides & Skins	41.6	56.6		
06)	Pulses	592.31	508.38		0.31
05)	Synth.®.fibres	54.52	81.68		

Data Source: DGCIS, Kolkata

Appendix 16.4

Commodity-wise Export through Kochi Port 2003- 04 to 2007-08

(Quantity in M.T, Value Rs. Crores)

		(«u							acy 111 111.11,	varue No. Or	0,00
SI.N	Commodity	2003	-04	2004	I-05	2005	5-06	2006	-07	2007	'-08
0.	Commodity	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1	2	3	4	5	6	6	6	6	10	11	12
1	Tea	86794	269.93	86589	96.200	31985	253.48	88610	540.67	71472	335.95
2	Cashew Kernels	88994	1147.24	91729	1717.300	80775	1651.12	68179	1504.94	77458	1480.70
3	Sea Foods	101517	986.93	103721	1157.89	100256	1173.97	109207	1448.25	108653	1519.82
4	Coir Products	113638	259.27	88470	1.070	73391	7.73	108051	12.36	124213	1308.13
5	Spices	25419	141.86	24846	53.55	65321	252.91	36732	942.85	70521	1124.60
6	Coffee	119384	443.42	115265	462.97	68960	603.23	92218	690.21	94386	1381.56
7	Miscellaneous	2019910	2731.80	2642724	4544.75	2499129	6180.4	2971199	5197.50	2943778	4171.93
	Total	2555656	5980.45	3153344	8033.73	2919817	10122.84	3474196	10336.78	3490481	11322.69

Source:- Cochin Port Trust

Appendix 16.5 Commodity-wise Import through Kochi Port, 2003- 04 to 2007- 08(Quantity in M.T)

SI.		2003	3-04	2004	-05	2005	5-06	2006	-07	2007	7-08
No.	Commodity	Quantity	Growth rate (%)								
1	2	3	4	5	6	7	8	9	10	11	12
	Fertilizers & Raw										
1	materials	504264	20.06	566358	12.31	726933	28.35	639533	-12.02	419688	-52.38
2	Foodgrains	0	0.00	0	0	0	0	181366	100.00	0	0.00
	Iron, Steel &										
3	Machinery	61427	-73.41	76278	24.18	308468	304.4	339674	10.12	290918	-16.76
4	Newsprint	67311	65.46	46926	-30.28	406502	766.26	76908	-81.08	97040	20.75
5	Cashewnut	309095	19.00	280483	-9.26	315679	12.55	339674	7.6	325014	-4.51
6	Miscellaneous	10074562	3.47	9980101	-0.94	9210060	-7.72	10206217	10.82	11131409	8.31
	Total	11016659	34.58	10950146	-3.99	10967642	1103.84	11783372	7.44	12264069	3.92

Source: Cochin Port Trust

Appendix 16.6
Item-wise Export of Marine Products from India, 2003-04 to 2007-08
(Quantity in MT, Value in Rs. Crore)

SI.		200	3-04	2004	-05	2005	-06	2006	-07	2007	-08
No.	ltem	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
1	2	3	4	5	6	7	8	9	10	11	12
1	Frozen Shrimp	129768	4013.07	138085	4221	145180	4271	137397	4506.08	136223	3941.62
2	Frozen Fish	138023	620.73	159689	759	182344	999	270751	1452.88	220200	1303.41
3	Frozen Cuttlefish	39610	435.18	44239	474	49651	549	55701	797.37	45955	744.13
4	Frozen Squid	37832	372.92	48124	477	52352	575	47250	568.32	34172	408.42
5	Dried Items	12574	145.68	9692	121	14167	133	24293	183.16	22414	258.88
6	Live Items	2341	5.11	2262	51	2568	62	2478	64.06	2498	69.07
7	Chilled Items	3779	64.04	3988	68	5060	82	7200	117.3	6541	118.11
8	Others	48090	389.23	55250	476	60842	574	67571	674.35	73698	777.29
	Total	412017	6045.96	461329	6647	512164	7245	612641	8363.52	541701	7620.93

Source: Marine Products Export Development Authority

Appendix 16.7

Market wise Export of Marine Products from India, 2003-04 to 2007-08

(Qtv in Tonnes & Value in Rs. Crore)

SI.	Market	200	3-04	. ,	4-05	2005	•	200	6-07	200	7-08
No.	iviai ket	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
1	2	3	4	6	7	8	9	10	11	12	13
1	Japan	50020	1163.69	57832	1202.45	59785	1156	67437	1353.38	67373	1227.59
2	USA	53153	1636.05	50045	1556.09	55817	1639	43758	1347.8	36612	1016.94
3	European Union	96284	1470.99	117742	1819.28	136842	2134	149760	2759.92	149381	2664.24
4	China	123738	676.46	124826	693.25	137076	849	203513	1156.96	139792	1009.59
5	S.E.Area	50670	545.77	63842	628.83	60140	586	67650	616.7	63818	573.97
6	Middle East	14711	201.52	16624	244.42	22270	308	23599	371.47	25752	393.96
7	Others	23441	351.48	30418	502.37	40234	573	56924	757.3	58972	734.62
	Total	412017	6045.96	461329	6646.69	512164	7245	612641	8363.53	541700	7620.91

Source: Marine Products Export Development Authority.

Appendix 16.8
Export of Marine Products from India & Kkerala 2003-04 to 2007-08
(Qty. in Tonnes & Value in Rs. Lakh)

		Indi	•	Kera		Kerala's S	hare (%)
SI.No.	Year	Quantity	Value	Quantity	Value	Quantity	Value
1	2	3	4	5	6	7	8
1	1996-97	378199	412136	92289	93622	24.4	24.75
2	1997-98	385818	469748	89366	94803	23.16	20.18
3	1998-99	392934	462687	70641	81655	17.98	17.65
4	1999-00	343031	511667	92148	114696	26.86	22.42
5	2000-01	440473	644389	88852	104647	20.17	16.24
6	2001-02	424470	595705	72756	95055	17.14	15.96
7	2002-03	467297	688131	81392	104583	17.42	15.2
8	2003-04	412017	609195	76627	109913	18.6	18.04
9	2004-05	461329	664669	87337	115742	18.94	17.41
10	2005-06	512164	724530	97311	125765	19	17.36
11	2006-07	612642	836353	108616	152412	17.74	19.00
12	2007-08	541701	762092	100318	143091	18.52	18.78

Source: Marine Products Exports Development Authority.

Appendix. 16.10

EXPORT OF SPICES THROUGH COCHIN AND TRIVANDRUM PORTS DURING 2002-03 TO 2006-07

(QTY IN TONNES; VALUES IN Rs.LAKHS)

SI.	Item										
No.	item	2002	-03	2003	-04	2004	-05	2005	5-06	2006	5-07
		QTY	VALUE								
1	2	3	4	5	6	7	8	9	10	11	12
1	Pepper	20476.18	16605.50	15709.67	13447.05	13355.54	11433.09	16312.39	14059.66	25537.37	27188.40
2	Cardamom (small)	383.66	2535.12	434.75	2161.93	386.36	1362.72	436.57	1382.85	371.47	1309.87
3	Cardamom (large)	5.02	7.24	39.42	43.21	0.80	1.52	0.30	0.24	0.23	0.17
4	Chilli	10485.18	6512.92	11783.06	7861.76	13785.32	8785.65	13953.08	8797.42	13168.42	9727.74
5	Ginger	3522.07	1685.83	2089.24	1423.89	2856.39	3304.00	2446.16	2589.73	2924.17	2348.85
6	Turmeric	6998.59	2611.08	6666.99	2671.16	5068.76	2973.73	5040.60	2790.60	5559.93	3030.00
7	Coriander	793.23	424.34	2069.63	822.53	988.84	580.87	1265.93	660.17	1469.82	873.70
8	Cumin	315.22	348.25	308.32	268.97	487.87	437.82	522.93	509.56	843.01	824.91
9	Celery	486.84	252.65	435.62	219.13	608.61	311.43	590.19	321.50	473.82	263.77
10	Fennel	116.78	67.77	118.12	79.07	125.44	71.11	170.98	119.98	147.37	113.08
11	Fenugreek	443.91	200.68	544.95	266.37	603.93	350.48	892.86	492.81	762.88	493.23
12	Other Seed Spices	38.10	15.74	320.62	122.26	369.68	166.42	542.03	211.33	171.11	104.04
13	Garlic	13.40	14.06	49.10	31.19	30.49	23.71	116.46	51.09	233.80	130.05
14	Tamarind	926.61	137.00	1191.83	119.3	415.79	126.54	1004.02	161.53	771.17	285.54
15	Nutmeg & Mace	1232.76	2525.78	1262.56	2353.94	1076.83	1968.54	1377.05	2765.95	1761.33	3581.84
16	Vanilla	9.18	876.14	4.33	571.66	9.99	1274.74	22.18	405.35	56.75	635.39
17	Other Misc. Spices	2194.83	655.38	1742.49	880.32	4403.93	2036.91	3809.89	1328.61	5228.11	1454.97
18	Curry Powder/Mixture	1694.51	1699.10	1684.76	1650.02	1999.04	1978.72	2118.84	2164.34	2824.93	3116.41
19	Spice Oils & Olernes	3552.31	31555.04	4207.66	32037.91	5147.19	41856.17	5503.23	44549.35	5056.65	41926.43
20	Mint Products	3.82	27.39	0.89	12.79	1.66	102.73	20.09	130.79	9.46	221.62
	Total	53692.20	68757.01	50664.01	67044.46	51722.46	79146.90	56145.78	83492.86	67371.80	97630.01

Source: DGCI&S., Calcutta/s.Bill/Exporters Returns

Appendix 17.1
State wise Financial Assistance Disbursed by NABARD during 2007-08
(Amount Rs. crore)

Sl.	Name of State	Disbursen NABA	-
No.	•	Amount	%
(1)	(2)	(3)	(4)
1	Andrapradesh	1412.14	15.61
2	Assam	114.57	1.27
3	Bihar	184.05	2.03
4	Gujarat	310.15	3.43
5	Haryana	538.47	5.95
6	Karnataka	770.14	8.51
7	Kerala	570.88	6.31
8	Madyapradesh	483.75	5.35
9	Maharashtra	389.63	4.31
10	Orissa	358.51	3.96
11	Panjab	754.49	8.34
12	Rajasthan	479.19	5.30
13	TamilNadu	492.39	5.44
14	Uttarpradesh	1174.85	12.99
15	WestBengal	521.23	5.76
	Total	8554.44	94.6
	All India Total	9046.27	100

Source: Reports of NABARD 2007-08 Note: Percentages are to All India Total.

Appendix 17.2
State wise Cumulative Financial Assistance Disbursed by NABARD as at the end of March 2008

(Amount Rs. crore)

Sl.		Disbursen	ent by
No.	Name of State	NABA	RD
110.		Amount	%
(1)	(2)	(3)	(4)
1	Andrapradesh	11342.08	10.54
2	Assam	1344.78	1.25
3	Bihar	3012.20	2.80
4	Gujarat	5287.14	4.91
5	Haryana	6605.76	6.14
6	Karnataka	7431.02	6.90
7	Kerala	5078.45	4.72
8	Madyapradesh	5959.77	5.54
9	Maharashtra	8800.78	8.18
10	Orissa	3862.08	3.59
11	Panjab	9065.24	8.42
12	Rajasthan	5917.74	5.5
13	TamilNadu	7534.73	7.00
14	Uttarpradesh	16506.90	15.34
15	WestBengal	5344.54	4.97
	Total	103093.21	95.8
	All India Total	107628.11	100

Source: Reports of NABARD, 2007-08 Note: Percentages are to All India Total

Appendix 17.3

State wise distribution of commercial bank branches and population per bank office.

