

SIXTH FIVE YEAR PLAN  
1980-85

STATE PLANNING BOARD  
TRIVANDRUM

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## CONTENTS

	<i>Page No.</i>
Chapter I Introduction	1
Chapter II Sectoral Strategy	12
Chapter III Sectoral Programmes	25
3.1 Agriculture and Allied Services	25
Agriculture	25
Land Reforms	39
Minor Irrigation	40
Soil and Water Conservation	41
Special Area Programme for Rural Development	46
Food	47
Animal Husbandry	48
Dairy Development	55
Fisheries	59
Forests	65
Investments in Agricultural Financial Institutions	71
Community Development and Panchayats	71
3.2 Co-operation	74
3.3 Irrigation, Flood Control, Anti-Sea Erosion and Power	79
Major and Medium Irrigation	79
Flood Control and Anti-Sea Erosion	83
Power	84
3.4 Industry and Minerals	89
Small Scale Industries	89
Industrial Estates	96
Handloom Industry	98
Powerloom Industry	102
Khadi and Village Industries	103
Handicrafts	104
Coir Industry	106
Cashew Industry	108
Bamboo Industry	109
Bricks and Tiles	109
Beedi Industry	109
Medium and Large Industries	110
Mineral Development	130
3.5 Transport and Communications	131
Ports and Shipping	131
Roads and Bridges	135

	<i>Page No</i>
Road Transport ..	137
Water Transport ..	138
Tourism ..	140
3.6 Social and Community Services ..	142
Elementary Education ..	142
Secondary Education ..	144
Teacher Education ..	147
University Education ..	147
Adult Education ..	154
Art and Culture ..	155
Technical Education ..	157
Scientific Services and Research ..	163
Health ..	165
Sewerage and Water Supply ..	179
Housing ..	187
Urban Development ..	192
Information and Publicity ..	194
Labour and Labour Welfare ..	196
Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes ..	201
Social Welfare ..	209
Nutrition ..	216
3.7 Economic Services ..	217
State Planning Board ..	217
Economic Advice and Statistics ..	220
Regulation of Weights and Measures ..	221
3.8 General Services ..	222
Stationery and Printing ..	222
Public Works ..	223
Chapter IV Minimum Needs Programme ..	225
Chapter V Special Component Plan for Scheduled Castes ..	228
Chapter VI Resources for the Plan ..	230
APPENDIX Statistical Statements ..	233



## CHAPTER 1

### INTRODUCTION

The Sixth Five Year Plan of India as finally approved by the National Development Council in February 1981 envisages a total investment outlay of Rs. 1,58,710 crores during the period 1980-85 at 1979-80 level of prices. Of this, Rs. 84,000 crores (53 per cent) is estimated to be in the public sector and the balance of Rs. 74,710 crores (47 per cent) in the private sector. Including a current development outlay of Rs. 13,500 crores in the public sector, the aggregate public sector outlay on the Sixth Plan would amount to Rs. 97,500 crores. The Plan aims at an annual growth rate of 5.2 per cent in the economy during 1980-85 as against an underlying trend rate of growth of 3.5 per cent during the years 1950-51 to 1978-79. The realisation of the projected growth rate in the Sixth Plan would, therefore, involve a significant acceleration of the pace of development, especially in the two crucial sectors of agriculture and industry. Since the State Plan represents regional component of the national plan, it may be in order by way of background to dwell at some length on the main objectives and strategies of the National Plan as visualised by the Planning Commission.

#### All India Plan (1980-85)

##### *Objectives*

1.2 The objectives of the Sixth Plan of India have been formulated taking into account the achievements and failures of the past three decades of planning and the recent economic situation as reflected in the acute inflationary pressures which have prevailed since March, 1979, a set back in the functioning of such critical sectors as power, coal, railways and steel and the steep rise in the price of petroleum products resulting in an increasing deterioration in the nation's terms of trade and balance of payments. Since, however, the long term prospects of the economy depend significantly on the development of domestic resources of coal, power and renewable sources of energy, on the investment in the modernisation and expansion of transport and in a rapid growth in agriculture and rural development, it will be necessary to make the requisite effort to mobilise resources in the face of all these difficulties so as to put the economy back on the path of sustained and self-generating growth.