		Nui	mber of B	anks as a	at the end	of		Perc	entage to	total nur	nber of c	offices as	at the e	nd of	Av	erage Po	pulation	n per ban	ık brancl	n(in '000	s)
States	Jun-69	Jun-03	Jun -04	Jun-05	Jun-06	Jun-07	Jun-08	Jun -69	Jun-03	Jun -04	Jun-05	Jun-06	Jun-07	Jun-08	Jun-69	Jun-03	Jun-04	Jun-05	Jun-06	Jun-07	Jun-08
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	19	20	21	22	22
1.Andhra Pradesh	567	5267	5284	5393	5541	5692	6147	6.9	0.9	7.9	7.9	7.9	7.9	8.1	74	15	14	14	15	14	13
2.Assam	74	1220	1221	1235	1247	1280	1325	0.9	0.1	1.8	1.8	1.8	1.8	1.7	193	22	22	22	23	23	23
3.Bihar	273	3564	3569	3587	3592	3621	3721	3.3	0.4	5.3	5.3	5.2	5.0	4.9	207	21	22	23	25	25	25
4.Gujarat	852	3670	3668	3705	3784	3927	4156	10.3	1.3	5.5	5.4	5.4	5.5	5.5	34	14	23	14	15	14	13
5.Haryana	172	1591	1615	1668	1770	1849	2026	2.1	0.3	2.4	2.5	2.5	2.6	2.7	97	13	14	13	13	12	12
6.Karnataka	756	4804	4834	4948	5095	5229	5504	9.2	1.1	7.2	7.3	7.3	7.3	7.2	37	11	13	11	11	11	10
7.Kerala	601	3370	3404	3493	3615	3734	3920	7.3	0.9	5.1	5.1	5.1	5.2	5.2	34	10	11	9	9	9	9
8.Madhya Pradesh	343	3450	3453	3486	3514	3578	3757	4.2	0.5	5.2	5.1	5.0	5.0	4.9	116	19	10	17	19	19	18
9.Maharashtra	1118	6317	6334	6439	6592	6786	7087	13.5	1.7	9.5	9.5	9.4	9.5	9.3	43	15	18	15	16	15	15
10.Orissa	100	2227	2240	2267	2330	2406	2555	1.2	0.1	3.3	3.3	3.3	3.4	3.4	211	17	15	16	17	16	16
11.Punjab	346	2615	2641	2755	2801	2914	3109	4.2	0.5	3.9	4.0	4.0	4.1	4.1	42	9	17	9	9	9	9
12.Rajasthan	364	3342	3350	3408	3474	3572	3757	4.4	0.5	5.0	5.0	4.9	5.0	4.9	68	17	9	16	18	18	17
13.Tamil Nadu	1060	4746	4757	4846	4969	5162	5534	12.8	1.6	7.1	7.1	7.1	7.2	7.3	37	13	17	13	13	13	12
14.Uttar Pradesh	747	8212	8213	8299	8474	8672	9249	9.0	1.1	12.3	12.2	12.1	12.1	12.2	114	20	13	20	22	21	21
15.West Bengal	504	4446	4466	4519	4593	4691	4892	6.1	8.0	6.7	6.6	6.5	6.5	6.4	85	19	20	18	19	18	18
TOTAL	7877	58841	59049	60048	61391	63113	66739	95.3	11.8	88.2	88.2	88.0	88.0	87.8	-	-	18	15	16	16	15
All India Total	8262	66692	66970	68116	69801	71781	76003	100.0	12.4	100.0	100.0	100.0	100.0	100.0	65	16	15	15	16	16	15

Source: Report on Trend and Progress of Banking in India, 2007-08, RBI.

Note: 1. Data for June 2007 are revised
2. Data for June 2008 are provisional

Appendix 17.4

State-wise Deposits, Credits and Credit- Deposit Ratio of Public Sector Banks. (Rs. Crore)

		Mar -06			Mar -07			Mar -08	
States/Months	Deposit	Credit	C.D. Ratio	Deposit	Credit	C.D. Ratio	Deposit	Credit	C.D. Ratio
1	11	12	13	11	12	13	17	18	19
1.Andhra Pradesh	98019	81969	83.63	116942	104451	89.32	144401	135656	93.94
2.Assam	19980	8466	42.37	24554	10677	43.48	29694	12384	41.71
3.Bihar	45863	14013	30.55	55927	17012	30.42	67140	20145	30.00
4.Gujarat	89595	49152	54.86	101527	63559	62.60	128138	81311	63.46
5.Haryana	39384	26610	67.57	45717	31159	68.16	55887	39622	70.90
6.Karnataka	97710	80959	82.86	123831	103832	83.85	150469	124979	83.06
7.Kerala	53015	34831	65.70	62807	42724	68.02	71768	49749	69.32
8.Madhya Pradesh	52417	31560	60.21	61627	38290	62.13	76850	45599	59.34
9.Maharashtra	281312	285715	101.57	374794	375804	100.27	478540	477262	99.73
10.Orissa	30280	20061	66.25	38621	25253	65.39	48639	28653	58.91
11.Punjab	65669	38278	58.29	75056	48643	64.81	89346	61333	68.65
12.Rajasthan	41421	33841	81.70	48472	42262	87.19	60120	51446	85.57
13.Tamil Nadu	93631	95911	102.44	114231	123546	108.15	141105	154645	109.60
14.Uttar Pradesh	142884	60741	42.51	169289	77509	45.79	198874	91645	46.08
15.West Bengal	104358	60020	57.51	122822	79308	64.57	152435	95206	62.46
TOTAL	1255538	922127	73.44	1536217	1184029	77.07	1893406	1469635	77.62
All India Total	1574664	1111474	70.58	1918478	1425655	74.31	2390247	1760619	73.66

Source: Banking Statistics :Quarterly Handout, RBI (various issues)

Appendix 17.5
Banking Statistics of Kerala – 1990-2008.

(Rs. crore)

		State Bank	Group			Nationalise	d Banks			Gramir	Bank		Т	otal Public	Sector Bank	(S
Ending March	Total Deposit	Of which NRE Deposits	Total Advance	CD Ratio	Total Deposit	Of which NRE Deposits	Total Advance	CD Ratio	Total Deposit	Of which NRE Deposits	Total Advance	CD Ratio	Total	Of which NRE Deposits	Total Advance	CD Ratio
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1990	2406.71	800.3	1551.12	64.45	2718.06	832.34	1595.29	58.69	87.74		179.83	204.96	5212.51	1632.64	3326.24	63.81
1991	2854.66	949.58	1797.91	62.98	3205.41	997.48	1749.2	54.57	109.78		195.81	178.37	6169.85	1947.06	3742.92	60.66
1992	3410.27	1196.69	1850.95	54.28	3865.81	1262.86	1830.93	47.36	142.3		213.37	149.94	7418.38	2459.55	3895.25	52.51
1993	4285.29	1779.54	2146.1	50.08	4743.08	1815.06	2064.89	43.53	171.56		232.16	135.32	9199.93	3594.6	4443.15	48.30
1994	5312.22	2369.6	2404.91	45.27	5753.17	2418.4	2126.1	36.96	211.59		262.75	124.18	11276.98	4788	4793.76	42.51
1995	6154.52	2696.96	2934.99	47.69	6516.3	2806.37	2387.69	36.64	260.7		313.9	120.41	12931.52	5503.33	5636.58	43.59
1996	6935.66	3059.13	3135.42	45.21	7261.92	3140.39	2890.17	39.8	263.39		351.71	133.53	14460.97	6199.52	6377.3	44.10
1997	7736.39	3648.94	3604.73	46.59	8380.93	3872.82	3262.32	38.93	334.85		439.27	131.18	16452.17	7521.76	7306.32	44.41
1998	8965.43	4310.78	4131.4	46.08	9728.35	4763.39	4084.84	41.99	404.99		515.73	127.34	19098.77	9074.17	8731.97	45.72
1999	10498.17	5299.59	4670	44.48	10141.59	4491.7	4082.02	40.25	510.72		613.52	120.13	21150.48	9791.29	9365.54	44.28
2000	12617.34	6755.85	5580.48	44.23	13536.21	6708.45	5192.63	38.36	649.00		755.89	116.47	26802.55	13464.3	11529	43.01
2001	14663.45	7588.28	6508.93	44.39	15175.61	7786.79	5868.13	38.67	796.85	21.53	967.16	121.37	30635.91	15396.6	13344.22	43.56
2002	16894.74	8874.44	7660.15	45.34	17080.96	8032.07	6973.01	40.82	1000.14	70.36	1086.68	108.65	34975.84	16976.87	15719.84	44.94
2003	19510.64	10124.41	9040.24	46.33	19944.88	9506.81	8744.20	43.84	1271.06	165.45	1202.23	94.58	40726.58	19796.67	18986.67	46.62
2004	21473.4	10764.57	10544.34	49.10	21712.62	9778.45	10716.95	49.36	1511.51	198.96	1456.07	96.33	44697.53	20741.98	22717.36	50.82
2005	22990.85	10545.72	13021.89	56.64	22408.00	9260.74	13169.57	59.27	1752.84	190.12	1862.38	106.25	47151.69	19996.58	28053.84	59.50
2006	25506.07	11513.83	16399.11	64.29	24611.70	9229.90	16342.86	66.40	2100.54	199.16	2295.89	109.30	52218.31	20942.89	35037.86	67.10
2007	30118	12509	20737	68.65	29582.00	9695.00	19309.00	65.27	2448.00	211	2896	118.30	62148	22415	42942	69.10
2008	34905.39	10910.35	24786.52	71.01	33237.65	9085.74	22188.85	66.76	3185.56	194.11	3451.27	108.34	71328.60	20190.20	50426.64	70.70

Appendix - 17.5 (Contd.)

		Co-opera	tive Banks	i		Private	Banks			Foreigr	n Banks			Grand	Total	
Ending March	Total Deposit	Of which NRE Deposits	Total Advance	CD Ratio	Total Deposit	Of which NRE Deposits	Total Advance	CD Ratio	Total Deposit	Of which NRE Deposits	Total Advance	CD Ratio	Total Deposit	Of which NRE Deposits	Total Advance	CD Ratio
1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
1990					1407.58	286.09	791.92	56.26	39.47	14.19	68.97	174.74	6659.56	1932.92	4187.13	62.87
1991					1687.81	357.29	895.27	53.04	77.12	12.25	77.15	100.04	7934.78	2316.6	4715.34	59.43
1992					2252.55	579.33	1107.71	49.18	115.82	77.12	90.43	78.08	9786.75	3116	5093.39	52.04
1993					2912.31	904.31	1374.84	47.21	149.2	100.48	42.52	28.50	12261.44	4599.39	5860.51	47.80
1994					3664.17	1226.63	1647.79	44.97	197.19	137.73	43.31	21.96	15138.34	6152.36	6484.86	42.84
1995					4526.39	1382.71	2159.94	47.72	236.39	157.67	46.04	19.48	17694.3	7043.71	7842.56	44.32
1996					5710.33	1903.88	2583.61	45.24	247.66	152.93	45.75	18.47	20418.96	8256.33	9006.66	44.11
1997					6576.22	2434.92	3175.5	48.29	324.48	221.41	83.28	25.67	23352.87	10178.09	10565.1	45.24
1998					8065.02	3385.64	3542.4	43.92	408.27	275.17	89.87	22.01	27572.06	12734.98	12364.24	44.84
1999					9914.39	3204.45	4107.97	41.43	466.97	332.79	103.16	22.09	31531.84	13328.53	13576.67	43.06
2000					11442.39	4948.17	4312.79	37.69	373.9	311.14	99.07	26.50	38618.84	18723.61	15940.86	41.28
2001					13848.15	5791.53	5741.5	41.46	366.09	242.7	94.55	25.83	44850.15	21430.83	19180.27	42.77
2002					16302.23	7329.28	6248.91	38.33	377.71	227.56	93.19	24.67	51655.78	24533.71	22061.94	42.71
2003					18293.05	8641.09	7875.67	43.05	379.73	257.81	144.19	37.97	59399.36	28695.57	27006.53	45.47
2004					20891.72	9146.59	8981.31	42.99	371.86	211.82	168.64	45.35	65961.11	30100.39	31867.31	48.31
2005	2276.84	1.68	3048.94	133.91	22037.99	8928.32	12670.78	57.50	393.96	194.82	223.87	56.83	71860.48	29121.40	43997.43	61.23
2006	2838.22	2 1.17	3395.58	119.64	25012.45	9477.57	16641.75	66.53	446.31	251.02	238.90	53.53	80515.29	30672.65	55314.09	68.70
2007	2813	3 0.92	4024	143.05	29039	10598	21055	72.51	510	290	276.00	54.14	94510	33304	68298	72.26
2008	3748.04	1 0.42	4007.54	106.92	33617.98	9417.03	24547.72	73.02	541.67	282.16	330.38	60.99	109236.29	29889.81	79312.28	72.61

Source:Banking Statistics of Kerala, Reported by State Level Bankers' Committee.

Note: Details of Co-operative Bank statistics are available through SLBC from 2004-05 onwards.

Appendix 17.6

District Wise distribution of number of branches, aggregate deposits, gross bank credit and CD Ratio of sheduled commercial banks-Kerala, March 2008

(Amount Rs. Crore)

SI.		State Ban	k Group	١	N	lationalis	ed Bank	s	Re	egional R	ural Ba	nks		er Comm uding Fo			All	Comme	rcial Ba	anks	
No.	District	No.of branch es	Deposits	Credits	CD Ratio	No.of branch es	Deposits	Credits	CD Ratio	No.of branc hes	Deposits	Credits	CD Ratio	No.of branch es	Deposits	Credits	CD Ratio	No.of branc hes	Deposits	Credits	C D Ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	Thiruvananthapuram	123	7507	4975	66.3	181	5709	3809	66.7					103	4002	2237	55.9	407	17217	11021	64.0
2	Kollam	52	2263	1810	80.0	99	1751	1638	93.5	1	100	1	1	67	2101	1113	53.0	219	6215	4562	73.4
3	Pathanamthitta	64	3296	1255	38.1	89	2418	750	31.0	9	48	51	106.25	110	3334	910	27.3	272	9096	2965	32.6
4	Alappuzha	71	2389	1973	82.6	73	1802	1022	56.7	7	32	50	156.25	91	2120	1040	49.1	242	6343	4085	64.4
5	Kottayam	110	3365	2671	79.4	68	1455	951	65.4	9	63	63	100	115	2885	1451	50.3	302	7768	5137	66.1
6	Idukki	39	529	758	143.3	33	245	417	170.2					36	433	473	109.2	108	1208	1649	136.5
7	Ernakulam	122	6683	5353	80.1	220	7252	5750	79.3	13	186	78	41.935	224	12174	7575	62.2	579	26295	18761	71.3
8	Thrissur	74	2743	1577	57.5	113	3233	1472	45.5	22	275	169	61.455	229	5863	2779	47.4	438	12114	5998	49.5
9	Palakkad	52	1741	1200	68.9	115	2128	1433	67.3	14	83	115	138.55	87	1067	793	74.3	268	5020	3541	70.5
10	Malapuram	40	1511	732	48.4	77	1541	911	59.1	80	652	773	118.56	81	1085	685	63.1	278	4789	3101	64.8
11	Kozhikode	45	1624	1205	74.2	101	2110	1438	68.2	67	535	684	127.85	62	1123	1402	124.8	275	5391	4729	87.7
12	Wayanad	13	182	306	168.1	28	228	286	125.4	27	136	306	225	9	119	147	123.5	77	664	1045	157.4
13	Kannur	32	1549	821	53.0	87	2247	1027	45.7	76	574	652	113.59	43	816	612	75.0	238	5186	3112	60.0
14	Kasaragod	11	316	216	68.4	57	944	582	61.7	48	325	469	144.31	17	211	255	120.9	133	1797	1521	84.6
	Total	848	35698	24852	69.6	1341	33063	21486	65.0	373	3009	3411	113.36	1274	37333	21472	57.5	3836	109103	71227	65.3

Source: Reserve Bank of India, March 2008.

Appendix - 17.7
Bank wise performance 2007-08, Kerala as at March 2008 (Rs. crore)

Sl. No.	Bank wise performance Name of Bank	Total Deposit	NRE Deposit	Total Advances	CD Ratio
1	Name of Bank	3	4	5	6
A 1	State Bank Group	<u>پ</u>	4	υ	U
1	State Bank of India	11743.60	4127.54	8818.42	75.09
2	State Bank of Bikania & Jaipur	45.15		51.90	114.95
3	State Bank of Mysore	114.97		88.04	
4	State Bank of Sourashtra	36.19		48.81	134.87
5	State Bank of Hydrabad	196.08		108.49	55.33
6	State Bank of Travancore	22769.40			
·	Total: Stat Bank Group	34905.39	10910.35	24786.52	71.01
В	Nationalised Banks	0.000.00	10010100	2 11 00102	7
1	Alahabad Bank	97.72	2.10	120.44	123.25
2	Andhara Bank	275.05		189.59	68.93
3	Bank of Baroda	1531.88		777.41	50.75
4	Bank of India	1420.31	177.27	1149.11	80.91
5	Bank of Maharashtra	192.05	2.23	55.05	28.66
6	Canara Bank	9466.01		6079.86	64.23
7	Central Bank of India	1711.16		1124.13	65.69
8	Corporation Bank	1232.49	298.93	659.83	53.54
9	Dana Bank	178.22	14.05	97.00	54.43
10	Indian Bank	2266.20	734.08	1245.94	54.98
11	Indian Overseas Bank	3626.84	1357.28	1717.56	47.36
12	Oriental Bank of India	206.89	18.37	226.16	109.31
13	Punjab National Bank	1661.22	234.72	1366.13	82.24
14	Punjab & Sind Bank	20.47	0.27	19.68	96.14
15	Syndicate Bank	2740.35	658.31	2422.71	88.41
16	Union Bank of India	4728.74	669.37	3164.85	66.93
17	United Bank of India	53.80		64.54	119.96
18	Uco Bank	412.31	49.20	553.31	134.20
19	Vijaya Bank	1194.58		649.12	54.34
	Total: Nationalised Banks	33016.29	9055.20	21682.42	65.67
С	Regional Rural Banks				
1	North Malabar Gramin Bank	1306.32	89.31	1408.13	107.79
2	South Malabar Gramin Bank	1879.24			
	Total: Regional Rural Banks	3185.56		3451.27	108.34
	TOTAL-PUBLIC SECTOR BANKS	71107.24	20159.66	49920.21	70.20
D	Private Sector Banks	0045.07	200.05	4500.07	40.00
1	Catholic Syrian Bank	3615.67	900.95	1566.67	43.33
2	Dhanalekshmi Bank	2589.62	179.71	1142.94	44.14
3	Federal Bank	12665.62		9074.58	
5	Karnataka Bank	212.49 137.58		110.60 120.96	52.05 87.92
6	Karoor Vysya Bank Lekshmivilas Bank	108.01	2.08	120.96	15.62
7	Lord Krishna Bank	100.01	2.00	10.07	13.02
8	South Indian Bank	7690.47	2647.00	3659.50	47.58
9	Tamil Nadu Mercantile Bank	252.29			
10	ING Vysya Bank	487.46			
11	IDBI Bank	221.36			
	I .				86.65
12	City Union Bank	140 00	29 19		
12 13	City Union Bank Centurian Bank	140.00 1137.99			
12 13 14	Centurian Bank	1137.99	165.53	526.19	46.24
13 14		1137.99 380.97	165.53 33.29	526.19 658.96	46.24
13 14 15	Centurian Bank Indus Ind Bank HDFC Bank	1137.99 380.97 1238.48	165.53 33.29 365.65	526.19 658.96 1590.87	46.24 172.97 128.45
13 14	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan	1137.99 380.97 1238.48 2.28	165.53 33.29 365.65 0.01	526.19 658.96 1590.87 3.41	46.24 172.97 128.45 149.56
13 14 15 16	Centurian Bank Indus Ind Bank HDFC Bank	1137.99 380.97 1238.48 2.28 1892.79	165.53 33.29 365.65 0.01 629.27	526.19 658.96 1590.87	46.24 172.97 128.45 149.56
13 14 15 16 17	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank	1137.99 380.97 1238.48 2.28	165.53 33.29 365.65 0.01 629.27 0.07	526.19 658.96 1590.87 3.41 4666.36	46.24 172.97 128.45 149.56 246.53 207.18
13 14 15 16 17 18	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71	165.53 33.29 365.65 0.01 629.27 0.07 269.91	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65	46.24 172.97 128.45 149.56 246.53 207.18
13 14 15 16 17 18 19	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank	1137.99 380.97 1238.48 2.28 1892.79 6.55	165.53 33.29 365.65 0.01 629.27 0.07 269.91	526.19 658.96 1590.87 3.41 4666.36	46.24 172.97 128.45 149.56 246.53 207.18 84.42
13 14 15 16 17 18 19	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04
13 14 15 16 17 18 19	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04
13 14 15 16 17 18 19	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks Stan Chart Grindlays	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054 159.69 170.31	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04 148.05 43.59
13 14 15 16 17 18 19 E	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks Stan Chart Grindlays HSBC	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448 0 242.12	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054 159.69 170.31	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04 148.05 43.59 0.88
13 14 15 16 17 18 19 E	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks Stan Chart Grindlays HSBC Oman Intl. Bank	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839 107.86 390.72 43.09	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448 0 242.12 40.04 282.16	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054 159.69 170.31	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04 148.05 43.59 0.88 60.99
13 14 15 16 17 18 19 E	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks Stan Chart Grindlays HSBC Oman Intl. Bank Total - Foreign Banks	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839 107.86 390.72 43.09 541.67	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448 0 242.12 40.04 282.16	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054 159.69 170.31 0.38 330.38	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04 148.05 43.59 0.88 60.99
13 14 15 16 17 18 19 E 1 2 3	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks Stan Chart Grindlays HSBC Oman Intl. Bank Total - Foreign Banks TOTAL - COMMERCIAL BANKS	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839 107.86 390.72 43.09 541.67	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448 0 242.12 40.04 282.16 29889.39	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054 159.69 170.31 0.38 330.38 75304.74	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04 148.05 43.59 0.88 60.99
13 14 15 16 17 18 19 E 1 2 3	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks Stan Chart Grindlays HSBC Oman Intl. Bank Total - Foreign Banks TOTAL - COMMERCIAL BANKS Co-operative Banks	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839 107.86 390.72 43.09 541.67 105488.25	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448 0 242.12 40.04 282.16 29889.39	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054 159.69 170.31 0.38 330.38 75304.74	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04 148.05 43.59 0.88 60.99 71.39
13 14 15 16 17 18 19 E 1 2 3	Centurian Bank Indus Ind Bank HDFC Bank Bank of Rajasthan ICICI Bank Jammu & Kashmir Bank Axis Bank Total-Private Sector Banks Foreign Banks Stan Chart Grindlays HSBC Oman Intl. Bank Total - Foreign Banks TOTAL - COMMERCIAL BANKS Co-operative Banks KSCARDB	1137.99 380.97 1238.48 2.28 1892.79 6.55 1059.71 33839 107.86 390.72 43.09 541.67 105488.25	165.53 33.29 365.65 0.01 629.27 0.07 269.91 9448 0 242.12 40.04 282.16 29889.39	526.19 658.96 1590.87 3.41 4666.36 13.57 894.65 25054 159.69 170.31 0.38 330.38 75304.74	46.24 172.97 128.45 149.56 246.53 207.18 84.42 74.04 148.05 43.59 0.88 60.99 71.39