1.3 In the light of these considerations, the following objectives have been formulated:

- (i) a significant step-up in the rate of growth of the economy, the promotion of efficiency in the use of resources and improved productivity;

- (ii) strengthening the impulses of modernisation for the achievement of economic and technological self-reliance;
- (iii) a progressive reduction in the incidence of poverty and unemployment;
- (iv) a speedy development of indigenous sources of energy, with proper emphasis on conservation and efficiency in energy use;
- (v) improving the quality of life of the people in general with special reference to the economically and socially handicapped population, through a Minimum Needs Programme whose coverage is so designed as to ensure that all parts of the country attain within a prescribed period nationally accepted standards;
- (vi) strengthening the redistributive bias of public policies and services in favour of the poor contributing to a reduction in inequalities of income and wealth;
- (vii) a progressive reduction in regional inequalities in the pace of development and in the diffusion of technological benefits;
- (viii) promoting policies for controlling the growth of population through voluntary acceptance of the small family norm;
- (ix) bringing about harmony between the short and the long term goals of development by promoting the protection and improvement of ecological environmental assets; and
- (x) promoting the active involvement of all sections of the people in the process of development through appropriate education, communication and institutional strategies.

##### *Savings and Investment*

1.4 The National Plan envisages a total investment (gross capital formation) of Rs. 1,58,710 crores over the plan period 1980-85 estimated at 1979-80 prices. This is to be financed by domestic saving of Rs. 1,49,647 crores and net inflow of funds from abroad to the extent of Rs. 9,063 crores. Thus, nearly 94.3 per cent of the total investment is to be financed from domestic resources. The total investment has been projected to grow from Rs. 23,618 crores in 1979-80 to Rs. 36,797 crores in 1984-85. At the same time Gross Domestic Product at market prices has been projected to increase from Rs. 1,08,546 crores to Rs. 1,46,540 crores during the same period. Thus, investment as percentage

of Gross Domestic Product at market prices is expected to rise from 21.8 per cent in 1979-80 to 25.1 per cent in 1984-85.

#### Domestic Savings

1.5 Domestic saving is expected to grow from Rs. 23,055 crores in 1979-80 to Rs. 35,870 crores in 1984-85. Saving rate as percentage of Gross Domestic Product at market prices is envisaged to increase from 21.2 per cent in 1979-80 to 24.5 per cent in 1984-85 implying a marginal rate of saving of the order of 33.7 per cent over the plan period. The Sixth Plan aims at stepping up the rate of saving by bringing about an improvement in the rates of saving to disposable income in the different sectors. The share of public sector in aggregate domestic saving would rise from 17.4 per cent to 24.8 per cent, while that of the households would decline from 75.2 per cent to 66.9 per cent over the plan period.

1.6 The proposed investment outlay of Rs. 1,58,710 crores over the plan period is expected to result in an annual average rate of growth of 5.2 per cent in Gross Domestic Product. The sectoral growth rates are determined by the demand for and supply of different commodities and services either through the market mechanism or as a result of specific public policies adopted to clear specific markets. Sectoral growth rates are thus subject to technical, behavioural and institutional constraints as well as policies of the Government. A large part of the supply is determined by the investment decisions already made in the past; a large part of demand originates from the need for building up capacity for the future. There is also the foreign demand for our exports and the supply of imports from abroad. The projected demand pattern takes into account the consumption requirements consistent with the objective of a significant reduction in the proportion of people below the poverty line. Redistribution of consumption in favour of the poorer sections of the population has been provided for to assess the output implications of the postulate of a reduction in the percentage of population below the poverty line to 30, both in rural and urban areas by 1984-85.

1.7 While significant growth is projected for all the sectors, the changing pattern of demand, as is to be expected in a developing economy, indicates different growth rates at sectoral level, leading to a diversification of the production structure of the economy. The sectoral growth rates and the consequent structural change in the composition of gross domestic product over the plan period are shown in Table 1.1

TABLE 1.1  
Sectoral Growth Rates and Change in Sectoral Composition of Gross Value Added

Sector	Growth rate of Gross Value Added 1979-1980 to 1984-85 (Per cent per Annum)	Sectoral Composition of Gross Value Added (Percentage Distribution)	
		1979-80	1984-85
1. Agriculture	3.83	35.13	32.90
2. Mining and Manufacturing	6.90	19.59	21.22
3. Electricity	7.15	1.71	1.88
4. Construction	5.10	5.07	5.05
5. Transport	5.46	4.89	4.95
6. Services	5.44	33.61	34.00
Total	5.20	100.00	100.00

1.8 The total plan investment for the period 1980-85, is estimated at Rs. 1,58,710 crores. Of this Rs. 84,000 crores (53 per cent) is envisaged to be in the public sector and the balance of Rs. 74,710 crores (47 per cent) in the private sector. The sector-wise breakup of the gross investment envisaged has been arrived at in such a manner as to realise the targeted sectoral growth rates. The breakup of gross investment by sectors of destination is given in Table 1.2.

TABLE 1.2  
Gross Investment by Sectors of Destination (1980-85)

Sector	Investment (Rs. crores)	
	(at 1979-80 prices)	(at market prices)
1. Agriculture	32,242	
2. Forestry and Logging	478	
3. Fishing	748	
4. Mining and Quarrying	6,575	
5. Manufacturing	45,515	
6. Construction	1,760	
7. Electricity, Gas and Water Supply	23,554	
8. Railways	4,724	
9. Other Transport	11,330	
10. Communications	2,902	
11. Trade, Storage and Warehousing	7,299	
12. Banking and Insurance	260	
13. Real Estate and Ownership of Dwellings	16,437	
14. Other Services (including Public Administration and Research)	4,886	
Total	1,58,710	

*Private Sector Investment*

1.9 Of the anticipated private sector investment of Rs. 74,710 crores nearly 41 per cent (Rs. 30,323 crores) is likely to be in mining and manufacturing including small and village industries. The break up of private sector investment according to sectors is given in Table 1.3.

TABLE 1.3  
**Distribution of Private Sector Investment  
(1980-85)**

<i>Sector</i>	<i>Amount</i>	<i>Share (%)</i>
1. Agriculture and other Sectors	16101	21.55
2. Industry and Minerals	30323	40.59
3. Power	189	0.25
4. Transport and Communications	3390	4.54
5. Others	24707	33.07
Total	74710	100.00

*Public Sector Outlays*

1.10 The Sixth Five Year Plan provides for a total outlay in the public sector of Rs. 97,500 crores at 1979-80 prices. Of this, current outlay, i.e. outlay mainly for the maintenance of service created during the plan period (outlay which does not create assets) comes to Rs. 13,500 crores; the balance of Rs. 84,000 crores being public sector investment. Compared with the Fifth Plan (1974-79), the Sixth Plan outlay represents an increase of over 80 per cent in real terms.

1.11 The share of the States and Union Territories in the total public sector outlay is Rs. 50,250 crores, distributed among the States as shown in Table 1.4. The balance of Rs. 47,250 crores is the outlay in the Central Sector.

TABLE 1.4  
**Sixth Five Year Plan—Public Sector Outlays**

(Rs. crores)

<i>Sector</i>	<i>Centre</i>	<i>States</i>	<i>U.Ts.</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)
I. <i>Agriculture</i>	2450.13	3119.02	125.92	5695.07
Agricultural Research and Education	340.00	197.67	..	537.67
Crop Husbandry	293.00	906.50	34.48	1233.98
Soil and Water Conservation	90.00	323.16	20.41	433.57
Animal Husbandry and Dairying	398.00	430.56	22.82	851.38
Fisheries	174.00	185.13	12.29	371.42
Forestry	105.00	559.54	28.10	692.64
Land Reforms	30.10	272.62	1.91	304.63
Management of Natural Disasters	15.00	..	..	15.00
Agricultural Marketing	46.65	48.55	0.91	96.11
Food, Storage and Warehousing	294.00	38.61	5.00	337.61
Investment in Agricultural Financial Institutions	664.38	156.68	..	821.06
II. <i>Rural Development</i>	2314.87	3020.03	28.83	5363.73
Integrated Rural Development and Related Programme	997.55	1508.09	1.00	3486.64
National Rural Employment Programme	980.00			
Community Development and Panchayat Institutions	7.17	335.29	9.74	352.20
Co-operation	330.15	566.00	18.09	914.24
Special Employment Programmes	..	610.65	..	610.65
III. <i>Special Area Programme</i>	..	1480.00	..	1480.00
Hill Areas	..	560.00	..	560.00
Tribal Areas	..	470.00	..	470.00
North Eastern Council	..	340.00	..	340.00
Development of Backward Areas	..	110.00	..	110.00
IV. <i>Irrigation and Flood Control</i>	635.00	11395.48	129.55	12160.03
Major and Medium Irrigation	90.00	8301.46	56.90	8448.36
Minor Irrigation	70.00	1710.70	29.60	1810.30
*Command Area Development	300.00	555.92	0.035	856.27
Flood Control including Anti Sea Erosion	175.00	827.40	42.70	1045.10