Source: SLBC - Kerala, 2008

Appendix 19.1
ITI wise details of seat strength and enrolment in governemnt ITIs

		Total	Seat Str			otal Enrolr	nent		Women			SC			ST	
			2006-			2006-			2006-			2006-			2006-	
SI.	Name of		07(Revi			07(Revise	9		07(Revis			07(Revise			07(Revis	e
No	Institution	2005-06	sed)	2007-08	2005-06	d)	2007-08	2005-06	ed)	2007-08	2005-06	d)	2007-08	2005-06	d)	2007-08
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	ITI D'Puram	690	952	837	636	806	782	98	94	110	126	121	103	1	2	6
2	Aryanad	57	57	171	55	57	146	7	5	3	35	30	89	6	14	16
3	Chakkai	800	1178	1216	764	797	811	54	102	58	80	91	104	3	3	2
4	Kazhakkuttam(w)	233	268	268	233	233	225	233	233	225	25	32	34		0	0
5	Attingal	570	505	543	564	499	524	43	57	70	71	43	88	1	3	0
6	Chandanathope, Kollam	640	559	578	540	495	554	42	56	32	53	58	66	2	0	0
7	Kollam(w)	257	498	583	212	352	434	212	352	434	32	15	80		0	1
8	Chathannoor Basic Training	57	57	57	55	57	50	17	16	15	8	8	9		0	0
9	Centre,Kollam	110	57	57	110	57	57	8	10	2	11	21	11		0	0
10	Chengannur	741	699	734	580	694	678	51	55	65	119	156	151	3	0	3
11	(W) Chengannur	106	86	105	103	83	101	103	122	101	24	25	27	1	2	0
12	Chenneerkara	114	133	133	110	114	111	21	26	18	18	16	22	0	2	2
13	Palliccathode	371	580	580	305	457	366	16	22	29	23	22	31	5	8	3
14	Ettumanoor	596	739	751	558	636	639	21	36	37	51	57	63	5	3	5
15	Kattappana	138	140	140	128	125	119	5	10	3	14	17	11	3	10	4
16	Kalamassery	590	601	601	542	539	596	36	52	24	70	95	68	7	0	15
17	(W) Kalamassery	110	104	104	90	101	97	90	101	97	17	15	16	0	10	0
18	Chalakudy	580	636	796	558	619	778	56	52	68	74	81	104	2	7	6
19	(W)Chalakkudy	96	86	86	83	86	86	83	86	86	19	20	24	0	18	2
20	Mala	120	114	131	106	107	125	25	31	25	17	20	22	0	1	0
21	Malampuzha	560	563	601	493	543	517	47	48	57	79	99	99	6	0	9
22	(W) Malampuzha	110	91	110	109	90	110	109	90	110	8	9	19	0	1	1
23	Kuzhalmannam	98	95	95	91	0	93	15	17	3	10	10	10	0	2	0
24	Arecode	242	276	241	190	249	196	24	30	24	20	43	27	0	0	2
25	Nilambur	38	38	38	38	38	38	2	6	2	30	26	30	0	7	0
26	Kalpetta	114	114	114	113	114	110	12	14	5	18	18	14	0	1	30
27	Kozhikode	510	502	502	499	472	495	46	50	38	43	65	56	4	7	7
28	(W)Kozhikkode	219	300	319	210	273	309	210	162	309	38	15	46	0	1	0
29	Quilandy	44	44	152	38	40	141	6	7	10	4	4	14	0	0	1
30	Kannur	560	648	534	524	593	507	54	64	54	62	43	53	6	5	10
31	(W) Kannur	96	86	86	84	85	86	84	85	86	7	7	9	1	2	0
32	Kasargode	210	76	95	186	67	89	27	28	20	10	18	23	0	4	17
	Kayyur	124	122	265	118	109	225	38	40	71	8	6	20	3	1	0
	Attappadi	50	66	66	42	31	45	10	15	0	10	5	11	0	9	13
	Total	9951	11070	11689	9067	9618	3 10240	1905	2174	229	l 1234	1311	1554	4 59) 12	3 155

Source : Industrial Training Department

Appendix 19.10

District-wise Distribution of Work Seekers as on 31.03.2008

SI.	District	General Work Profession Total Work Seekers seekers al/Technica (General + Technical							
No.		seekers	al/Technica	(Gene	ral + Techr	nical)			
			l work			-			
		Total	Total	Total	Men	Women			
1	Thiruvananthapuram	554143	21818	575961	223408	352553			
2	Kollam	392826	16888	409714	169847	239867			
3	Pathanamthitta	155887	6739	162626	64088	98538			
4	Alappuzha	349108	11840	360948	155846	205102			
5	Kottayam	234091	7368	241459	102460	138999			
6	Idukki	114345	2887	117232	49196	68036			
7	Ernakulam	346358	18920	365278	156352	208926			
8	Thrissur	333708	9395	343103	127976	215127			
9	Palakkad	295824	9625	305449	137151	168298			
10	Malappuram	291781	5682	297463	137819	159644			
11	Kozhikode	354869	12234	367103	149477	217626			
12	Wayanad	81723	1570	83293	37660	45633			
13	Kannur	217369	6795	224164	90536	133628			
14	Kasaragod	97241	2279	99520	43933	55587			
	Total	3819273	134040	3953313	1645749	2307564			

Source: Directorate of Employment & Training

Appendix 19.11
Unemployment Assistance & Self Employment Scheme

SI.	Year (at the end of	Unemplo	yment Assi	stance	Self Empl	oyment A	ssistance
No.	December)	Application	No. of	Amount	Applicati	No. of	Amount
		Received	Beneficiar	Disbursed	on	Benefici	Disburse
			ies	(Rs. In	Received	aries	d (Rs. In
				Lakhs)			Lakhs)
1	1999	188584	369863	2366.09	3384	885	
2	2000	56906	346114	3689.39	17097	469	29.75
3	2001	65245	351685	2175.97	7114	330	12.69
4	2002	180586	332287	2516.4	NIL	416	29.69
5	2003	186029	348027	1423.1	7659	668	36.61
6	2004	192796	387370	739.843	1920	734	49.99996
7	2005	170972	344698	10243.376	1944	238	16.85031
8	2006	65976	339879	3667.7068	2370	1040	124.4386
9	2007	66700	361930	5005.7615	2110	898	102.0392
10	Jun-05	25148	337032	5094.7801	2383	862	113.2079

Source: Directorate of Employment & Training

Appendix 19.12 Employment in Organised Public and Private Sectors – All India

(in lakhs)

SI.		Р	ublic Sector		Р	rivate Secto	or	Public and	Private Sec	tor (Total)
No.	Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2	3	4	5	6	7	8	9	10	11
1	1996	167.94	26.35	194.29	67.2	17.92	85.12	235.14	44.26	279.41
2	1997	168.31	27.28	195.59	67.77	19.09	86.86	236.08	46.37	282.45
3	1998	166.55	27.63	194.18	67.37	20.11	87.48	233.92	47.74	281.66
4	1999	166.04	28.11	194.15	66.8	20.18	86.98	232.84	48.29	281.13
5	2000	164.57	28.57	193.14	65.8	20.66	86.46	230.37	49.23	279.6
6	2001	162.79	28.59	191.38	65.62	20.9	86.52	228.4	49.49	277.89
7	2002	158.86	28.87	187.73	63.83	20.49	84.32	222.71	49.35	272.06
8	2003	158.75	29.05	185.8	63.57	20.64	84.21	220.32	49.68	270
9	2004	153.07	28.9	181.97	62.02	20.44	82.46	215.09	49.34	264.43
10	2005							214.4	50.2	264.6

Source: DGE & T

Appendix 19.15

District - wise Employment in Public Sector in Kerala on 31st March 2008.

SI.No	District	Centra	l Govt.	State	Govt.	Centra	l Quasi	State	Quasi	Local	Bodies	То	tal
	-	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Thiruvananthapuram	27721	5632	55235	20446	19664	5575	33035	6945	5914	2293	141569	40891
2	Kollam	650	253	18540	8093	5393	1364	19816	11475	3185	1043	47584	22228
3	Pathanamthitta	1630	580	11260	4064	3966	782	7960	3272	1184	479	26000	9177
4	Alappuzha	753	250	8412	3499	3163	775	8842	3639	1066	412	22236	8575
5	Kottayam	671	173	15392	6744	7416	2014	8587	1766	1373	432	33439	11129
6	ldukki	1270	394	9628	2899	1308	263	2237	384	720	226	15163	4166
7	Ernakulam	11843	2824	24909	10699	28190	5511	16673	3482	2279	830	83894	23346
8	Thrissur	5785	1580	26429	11132	5774	1751	12699	4379	2198	787	52885	19629
9	Palakkad	17806	2058	18152	6877	4144	883	4266	443	1564	444	45932	10705
10	Malappuram	1715	385	21280	8432	3169	597	5852	1010	1508	381	33524	10805
11	Kozhikode	2478	584	20523	6348	7352	1753	5825	994	2864	807	39042	10486
12	Wayanad	599	124	11454	3737	943	122	1975	321	441	116	15412	4420
13	Kannur	1860	476	19422	9556	5459	897	7420	3160	1570	510	35731	14599
14	Kasaragod	800	168	11912	5350	1368	275	2725	579	517	120	17322	6492
	State	75581	15481	272548	107876	97309	22562	137912	41849	26383	8880	609733	196648

Source:Directorate of Employment & Training

Appendix 19.16
Employment in the Public Sector by Industry - All India
(Lakh persons as on 31st March 2008)

SI. No	Industry	1981	1991	2001	2002	2003	2004	2005
1	Agriculture,hundting etc	4.63	5.56	5.02	4.83	5.06	4.93	4.96
2	Mining and quarrying	8.18	9.99	8.75	8.61	8.47	10.3	10.14
3	Manufacturing	15.02	18.52	14.3	13.5	12.6	11.89	11.3
4	Electricity,gas and water	6.83	9.05	9.35	9.23	9.13	8.74	8.6
5	Construction	10.89	11.49	10.81	10.26	9.48	9.32	9.11
6	Wholesale and retail trade	1.17	1.5	1.63	1.57	1.82	1.81	1.84
7	Transport,storage&communications	27.09	30.26	30.42	30.09	29.39	28.15	27.51
8	Finance,insurance,real estate etc.	7.48	11.94	12.81	12.3	13.77	14.08	14.08
9	Community, Social & personal services	73.55	92.27	98.3	97.35	96.09	92.76	92.52
	Total	154.84	190.58	191.39	187.74	185.81	181.98	180.06