	(1)	(2)	(3)	(4)	(5)
V. <i>Energy</i> ..		11995.00	14293.56	246.88	2065 26535.44
Power ..		4725.00	14293.56	246.88	1192 19265.44
New and Renewable Sources of Energy ..		100.00	..	..	10 100.00
Petroleum ..		4300.00	..	..	43 4300.00
Coal ..		2870.00	..	..	28 2870.00
VI. <i>Industry and Minerals</i> ..		12771.47	2185.86	60.24	1150 15017.55
Village and Small Scale ..		923.40	815.11	41.94	7 780.45
Large and Medium ..		11848.07	1370.75	18.30	1132 13237.15
VII. <i>Transport</i> ..		8418.64	3707.34	285.99	24 2411.95
Railways ..		5100.00	..	..	51 5100.00
Roads ..		830.00	2398.87	210.09	34 3438.90
Road Transport ..		70.00	1111.40	14.15	11 1195.55
Ports ..		575.00	..	..	5 575.00
Light Houses ..		12.00	63.85	43.75	14 1414.60
Shipping ..		720.00	..	..	7 720.00
Inland Water Transport ..		45.00	24.36	2.30	7 71.66
Civil Aviation ..		850.00	6.30	2.80	8 859.10
Tourism ..		72.00	102.56	12.90	1 187.46
Meteorology ..		144.64	..	..	1 144.64
VIII. <i>Communications and Information and Broadcasting</i> ..		3101.98	28.61	3.67	31 3134.26
Communication ..		2810.00	0.15	0.12	28 2810.27
INSAT—Space Segment ..		51.65	..	..	5 51.65
Broadcasting and Television ..		210.33	..	..	2 210.33
Information and Publicity ..		30.00	28.46	3.55	6 62.01
IX. <i>Science and Technology</i> ..		849.15	17.05	..	8 865.20
Atomic Energy ..		248.98	..	..	2 248.98
Space ..		245.80	..	..	2 245.80
Scientific Research ..		304.87	17.05	..	3 321.92
National Test Houses ..		8.50	..	..	8 8.50
Ecology and Environment ..		40.00	..	..	4 40.00
X. <i>Social Services</i> ..		4453.42	8830.88	750.96	140 14035.26
<i>Education</i>					
(a) General Education ..		515.75	1493.09	153.39	2 2162.23
(b) Art and Culture ..		51.00	31.85	1.05	8 83.90
(c) Technical Education ..		168.00	99.13	10.48	1 277.61
Health including Medical ..		601.00	1091.19	128.86	11 1821.05
Family Planning ..		1010.00	..	..	10 1010.00
Housing ..		300.00	1065.95	124.92	1 1490.87
Urban Development ..		110.00	780.77	106.76	9 997.53
Water Supply and Sanitation ..		614.22	3123.65	184.15	3 3922.02
Welfare of Scheduled Castes, Scheduled Tribes and other Backward Classes ..		240.00	709.00	11.30	9 960.30
Special Central Additive for Scheduled Caste Component Plans ..		600.00	..	..	6 600.00
Social Welfare ..		150.00	109.78	12.19	2 271.97
Nutrition ..		14.95	214.55	8.64	2 238.14
Labour and Labour Welfare ..		78.50	111.92	9.22	1 199.64
XI. <i>Others</i> ..		261.34	522.17	17.96	8 801.47
Statistics ..		68.87	24.56	2.01	9 95.44
Rehabilitation of Displaced Persons ..		154.12	..	..	1 154.12
Planning Machinery ..		20.07	..	..	2 20.07
Stationery and Printing ..		12.00	26.06	1.49	3 39.55
Public Works ..		..	190.30	4.87	1 195.17
Training for Development ..		2.28	..	..	2 2.28
Other Unclassified Services ..		4.00	281.25	9.59	4 294.84
<b>Total (I to XI)</b> ..		<b>47250.00</b>	<b>48600.00</b>	<b>1650.00</b>	<b>9 97500.00</b>