Source: Economic Survey

Appendix 19.17

No. of Placements through Employment Exchange and Monthly Average Number of Employers using Employment Exchanges in Kerala

Year	No. of Placements	Monthly average number of Employers usisng Employment Exchanges
1999	19661	447
2000	23012	388
2001	15750	376
2002	12409	312
2003	9902	223
2004	8711	225
2005	11450	244
2006	10742	312
2007	12132	394
Jun-08	9659	399

Source: Directorate of Employment of Training

Appendix 19.2
District-wise details of trainees admitted during 2008 (as on30/09/08) in ITI/ITC/SCDD (Nos)

			o. of s admitted	S	SC .		ST	Wome	n	SCDD/ STDD	PH
SI.No	District	ITI	ITC	ITI	ITC	ITI	ITC	ITI	ITC	ITC	
1	2	3	4	5	6	7	8	9	10	11	12
1	Thriuvananthapuram	2761	2300	1005	140	28	2	549	480	180	12
2	Kollam	1279	2588	216	219	14	10	644	685	89	24
4	Alappuzha	197	1100	46	125	0	2	60	190	60	10
3	Pathanamthitta	976	1761	205	120	4	25	656	260	48	2
5	ldukki	1012	1000	125	120	8	10	91	230	58	9
6	Kottayam	195	300	7	20	5	20	24	30	20	6
7	Ernakulam	644	1960	174	173	11	10	153	207	33	4
8	Trissur	1084	1318	150	54	10	2	199	196	180	2
9	Palakkad	800	872	151	28	33	0	185	19	76	6
10	Malappuram	607	2574	149	150	3	30	92	195	77	11
11	Kozhikode	980	1700	123	54	13	15	400	47	60	6
12	Wayanad	166	296	18	5	40	1	69	47	0	0
13	Kannur	815	1620	90	432	18	20	145	97	32	2
14	Kasaragod	661	142	45	2	57	1	193	41	36	0
	Total	12177	19531	2504	1642	244	148	3460	2724	949	94

Source : Industrial Training Department

Appendix 19. 3

Trade wise in take and out turn in government ITIs during 2007-08 as on 30-09- 2008 (1 Year Course)

	Trade wise in take and t		udents a							ents pas			
		То	tal	S	<u> </u>	S	T	To	tal	S	С	ST	
SI.No.	Name of trade	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Plumber	433		63		5	0	197	0	30	0	4	0
2	Mech.Diesel	284		49		6	0	151	0	15	0	14	0
3	Secretarial Practice		37		4		0	0	18	0	1	0	0
4	COPA	107	397	30	55		1	93	403	17	51	2	2
5	Steno-English	112	161	23	32		2	27	147	4	31	0	1
6	Steno-Hindi		8				0	0	7	0	0	0	0
7	Dress Making		71		8		0	2	60	0	6	0	0
8	Welder	780		88		12	0	336	0	35	0	3	0
9	Foundryman	64		15			0	19	0	0	0	0	0
10	DTPO	9	82	1	2		0	2	76	0	12	0	0
11	Front Office Assistant	26	62	4	11	1	0	5	34	0	11	0	0
12	Upholstery	15	0	2	0	0	0	24	0	0	0	0	0
13	SMW	217	15	22	8	2	0	118	3	11	1	1	0
14	Carpenter	374		49			0	165	0	20	0	0	0
15	PPO	24		5			0	13	2	1	0	0	0
16	Mech.Tractor	38		12			0	29	0	4	0	1	0
17	Sanitary Hardware Fitter	36	5	78	1		1	2	0	0	0	0	0
	Mech Auto Electrical and												
18	Electronics	75		13			0	1	0	0	0	0	0
19	Health Sanitary Inspector	11	33		6		0	1	17	0	0	0	0
20	Driver-cum Mechanic	205		35			0	22	0	3	0	0	0
21	Diarying	6					0	4	0	0	0	0	0
22	Network Technician	27	36	1	6	3	0	13	21	1	2	0	0
23	Data Entry Operator	89	105	10	29		3	15	14	4	3	0	0
24	Architectural Assistant	23	6	2			0	0	2	2	0	0	0
25	Hospital Housekeeping	16	23	2	5		0	0	31	0	0	0	0
26	Steward	19		2			0	0	0	0	0	0	0
27	Interior Decoration & Designing		36		14		5	0	0	0	0	0	0
	Total	2990	1077	506	181	29	12	1239	835	147	118	25	3

Source : Industrial Training Department

Appendix 19.4

Trade wise in take and out turn in government ITIs during 2006-08 as on 30.09.2008 (two year course)

		S	tudents	admitted	in 2007	(Numbe	rs)		Stude	ents pass	ed (Num	bers)	
		To	tal	S	С	S	T	Tota	al	SC	;	S	Т
SI.No	Name of Trade	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	MRTV	237	187	58	36		3	122	63	19	16	1	0
2	D/Civil	199	194	24	24	7	1	158	144	19	16	2	1
3	D/Mech	72	39	6	4	1		29	7	2	1	0	0
4	MRAC	264	35	63	5		1	247	10	44	3	0	C
5	Surveyor	42	89	8	14	7	2	24	78	2	7	1	C
6	Fitter	581	25	50	7	4		397	5	35	1	3	C
7	Wireman	446		47		9		269	0	19	0	2	C
8	Electronic Mechanic	353	226	74	35	8	3	271	159	46	23	1	1
9	Electrician	421	52	46	3	7	2	303	30	26	4	2	C
10	Mechanic Computer												
	Hardware	27		2				7	0	0	0	0	C
11	MMV	481		67		5		364	0	42	0	5	C
12	Turner	314	10	29		2		207	1	21	0	3	C
13	Machinist	223	14	25	6			185	5	18	1	0	C
14	Painter General	82	8	26	1	3	1	51	3	12	0	0	C
15	Instrument Mechanic	74	19	10	1		3	65	8	5	2	0	C
16	Electro Plater	0	0	0	0	0	0	0	0	0	0	0	C
17	MMTM	9	0	1	0	0	0	9	0	1	0	0	C
18	Agriculture Machinery	14	5	3	2	0	0	3	2	1	1	0	C
19	Mechanic Industrial												
	Electronics	0	0	0	0	0	0	0	0	0	0	0	C
	Total	3839	903	539	138	53	16	2711	515	312	75	20	2

Source: Industrial Training Department

Appendix 19.5

New trades introduced during the last 2 years as part of modernisation

SI.No	Name of ITI	Trade	Unit		
		Mechanic Computer Hardware	1		
1	ITI Dhanuvachapuram	Mechanic Consumer Electronics	1		
'	TT Dilanuvachapuram	Health Sanitary Inspector	1		
		Driver cum Mechanic	1		
2	ITI Thiruvananthapuram	Mechanic Computer Hardware	1		
_	TTT TIME Variation apparation	Network Techinician	1		
3	ITI Kollam Lift Mechanic Operator				
	TTTKOMATT	Health Sanitary Inspector	1		
		Network Techinician	1		
4	ITI(W)Kollam	Data Entry Operator	1		
		Front Office Assistant	1		
5	ITI Chengannur	Mechanic Auto Electrical & Electronics	1		
	•	•			
6	ITI Ettumannoor				
7	ITI Pallickathode	Mechanic Computer Hardware	1		
		Front Office Assistant	1		
8	ITI Kattappana	Front Office Assistant	1		
9	ITI Kalamasserry	Driver cum Mechanic	1		
10	ITI Areacode	Lift Mechanic Operator	1		
		Mechanic Computer Hardware	1		
11	ITI Kozhikode	Mechanic Auto Electrical &	1		
		Electronics			
		Fashion Technology	1		
12	ITI(W) Kozhikode	Mechanic Computer Hardware	1		
	• •	Front Office Assistant	1		
		Data Entry Operator	1		
13	ITI Kannur	Mechanic Mechatronics	1		
Course		Biulding Maintanance	1		

Source : Industrial Training Department

Appedix 19.6
Institution wise details of apprentices under Industrial Training Department

			Seat Strength (Num	bers)	Appr	entices Tra	ained (Num	bers)
SI.No	Name of Insit	tutue	2007(Payingd)	2009	2007(R	evised)	2008	
			2007(Revised)	2008	Boys	Girls	Boys	Girls
1	Thiruvananthapura	am R.I.C	1463	1535	1355	108	1398	137
2	Kollam	,,	732	828	611	100	608	206
3	Allapuzha	,,	614	623	376	39	482	53
4	Kottayam	,,	638	669	480	53	490	51
5	Kalamassery	,,	1467	1469	1322	92	1320	91
6	Thrisser	,,	785	783	694	91	617	114
7	Palakkad	,,	906	959	521	112	520	176
8	Kozhikode	,,	448	454	400	46	407	47
9	Kannur	,,	383	377	281	92	284	79
10	Chenneerkara	I.T.I	219	182	182	37	128	21
11	Kattappana	,,	262	262	55	11	235	5
12	Areacode	,,	321	351	264	17	336	4
13	Kalpatta	,,	90	110	64	4	77	15
14	Kasaragode	,,	73	74	28	10	15	14
	Total		8401	8676	6633	812	6917	1013

Source: Industrial Training Department

Appendix 19.7
Total Work Seekers in Kerala

Year (at the end of	General Work seekers	Professional/T echnical work	Total Work Seekers
December)		Seekers	
1	2	3	4
2000	4049082	166201	4215283
2001	4254307	177032	4431339
2002	3499774	180118	3679892
2003	3845641	158897	4004538
2004	3579675	176638	3756313
2005	3492776	176922	3669698
2006	3673148	183556	3856704
2007	3816790	171665	3988455
Jun-08	3961902	158769	4120671

Source: Directorate of Employment & Training

Appendix 19.8

Distribution of Work Seekers in Kerala by Educational Level

Year (at the end of December)	Below SSLC	SSLC	Pre-Degree	Degree	Post graduate	SSLC & avove	% to Total Work Seekers	Total Work seekers
1	2	3	4	5	6	7	8	9
2000	952434	2416709	530231	256772	59137	3262849	77%	4215283
2001	966914	2574722	542815	280618	66270	3464425	78%	4431339
2002	711714	2162627	510063	242060	53428	2968178	80%	3679892
2003	746129	2364016	564939	268124	61330	3258409	81%	4004538
2004	673301	2222940	559854	239701	60517	3083012	82%	3756313
2005	628788	2181488	574634	229684	55104	3040910	83%	3669698
2006	636997	2315838	616571	232739	54214	3219362	83.50%	3856704
2007	630782	2421734	645295	237774	52870	3357673	84%	3988455
Jun-08	624225	2537326	673282	232949	52889	3496446	85%	4120671

Source: Directorate of Employment & Training

Appendix 19.9

Number of Professional & Technical Work Seekers

Year (at the end	Medical	Engg.	Diploma Holders	ITI	Agricultur	Veterinary	Total
of December)	Graduates	Graduates	in Engg.	Certificate	al	Graduates	
				Holders	Graduates		
2000	2455	9858	42991	109592	1284	21	166201
2001	2691	10349	46377	115736	1496	383	177032
2002	3736	8506	43128	123387	881	480	180118
2003	3567	8116	40660	105221	897	436	158897
2004	3910	9213	42539	118518	1662	796	176638
2005	3428	6389	41345	124410	803	547	176922
2006	2925	8466	41700	109780	762	522	164155
2007	2319	7608	35216	103018	704	584	149449
Jun-08	2297	7706	31066	97014	690	580	139353

Source: Directorate of Employment & Training

Appendix 20.1

Rate of Crime under IPC and SLL- District Wise

SI. No.	District		2005			2006	
		IPC	SLL	Total	IPC	SLL	Total
1	Thiruvananthapuram	454	315	769	441	215	656
2	Kollam	388	165	553	403	217	620
3	Pathanamthitta	356	84	440	360	107	467
4	Alappuzha	361	82	443	366	43	409
5	Kottayam	704	119	823	727	162	889
6	Idukki	145	32	177	155	23	177
7	Ernakulam	471	291	763	460	468	928
8	Thrissur	325	383	709	330	199	529
9	Palakkad	212	160	372	215	170	386
10	Malappuram	189	137	327	180	127	307
11	Kozhikode	280	121	401	287	120	407
12	Wayanad	277	152	430	297	133	431
13	Kannur	217	87	303	228	69	296
14	Kasargod	251	155	406	255	99	354
15	Kerala	328	182	509	331	170	501

Source: Crime Records Bureau, Thiruvananthapuram

Appendix 20.2

Number of Cases Reported Under Atrocities Against Women under different

Crime Heads

SI.No		2003	2004	2005	2006	2007
1	Rape	394	480	478	601	512
2	Kidnapping & Abduction	102	142	129	202	177
3	Dowry Deaths	33	31	21	25	27
4	Molestation	1947	2260	2339	2543	2624
5	Sexual Harassment	68	133	175	222	262
6	Cruelty By Husband or relatives	2930	3222	3283	3708	3999
	Total	5474	6268	6425	7301	7601

Source: Crime Records Bureau, Thiruvananthapuram

Appendix 20.3

Number of Cases Reported Under Atrocities Against Women during 2007

	Rape	Kidnapping 8	& Dowry	Molestation	Sexual	Cruelty By	Total
	·	Abduction	Deaths		Harassment		
						relatives	
TVM city	20	16	2	141	10	131	320
TVM Rural	54	20	4	351	7	242	678
Kollam	46	20	4	282	10	448	810
PTA	19	18	0	153	18	162	370
Alapuzha	25	11	3	208	17	264	528
Kottayam	25	16	1	224	31	185	482
ldukki	28	7	0	155	21	186	397
Kochy C	23	6	0	75	5	89	198
EKM (rural)	22	6	1	126	10	151	316
Thrissur	48	19	0	202	28	332	629
Palakkad	39	4	6	82	5	356	492
Malappuram	41	3	0	139	37	503	723
KKD (City)	15	7	0	70	9	141	242
KKD (Rural)	25	10	3	128	16	257	439
Wayanadu	28	4	2	66	14	110	224
Kannur	35	10	1	123	14	247	430
Kasargode	19	0	0	93	7	195	314
Railways	0	0	0	6	3	0	9
Kerala	512	177	27	2624	262	3999	7601

Source: Crime Records Bureau, Thiruvananthapuram

Appendix 20.4

Distribution of Family Suicides during 2007

	No. of	Total
States	Cases	Victims
Andhra Pradesh	3-	4 83
Gujarat		5 17
Kerala	39	9 99
Madhya Pradesh	1:	2 39
Total States (reported)	100	0 264

Source: National Crime Records Bureau

Appendix 20.5
District Wise Suicide in Kerala

		2006			2007	
	M	F	Ţ	М	F	T
TVM city	268	85	353	236	84	320
TVM Rural	688	242	930	679	275	954
Kollam	864	243	1107	896	240	1136
PTA	257	77	334	303	84	387
Alapuzha	359	109	468	391	102	493
Kottayam	337	112	449	331	103	434
Idukki	330	121	451	365	100	465
Kochy C	171	63	234	163	54	217
EKM (rural)	367	153	520	401	135	536
Thrissur	646	297	943	596	271	867
Palakkad	662	288	950	605	285	890
Malappuram	330	117	447	306	118	424
KKD (City)	170	76	246	169	77	246
KKD (Rural)	289	130	419	280	146	426
Wayanadu	257	87	344	238	80	318
Kannur	415	171	586	423	156	579
Kasargode	167	72	239	201	64	265
Railways	6	0	6	5	0	5
Kerala	6583	2443	9026	6588	2374	8962

Source: Crime Records Bureau, Thiruvananthapuram

Appendix 20.6

Per 1000 Distribution of households by food availability status- By Social Groups

	Adequate Food Throughout the Year				Getting inadequate	n.r	Total
	as ascertained by a direct question	as judged by the investigator	all	food some months of the year	food all months		
All India							
Rural	472	502	974	20	4	2	1000
Scheduled Tribe	574	382	956	37	5	2	1000
Scheduled Caste	537	422	959	33	7	1	1000
Others	418	556	974	19	6	1	1000
Urban	297	697	994	4	1	1	1000
Scheduled Tribe	397	593	990	8	0	2	1000
Scheduled Caste	343	645	988	8	3	1	1000
Others	247	750	997	1	1	1	1000
Total	424	555	979	16	4	1	1000
Scheduled Tribe	557	403	960	35	4	1	1000
Scheduled Caste	496	469	965	27	6	2	1000
Others	348	635	983	12	4	1	1000
Kerala							
Rural	420	555	975	22	3	0	1000
Scheduled Tribe	479	390	869	131	0	0	1000
Scheduled Caste	591	355	946	52	2	0	1000
Others	335	653	988	10	3	0	1000
Urban	359	623	982	17	1	0	1000
Scheduled Tribe	904	96	1000	0	0	0	1000
Scheduled Caste	651	297	948	52	0	0	1000
Others	290	707	997	1	1	0	1000
Total	405	571	976	21	3	0	1000
Scheduled Tribe	515		880	120		0	1000
Scheduled Caste	602		947	52		0	1000
Others	323		990	8		0	1000

Source: NSS Report No. 512: Perceived Adequacy of Food Consumption in Indian Households 2004-05

Appendix 20.7
Nutritional Status of Women by State

Percentage of w	omen age	15-49 belo		-		(BMI) and	percentag	e with spec	ific BMI
			levels,	by state, Ind	ia 2005-06				
	Height				17.0-18.4	<17.9	>= 25.0	25.0-29.9	
	(% below		18.5-24.9	<18.5 (Total	(mildly	(severely	(overweig	(overweig	>+ 30.0
State	145 cm)	Mean BMI	(normal)	thin)	thin)	thin)	ht/ obese)	ht)	(obese)
Andhra Pradesh	12.1	20.9	50.9	33.5	17.8	15.6	15.6	11.5	4.1
Assam	15.8	20	55.7	36.5	21.4	15.2	7.8	6.9	0.9
Bihar	15.9	19.4	50.4	45.1	25.9	19.2	4.6	4	0.6
Gujarat	8.7	20.8	47	36.3	17.7	18.6	16.7	12.1	4.6
Haryana	4.4	21.1	51.2	31.3	16.8	14.5	17.4	13	4.4
Himachal Pradesh	6.1	20.8	56.6	29.9	16.7	13.2	13.5	11.4	2.1
Jharkhand	18	19.5	51.7	43	25	18	5.4	4.5	0.9
Karnataka	9.9	20.7	49.2	25.5	18.6	16.9	15.3	11.6	3.7
Kerala	8.6	22.6	53.9	18	9.6	8.4	28.1	23.1	5
Madhya Pradesh	8.4	19.7	50.8	41.7	22.8	18.9	7.6	6.2	1.4
Maharashtra	10.6	20.6	49.3	36.2	19.3	17	14.5	10.9	3.6
Orissa	13.1	19.7	52	41.4	23.1	18.3	6.6	5.5	1.1
Punjab	4.5	22.9	51.2	18.9	11.4	7.5	29.9	20.8	9.1
Rajastan	5	20.1	54.4	36.7	21.5	15.2	8.9	7.1	1.8
Tamil Nadu	9.5	21.6	50.6	28.4	14.9	13.5	20.9	15.8	5.1
Uttar Pradesh	14.4	20.1	54.8	36	21.1	14.9	9.2	7.5	1.7
West Bengal	14.3	20.2	49.6	39.1	21.4	17.6	11.4	9.4	2
India	11.4	20.5	51.8	35.6	19.7	15.8	12.6	9.8	2.8

Source: NFHS Report

Appendix 20.8 Prevalence of Anaemia in Children by State

(Percentage of Ch	ildren age	6-59 month	ns classifie	d as having
anaemia	, according	to state, Ir	ndia, 2005-0	06)
	Anem	ia Status b	y hemoglo	bin level
State		Moderate		
Otato	Mild (10-	(7.0-9-9	•	Any anaemia
	10.9 g/dl)	<u> </u>	g/dl)	(<11.0 g/dl)
Andhra Pradesh	23.7	43.5	3.6	70.8
Assam	28.7	38.7	2.2	69.6
Bihar	29.6	46.8	1.6	78
Gujarat	25	41.1	3.6	69.7
Haryana	25.8	42.2	4.3	72.3
Himachal Pradesh	25.7	26.8	2.2	54.7
Jharkhand	29.3	39.1	1.9	70.3
Karnataka	28.6	38.6	3.2	70.4
Kerala	23.5	20.5	0.5	44.5
Madhya Pradesh	27.1	43.6	3.4	74.1
Maharashtra	21.9	39.6	1.8	63.4
Orissa	28.9	34.5	1.6	65
Punjab	21.7	38.1	6.6	66.4
Rajastan	22.8	40.2	6.7	69.7
Tamil Nadu	27.1	34.6	2.6	64.2
Uttar Pradesh	25.4	45	3.6	73.9
West Bengal	30	29.4	1.5	61
India	26.3	40.2	2.9	69.5

Source: NFHS Report

Appendix 22.1

Development Funds to LSGs - Category-wise Outlay and Expenditure for 2006-07

(Rs. in lakhs)

		Gener	al			SC	P			TS	SP			Tota	<u> </u>	
Type of	Out	lay	Evnandi	%	Out	lay	Evnandi	%	Ou	tlay	Evnandi	%	Out	lay	Evnon	%
LSGIs	Budg eted	Formu- lated	Expendi- ture	0-10	Budgete d	Formu- lated	Expendi- ture	w.r.t Col.7	Budget ed	Formu- lated	Expendi- ture	w.r.t Col.11	Budgeted*	Formu- lated	Expen- diture	w.r.t Col.15
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
District Pts	11659.43	10395.20	9381.46	90.25	7129.07	8208.13	7013.01	85.44	1794.34	1906.88	1422.35	74.59	20582.84	20510.21	17816.82	86.87
Block Pts	11609.43	11020.15	10273.80	93.23	7129.07	7513.24	6555.82	87.26	1196.23	1196.65	1066.40	89.12	19934.73	19730.04	17896.02	90.70
Municipalities	8820.42	7977.33	7558.08	94.74	2505.99	3077.20	2096.38	68.13	68.85	75.17	35.98	47.86	11395.26	11129.70	9690.44	87.07
Corporations	7050.08	6527.20	6016.56	92.18	2148.66	2429.04	1149.50	47.32	0.00	0.00	0.00	0.00	9198.74	8956.24	7166.06	80.01
Grama Pts	54175.64	51610.52	47528.35	92.09	21387.21	23293.88	18710.75	80.32	2990.58	3164.40	2561.67	80.95	78553.43	78068.80	68800.77	88.13
Total	93315.00	87530.40	80758.25	92.26	40300.00	44521.49	35525.46	79.79	6050.00	6343.10	5086.40	80.19	139665.00	138394.99	121370.11	87.70