1.12 The sectoral allocations of the public sector outlays have been determined in the light of the pattern of growth of the economy visualised in the next five years, the capacity already available in the economy and the objectives of the Plan. A considerable part of the investment in the Sixth Five Year Plan will be for on-going projects; many of these will generate output during or towards the end of the plan period. Similarly, a part of the investment in the Sixth Plan, especially on projects with relatively long gestation,

will generate output in the period beyond the Sixth Plan. In determining the sectoral distribution of outlays all these factors have been taken into consideration.

#### State Plan Outlays

1.13 The distribution of total State Plan outlay among the States and Union Territories is shown in Table 1.5. The percentage share and the per capita outlay of each State are also shown in the Table.

TABLE 1.5  
Sixth Plan Outlays of States

States	Population (Percentage)	Outlay (1980-85) Rs. Crores	Percentage share in State Plan Outlay	Per Capita Outlay Rs.
(1)	(2)	(3)	(4)	(5)
1 Andhra Pradesh ..	7.94	3100	6.17	711
2 Assam ..	2.73	1115	2.22	743
3 Bihar ..	10.28	3225	6.42	572
4 Gujarat ..	4.87	3680	7.32	1378
5 Haryana ..	1.83	1800	3.58	1800
6 Himachal Pradesh ..	0.63	560	1.11	1600
7 Jammu and Kashmir ..	0.84	900	1.79	1957
8 Karnataka ..	5.35	2265	4.51	773
9 Kerala ..	3.89	1550	3.08	728
10 Madhya Pradesh ..	7.60	3800	7.56	911
11 Maharashtra ..	9.20	6175	12.29	1225
12 Manipur ..	0.20	240	0.48	2182
13 Meghalaya ..	0.18	235	0.47	2350
14 Nagaland ..	0.09	210	0.42	4200
15 Orissa ..	4.00	1500	2.99	685
16 Punjab ..	2.47	1957	3.89	1450
17 Rajasthan ..	4.70	2025	4.03	785
18 Sikkim ..	0.40	122	0.24	6100
19 Tamil Nadu ..	7.52	3150	6.27	765
20 Tripura ..	0.28	245	0.49	1531
21 Uttar Pradesh ..	16.12	5850	11.64	663
22 West Bengal ..	8.08	3500	6.97	790
Total (States) ..	(98.04)	47204	(93.94)	871
Union Territories ..	1.16	1650	3.28	2602
Hill Areas, Tribal Areas, etc. ..	..	1396	2.78	..
Total ..	100.00	50250	100.00	891

### Financial Resources

1.14 The aggregate resources for the Sixth Five Year Plan, 1980-85, are placed at Rs. 1,72,210 crores, consisting of an investment outlay of Rs. 1,58,710 crores and current development outlay in the public sector of Rs. 13,500 crores. The investment outlay is to be financed as shown in Table 1.6.

TABLE 1.6

#### Estimates of Gross Domestic Saving, Investment and Aggregate Resources (1980-85)

Sl.No.	Item	Amount (Rs. crores at 1979-80 prices)
1.	Public Saving	34,200
2.	Private Saving	1,15,447
3.	Aggregate Domestic Saving	1,49,647
4.	Net Inflow from Abroad	9,063
5.	Total Saving Available for Gross Investment	1,58,710
6.	Current Development Outlay in the Public Sector	13,500
	Aggregate Resources	1,72,210

1.15 Of the aggregate outlay of Rs. 1,72,210 crores, public sector outlay has been estimated at Rs. 97,500 crores. The estimates of financial resources for the public sector plan are given in Table 1.7. Additional resource mobilisation of Rs. 21,302 crores, market borrowings of Government, public enterprises and local bodies amounting to Rs. 19,500 crores and balance from current revenues at 1979-80 rates of tax estimated at Rs. 14,478 crores are the major components. External assistance and contribution of public enterprises are also contemplated on a significant scale. The estimates of financial resources for the plan in the public sector is given in Table 1.7.

TABLE 1.7

#### Estimates of Financial Resources for the Public Sector Plan 1980-85

Sl.No.	Item	Amount (Rs. crores at 1979-80 prices)
(1)	(2)	(3)
1.	Balance from Current Revenues at 1979-80 Rates of Taxes	14,478
2.	Contribution of Public Enterprises	9,395

(1)	(2)	(3)
3.	Market Borrowings of Government, Public Enterprises and Local Bodies	19,500
4.	Small Savings	6,463
5.	State Provident Funds	3,702
6.	Terms loans from Financial Institutions (Gross)	2,722
7.	Miscellaneous Capital Receipts (Net)	4,009
8.	External Assistance and Borrowing from Rest of the World (Net)	9,929
9.	Drawing Down of Foreign Exchange Reserves	1,000
10.	Additional Resource Mobilisation	21,302
11.	Uncovered Gap/Deficit Financing	5,000
	Aggregate Resources	97,500

### Major Strategies

1.16 To bring about co-ordination among critical sectors, the plan envisages that the projected production profile should be internally consistent not only at the sectoral level but also at the level of specific commodities/services. The commodity-wise demand-supply (material balances) projections consistent with the production targets of principal commodities were made in this regard. In taking operational decisions regarding production of respective commodities and creation of additional capacities, the inter sectoral balance will have to be supplemented by inter regional balances.

### Agriculture and Allied Sectors

1.17 In the agricultural sector, the highest priority will be accorded to bridging the gap between actual and potential farm yields at the current levels of technology through the removal of constraints. The strategies of agricultural programmes during the Sixth Plan period would be:

- consolidation of the gains already achieved;
- acceleration of the pace of implementation of land reforms and institution buildings for beneficiaries;
- extension of the benefits of new technology to more farmers, cropping systems and regions; and promotion of farm management efficiency through concurrent attention to cash and non-cash inputs;
- making agricultural growth not only an instrument of maintaining an effective national food security system but also a catalyst of income and employment generation in rural areas;

- (e) promotion of scientific land water-use patterns based on consideration of ecology, economics, energy, conservation and employment generation; and
- (f) safeguarding the interests of both producers and consumers by attending to the needs of production, conservation, marketing and distribution in an intergrated manner.

#### *Irrigation, Command Area Development and Flood Control*

1.18 The major strategies of development in the irrigation sector during the Sixth Five Year Plan will be:

- (a) Expeditious completion of as many on-going major schemes as technically and financially feasible; completion of all on-going medium schemes excepting some of them taken up during the last two or three years of the Plan which may spill over into Seventh Plan.
- (b) Initiation of action on a few selected projects so as to keep up the tempo of development in Seventh Plan and also meeting the needs of drought prone, tribal and backward areas and removing regional imbalances.
- (c) Improved implementation of the programme by aiding and strengthening, where required, monitoring organisations of the projects at the State level apart from continuing work of monitoring at the Central level.
- (d) Proper advance planning for scarce materials of construction in co-ordination with other Ministries concerned in order to procure scarce construction materials like cement, steel, coal, diesel, etc., required for planned implementation of major and medium irrigation projects.
- (e) Optimisation of benefits through better operation of existing systems and conjunctive use of surface and ground waters and adoption of warabandi.
- (f) Efficient water management and introduction of warabandi on rotational distribution system on the existing and new projects and formulation and monitoring irrigation programmes for different seasons in a water year.
- (g) Strengthening of Command Area Development (CAD) organisations and authorities and integrating the functioning of canal management authorities, CAD authorities and irrigators.
- (h) Setting up a system of evaluating regularly the project performance by appraising the actual benefits vis-a-vis the proposed.

#### *Rural Development*

1.19 The prime objective of the Sixth Plan is to alleviate rural poverty. Hence households below the poverty line, families of landless labourers, small and marginal farmers, rural artisans and socially and economically backward classes will have to be assisted through an appropriate package of technology, services and asset transfer programmes. The strategy and methodology for accelerated rural development will include increasing production and productivity in agriculture and allied sectors; resource and income development of vulnerable sections of the rural population through development of the primary, secondary and tertiary sectors; skill formation and skill upgrading programmes to promote self and wage employment amongst the rural poor; facilitating adequate availability of credit to support the programmes taken up for the rural poor; provision of additional employment opportunities to the rural poor for gainful employment during the lean agricultural season through a National Rural Employment programme (NREP); and provision of essential minimum needs.