^{*}Budgeted provision excluding the undistirbuted amount of Rs.335 lakh

Source: IKM & Budget Documents

Appendix 22.2

Development Funds to LSGs - Sector- wise Allocation and Expenditure for 2006-07

(Rs. in lakhs)

		Productive			Service		Inf	rastructure	١		Others			Total	
Type of LSGs	Allocati on	Expendi- ture	%	Allocati on	Expendi- ture	%	Allocatio n	Expendi- ture	%	Allocati on	Expendi- ture	%	Allocation	Expendi- ture	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
District Pts	3869.69	2979.18	77	12912.16	11404.18	88	3365.19	3040.19	90	363.30	393.12	108	20510.34	17816.67	87
Block Pts	3897.31	2978.88	76	10615.78	9452.52	89	3441.82	3688.90	107	1774.93	1783.52	100	19729.84	17903.82	91
Municipalities	1210.93	915.03	76	5892.38	4849.23	82	3323.28	3182.79	96	703.02	743.41	106	11129.61	9690.46	87
Corporations	608.11	311.34	51	5509.50	4336.23	79	2201.44	1819.79	83	637.13	698.61	110	8956.18	7165.97	80
Grama Pts	16849.40	14207.41	84	41924.39	36546.37	87	12917.35	11596.66	90	6377.88	6442.75	101	78069.02	68793.19	88
Total	26435.44	21391.84	81	76854.21	66588.53	87	25249.08	23328.33	92	9856.26	10061.41	102	138394.99	121370.11	88

Appendix 22.3

Development Funds to LSGs - Productive Sector - Allocation & Expenditure for 2006 - 07

(Rs. in lakhs)

Development	D	istrict Pts	i	В	lock Pts		Mun	icipalitie	s	Cop	poration	s	Gr	ama Pts			Total	
Sector	Allocati on	Exp.	%	Allocati on	Ехр.	%	Allocati on	Exp.	%	Allocati on	Exp.	%	Allocati on	Exp.	%	Allocati on	Ехр.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Agriculture and Allied sectors	1269.60	1025.04	80.74	1374.18	1334.47	97.11	759.96	590.19	77.66	330.71	194.95	58.95	10457.05	9278.59	88.73	14191.50	12423.24	87.54
Soil and water conservation, Irrigation	1538.83	1168.11	75.91	1902.50	1216.31	63.93	195.79	115.60	59.04	53.96	18.21	33.75	4371.49	3350.72	76.65	8062.57	5868.95	72.79
Industries	1057.60	781.41	73.89	619.25	426.66	68.90	244.07	198.26	81.23	117.95	76.03	64.46	1916.03	1515.59	79.10	3954.90	2997.95	75.8
Environment	3.66	4.62	126.23	1.38	1.44	104.35	11.11	10.98	98.83	105.49	22.15	21.00	104.83	62.51	59.63	226.47	101.70	44.91
Total	3869.69	2979.18	76.99	3897.31	2978.88	76.43	1210.93	915.03	75.56	608.11	311.34	51.20	16849.40	14207.41	84.32	26435.44	21391.84	80.92

Appendix 22.4

Development Funds to LSGs - Productive Sector - Sub Sector- wise Allocation & Expenditure for 2007 - 08

(Rs. In lakh)

Sub Sector	District Par	nchayats	Block Pan	chayats	Municipa	alities	Corpora	tions	Grama Pa	nchayats	Tot	tal
Sub Sector	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.
1	2	3	4	5	6	7	8	9	10	11	12	13
AGRICULTURE & ALLIED SECTORS												
Paddy	935.03	879.03	422.57	367.95	210.57	184.68	41.23	31.11	2619.27	2273.11	4228.67	3735.88
Other Crops	301.50	276.91	305.33	242.16	163.82	133.10	69.49	61.10	3808.99	3179.00	4649.12	3892.27
Other Agriculture development Activities	412.24	219.01	353.48	275.82	126.55	99.20	84.12	60.19	3083.16	2102.49	4059.54	2756.71
Animal Husbandry	178.61	147.45	223.18	201.15	154.59	119.42	77.30	66.76	4003.10	3163.01	4636.78	3697.79
Dairy	156.79	116.52	179.26	160.47	7.37	4.86	1.71	0.00	335.60	223.08	680.73	504.93
Fisheries	82.86	54.74	84.83	67.12	116.05	59.32	208.45	135.64	451.86	254.84	944.03	571.66
Forestry	0.00	0.00	2.50	2.48	0.10	0.10	0.00	0.00	12.25	8.28	14.89	10.86
Sub Total	2067.03	1693.66	1571.14	1317.15	779.05	600.68	482.30	354.80	14314.23	11203.81	19213.76	15170.10
SOIL AND WATER CONSERVATION, IRRIGATION												
Land & Water Resource Management	668.81	443.68	914.21	604.84	127.08	76.28	92.08	39.74	2244.72	1402.67	4046.90	2567.21
Minor Irrigation	904.42	529.28	821.49	578.42	18.91	14.45	11.72	10.56	1888.34	1101.10	3644.88	2233.81
Flood Control	207.98	144.92	128.89	95.70	26.24	19.30	0.00	0.00	327.83	210.46	690.94	470.38
Sub Total	1781.21	1117.88	1864.59	1278.96	172.23	110.03	103.80	50.30	4460.89	2714.23	8382.72	5271.40
INDUSTRIES												
Small Scale Industries	643.02	560.16	578.55	377.36	177.39	118.93	67.06	31.63	2366.99	1609.62	3833.01	2697.69
Handicraft	18.25	14.48	4.04	3.63	2.47	1.42	0.00	0.00	36.62	25.05	61.39	44.58
Handloom	37.85	22.17	8.23	7.75	1.54	0.80	0.00	0.00	8.05	4.15	55.67	34.86
Coir Industry	5.01	5.00	11.62	11.62	3.39	3.39	0.00	0.00	40.27	26.34		46.35
Khadi, Village Industries	75.08	61.73	12.39	11.25	2.00	0.00	0.00	0.00	18.01	14.07	107.48	87.04
Sericulture	26.50	25.26	1.90	1.80	0.00	0.00	0.00	0.00	2.05	2.05		29.11
Electronic and Electric Industries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.39	6.71	9.39	6.71
Other Industries	10.82	9.04	0.00	0.00	1.01	0.96	4.19	0.00	17.30	12.35	33.32	22.34
Employment Training	144.40	91.77	121.67	58.04	60.61	46.21	27.74	19.00	476.70	311.50		526.51
Co-operative & Industrial Sector	4.35	2.83	4.00	4.00	0.00	0.00	0.00	0.00	34.95	31.04	43.30	37.87
Total energy Security Mission	629.07	624.71	23.85	20.37	23.86	23.45	40.30	40.30	841.68	799.15		1507.98
Other Industrial Activities	45.84	6.65	48.67	35.53	3.71	2.67	1.00	0.00	46.85	29.49	146.06	74.35
Sub Total	1640.19	1423.79	814.92	531.35	275.98	197.83	140.29	90.93	3898.86	2871.52	6770.23	5115.44
ENVIRONMENT												
Environmental Protection	9.12	8.82	18.75	9.89	0.71	0.70	2.00	0.17	49.28	37.12	79.86	56.70
Environmental Activities	29.56	4.50	6.35	4.66	6.00	5.47	45.97	45.98	51.44	29.19	139.32	89.79
Sub Total	38.68	13.32	25.10	14.55	6.71	6.17	47.97	46.15	100.72	66.31	219.18	146.49
Grand Total	5527.11	4248.65	4275.76	3142.00	1233.97	914.71	774.36	542.18	22774.70	16855.87	34585.89	25703.43

Appendix 22.5

Development Funds to LSGs - Service Sector - Allocation & Expenditure for 2006 - 07

(Rs. in lakhs)

Development	Dis	trict Pts		Bl	ock Pts		Mur	nicipalitie	es	Co	poration	s	Gı	ama Pts			Total	
Sector	Allocati on	Exp.	%	Allocati on	Exp.	%	Allocati on	Exp.	%	Allocati on	Exp.	%	Allocati on	Ехр.	%	Allocati on	Exp.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Education, Culture, Arts, Youth Welfare & Sports	3234.49	2800.15	86.57	1210.80	1072.96	88.62	907.06	830.93	91.61	430.26	366.36	85.15	4229.52	3889.48	91.96	10012.13	8959.88	89.49
Health & Allied Services	2703.06	2232.48	82.59	2267.62	1777.25	78.38	896.41	955.05	106.54	1123.61	1072.43	95.45	5362.53	4423.25	82.48	12353.23	10460.46	84.68
Social Welfare	6326.49	5987.81	94.65	5981.61	5570.02	93.12	3394.20	2568.90	75.68	3233.80	2328.90	72.02	28116.54	24403.64	86.79	47052.64	40859.27	86.84
Women Development	258.03	165.47	64.13	617.03	569.60	92.31	472.99	304.00	64.27	544.25	407.30	74.84	2634.51	2348.43	89.14	4526.81	3794.80	83.83
Labour & Labour Welfare	163.55	100.21	61.27	110.57	98.93	89.47	47.54	61.36	129.07	68.73	86.47	125.81	470.40	428.28	91.05	860.79	775.25	90.06
General Economic Services	226.54	118.06	52.11	428.15	363.66	84.94	174.18	128.99	74.06	108.85	74.77	68.69	1110.89	1053.29	94.81	2048.61	1738.77	84.88
Total	12912.16	11404.18	88.32	10615.78	9452.42	89.04	5892.38	4849.23	82.30	5509.50	4336.23	78.70	41924.39	36546.37	87.17	76854.21	66588.43	86.64

Appendix 22.6

Development Funds to LSGs - Service Sector - Sub Sector- wise Allocation& Expenditure for 2007 - 08

(Rs. In lakh)

Sub Sector	District Pan	chayats	Block Pane	chayats	Municipa	alities	Corpora	tions	Grama Par	nchayats	Tot	al
Sub Sector	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.
1	2	3	4	5	6	7	8	9	10	11	12	13
EDUCATION, CULTURE, ARTS, YOUTH, SPORTS												
Pre-Primary Education	86.87	80.54	51.29	46.15	39.69	29.37	155.30	154.70	257.09	192.68	590.24	503.44
Primary Education	7.35	6.58	86.04	71.08	113.50	84.68	137.33	135.94	478.36	422.33	822.58	720.61
High School Education	624.55	451.98	58.72	46.19	110.59	91.14	124.07	69.01	91.75	61.39	1009.68	719.71
Higher Secondary Education	564.45	521.28	10.29	8.99	67.89	46.34	20.00	19.22	16.91	15.65	679.54	611.48
Technical Education	122.91	97.21	7.52	4.03	3.83	3.83	4.40	3.38	41.91	38.21	180.57	146.66
SSA	965.35	963.81	5.09	5.04	368.48	364.17	325.83	324.72	2397.54	2354.50	4062.29	4012.24
Sports	68.78	65.37	22.96	21.43	24.87	20.39	10.50	3.99	201.53	188.84	328.64	300.02
Youth Welfare	0.00	0.00	5.06	5.05	2.69	2.63	0.00	0.00	46.89	35.99	54.64	43.67
Vayana Shala & Library	118.49	62.89	55.83	49.82	46.23	39.53	9.90	5.11	98.42	81.16	328.87	238.51
Arts & Culture	52.01	32.19	100.37	52.79	58.56	44.30	18.09	11.91	174.38	84.33	403.41	225.52
Cont. Education & Informal Education	60.61	48.79	33.99	25.16	19.06	15.53	5.51	3.30	63.63	50.76	182.80	143.54
Sub Total	2671.37	2330.64	437.16	335.73	855.39	741.91	810.93	731.28	3868.41	3525.84	8643.26	7665.40
HEALTH & ALLIED SERVICES												
PHC/CHC	182.57	120.44	149.36	126.08	42.14	29.86	18.33	14.91	145.69	101.54	538.09	392.83
Public Health	39.86	31.66	17.13	10.02	44.09	38.94	1.06	1.06	128.25	107.79	230.39	189.47
Special Health Programme	161.85	127.37	52.79	41.93	6.43	6.43	47.75	47.22	351.41	317.82	620.23	540.77
Medicine	0.51	0.00	17.11	16.41	60.43	47.15	9.07	9.01	241.23	228.18	328.35	300.75
Waste Treatment	3.00	0.00	4.44	0.17	1.00	0.96	0.00	0.00	5.98	4.01	14.42	5.14
Insurance Programme	0.00	0.00	3.00	3.00	0.17	0.13	1.50	1.50	14.00	10.85	18.67	15.48
Other Health Programme	87.14	69.22	42.60	37.38	49.33	46.62	37.60	31.96	108.00	80.12	324.67	265.30
Drinking Water	1753.03	1233.45	1062.87	749.35	335.05	278.44	694.70	677.97	2517.18	1722.38	6362.83	4661.59
Sanitation	150.04	138.39	196.84	189.42	292.02	229.99		96.56		828.87	1796.47	1483.23
Sub Total	2378.00	1720.53	1546.14	1173.76	830.66	678.52	931.37	880.19	4547.95	3401.56	10234.12	7854.56
SOCIAL WELFARE												
Housing	1327.29	1177.62	1215.73	1171.28	866.21	723.56	430.04	333.64	7049.36	5936.42	10888.63	9342.52
Slum Development	403.94	363.98	528.73	509.16	766.22	645.81	753.76	722.23	2430.92	2059.37	4883.57	4300.55
Housing Construction Co-operative Institution	10.02	4.65	1.50	1.50	12.83	8.43	0.00	0.00	78.37	76.58	102.72	91.16
Electrification	456.71	421.18	246.58	233.87	75.13	71.88	141.26	141.06	902.71	823.30	1822.39	1691.29
Old age programmes	38.52	30.72	308.14	211.45	178.82	149.00	24.86	18.67	1247.16	1006.00	1797.50	1415.84
Programmes for Disabled	290.81	252.97	183.13	153.03	175.42	142.95	172.94	167.56	992.19	778.02	1814.49	1494.53

Sub Sector	District Pa	nchayats	Block Pan	chayats	Municipa	alities	Corpora	ations	Grama Pa	nchayats	To	tal
Gub Gooto.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.
1	2	3	4	5	6	7	8	9	10	11	12	13
Programmes for Destitudes	67.41	65.09	42.45	41.48	82.01	63.17	140.72	114.60	432.15	342.28	764.74	626.62
Integrated Poverty Eradication Programme	55.60	53.30	243.15	229.28	198.61	143.68	202.78	200.20	1024.18	879.64	1724.32	1506.10
Women Welfare	49.02	21.13	301.23	247.08	175.28	138.25	223.83	157.33	1623.02	1288.67	2372.38	1852.46
Programmes for SC	5173.28	3685.38	3025.40	2415.96	2355.48	1636.36	3116.61	1957.91	15929.36	11447.81	29600.13	21143.42
Programmes for ST	1567.17	1125.18	995.46	847.03	154.62	102.60	0.00	0.00	3093.44	2348.13	5810.69	4422.94
Sub Total	9439.77	7201.20	7091.50	6061.12	5040.63	3825.69	5206.80	3813.20	34802.86	26986.22	61581.56	47887.43
WOMEN & CHILDREN DEVELOPMENT												
Women & Children Development Programmes	274.58	162.75	349.73	230.60	271.87	205.16	237.36	229.56	1613.19	1213.01	2746.73	2041.08
Special Programmes for Child Welfare	20.17	18.11	30.16	18.48	44.35	41.31	94.23	91.79	154.42	127.01	343.33	296.70
Sub Total	294.75	180.86	379.89	249.08	316.22	246.47	331.59	321.35	1767.61	1340.02	3090.06	2337.78
LABOUR & LABOUR WELFARE												
Labour & Labour Welfare Programmes	33.67	24.76	31.27	25.14	7.61	5.48	3.95	3.88	213.76	173.96	290.26	233.22
Sub Total	33.67	24.76	31.27	25.14	7.61	5.48	3.95	3.88	213.76	173.96	290.26	233.22
OTHER ECONOMIC SERVICES												
Tourism	4.00	4.00	7.61	2.92	24.47	23.44	7.00	5.45	53.41	41.50	96.49	77.31
Public Distribution	0.00	0.00	0.10	0.07	1.87	1.87	0.00	0.00	2.32	2.03	4.29	3.97
Public Crimitorium	25.00	11.32	48.91	30.09	61.25	48.67	134.45	130.09	99.99	47.54	369.60	267.71
Survey & Studies	5.00	5.00	21.28	20.86	15.80	15.76	2.00	2.00	81.89	73.28	125.97	116.90
Monitoring and Evaluation	16.51	9.39	124.82	91.88	58.52	50.88	12.84	12.00	499.48	431.60	712.17	595.75
Good Governance	17.00	5.91	69.63	63.25	228.98	216.00	62.46	58.86	255.17	228.75	633.24	572.77
Computerisation	15.55	14.32	65.16	60.92	58.63	57.97	0.00	0.00	217.17	192.00	356.51	325.21
Other Plan Expenditure	0.00	0.00	0.75	0.75	100.30	99.38	0.00	0.00	3.41	3.17	104.46	103.30
Sub Total	83.06	49.94	338.26	270.74	549.82	513.97	218.75	208.40	1212.84	1019.87	2402.73	2062.92
Grand Total	14900.62	11507.93	9824.22	8115.57	7600.33	6012.04	7503.39	5958.30	46413.43	36447.47	86241.99	68041.31

Appendix 22.7

Development Funds to LSGs - Infrastructure Sector - Allocation & Expenditure for 2006 - 07

(Rs. in lakhs)

Development	Di	strict Pts	}	В	lock Pts		Mur	nicipalitie	s	Со	poration	s	Gr	ama Pts			Total	
Sector	Allocati on	Exp.	%	Allocati on	Exp.	%	Allocati on	Ехр.	%	Allocati on	Exp.	%	Allocati on	Exp.	%	Allocati on	Exp.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Enery	261.96	264.70	101.05	232.12	221.35	95.36	293.25	246.96	84.21	257.32	275.83	107.19	1007.52	963.55	95.64	2052.17	1972.39	96.11
Transportation	2868.78	2552.09	88.96	2969.56	3253.47	109.56	2655.33	2647.24	99.70	1684.69	1362.77	80.89	11137.50	9965.27	89.47	21315.86	19780.84	92.8
Public Building	234.45	223.40	95.29	240.14	214.08	89.15	374.70	288.59	77.02	259.43	181.19	69.84	772.33	667.84	86.47	1881.05	1575.10	83.74
Total	3365.19	3040.19	90.34	3441.82	3688.90	107.18	3323.28	3182.79	95.77	2201.44	1819.79	82.66	12917.35	11596.66	89.78	25249.08	23328.33	92.39

Appendix 22.8

Development Funds to LSGs-Infrastructure Sector- Sub Sector- wise Allocation & Expenditure for 2007 - 08

(Rs. In lakh)

Sub Sector	District Pa	nchayat	Block Par	chayat	Municipa	alities	Corpor	ation	Grama Pa	nchayat	To	tal
	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.	Allocation	Expr.
1	2	3	4	5	6	7	8	9	10	11	12	13
ENERGY												
Electrification of Street Light	29.83	16.21	43.53	37.55	252.04	216.89	133.30	98.79	450.42	400.64	909.12	770.08
Other Electricity Projects	6.50	6.50	3.29	3.02	7.33	6.67	388.00	384.61	83.26	75.08	488.38	475.88
Non Conventional Enery	0.00	0.00	0.00	0.00	1.50	1.41	0.00	0.00	1.00	0.49	2.50	1.90
Energy	0.00	0.00	0.00	0.00	0.85	0.78	18.30	18.30	14.86	14.11	34.01	33.19
Energy Audit	0.00	0.00	0.69	0.49	10.75	0.00	0.00	0.00	0.00	0.00	11.44	0.49
Other Energy Programmes	0.00	0.00	0.89	0.68	25.66	25.24	32.38	32.38	30.40	30.02	89.33	88.32
Sub Total	36.33	22.71	48.40	41.74	298.13	250.99	571.98	534.08	579.94	520.34	1534.78	1369.86
TRASPORTATION												
Roads	2096.80	1355.93	2047.87	1683.21	2188.93	1776.20	942.93	630.44	7735.26	5866.94	15011.79	11312.72
Footpath	60.95	37.02	121.50	89.19	62.56	42.15	81.36	66.76	633.62	483.99	959.99	719.11
Bridges	179.70	139.71	108.09	97.29	47.91	44.32	12.55	12.52	74.00	48.70	422.25	342.54
Culverts	33.45	28.06	32.43	23.41	39.64	29.57	0.00	0.00	191.25	127.84	296.77	208.88
Foot Bridges	79.70	56.65	12.10	11.29	33.41	29.01	0.00	0.00	90.33	48.57	215.54	145.52
Waiting Shed & Bus Stand	0.00	0.00	3.47	3.04	59.55	55.64	0.00	0.00	71.83	52.66	134.85	111.34
Vehicles	6.00	5.93	6.00	4.99	26.96	23.70	51.42	50.19	81.77	77.92	172.15	162.73
Inland Transportation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.85	2.80	5.85	2.80
Other Source of Transportation	0.00	0.00	7.77	7.36	0.00	0.00	2.86	0.00	3.42	2.13	14.05	9.49
Connecitivity Plan	0.00	0.00	1.37	0.71	6.40	5.28	3.00	2.23	5.73	5.05	16.50	13.27
PMGSY	13.42	13.42	6.96	6.96	0.00	0.00	0.00	0.00	12.72	12.29	33.10	32.67
Sub Total	2470.02	1636.72	2347.56	1927.45	2465.36	2005.87	1094.12	762.14	8905.78	6728.89	17282.84	13061.07
BUILDING												
Public Building	131.33	110.82	191.17	137.31	540.79	479.80	184.38	144.53	619.98	472.20	1667.65	1344.66
Sub Total	131.33	110.82	191.17	137.31	540.79	479.80	184.38	144.53	619.98	472.20	1667.65	1344.66
Grand Total	2637.68	1770.25	2587.13	2106.50	3304.28	2736.66	1850.48	1440.75	10105.70	7721.43	20485.27	15775.59