1.20 The operational strategy of Integrated Rural Development Programme will have the following main elements:—

- (1) A five year development profile for each district disaggregated into blocks, based on practical possibilities of development in agriculture and allied sectors;
- (2) Farm guidance to small and marginal farmer families;
- (3) A special programme of assistance based on household approach to raise the poorest of rural households above the poverty line;
- (4) A suitable mechanism to secure representation of the poor on the implementing agencies at the district, block and village levels to facilitate better planning and implementation of the programme;
- (5) Credit Plan for the District/Block to indicate the credit programme for the target groups;
- (6) A single agency in each district, (where no such agencies already exist) for the implementation of IRDP.

1.21 The scale of funding under the programme will be Rs. 5 lakhs per block in the first year of the plan, Rs. 6 lakhs in the second year and Rs. 8 lakhs each in the last three years.

#### *National Rural Employment Programme (NREP)*

1.22 The employment outlets created out of developmental projects in the public and private sectors will not be sufficient to absorb the growing rural work force

during the plan period. Rural development programmes in the form of individual beneficiary and area development schemes and other sectoral programmes in the plan will also provide opportunities to many of the rural poor for gainful employment through production enhancing activities. The beneficiaries of these programmes have an asset base. But there are a large number of people who are without assets and they have to be provided with wage employment especially during the lean agricultural period when they have no source of income for their livelihood. In order to benefit these people, the NREP is conceived in such a way that development projects and target group oriented employment generation projects will be closely intertwined.

1.23 NREP will be implemented as a centrally sponsored scheme, the outlay being shared equally by the Centre and the States. The Centre will provide its share in the form of foodgrains to the extent surplus foodgrains are available and the rest in cash.

#### *Scheduled Castes*

1.24 Special Component Plans will be formulated to enable Scheduled Caste families (who constitute the bulk of the poorer sections of population) to enable them to cross over the poverty line within a short period.

#### *Industry and Minerals*

1.25 Industrial development during the Sixth Plan period, in addition to aiming at the conventional strategies of optimum utilisation of existing capacities and improvement of productivity, would encompass the following:

- (a) Substantial enhancement of manufacturing capacities in public/private sector covering a wide range of industries for providing not only consumer goods and consumer durables but also intermediate and capital goods for supporting agricultural and industrial growth.
- (b) The capital goods industry in general and the electronics industry in particular will need special attention as these support the growth of a wide range of economic activity.
- (c) In the context of the substantial foreign exchange resources required to support the Plan, export of engineering goods and industrial products, as also project exports will need to be stepped up.
- (d) Industrial progress will necessarily depend upon continued technological excellence; this would call for a judicious blend of permitting import of contemporary technology and promoting the development of indigenous know-how through domestic research and development.

- (e) Although industrial development would increase the demand for energy, measures will need to be taken in the context of the emerging energy situation to improve energy efficiency, not only of manufacturing industry, but also of their end-products. Further efforts will need to be made to adjust the energy consumption pattern in the industrial sector to domestic energy endowments.
- (f) New strategies for development of backward regions will need to be devised. The thrust would be to implement a new model of development which would prevent concentration of industry in existing metropolitan areas.

#### *Village and Small Scale Industries*

1.26 Programmes for village and small industries sector during the Sixth Plan period are designed to serve the following objectives:

- (i) improvement in the levels of production and earnings, particularly of the artisans, through measures like upgradation of skills and technologies and producer-oriented marketing etc.;
- (ii) creation of additional employment opportunities on a dispersed and decentralised basis;
- (iii) significant contribution to growth in the manufacturing sector through, fuller utilisation of existing installed capacities;
- (iv) establishment of a wider entrepreneurial base through appropriate training and package of incentives;
- (v) creation of viable structure of village and small industries sector so as to progressively reduce the role of subsidies; and
- (vi) expanded efforts in export promotion.

#### *Transport*

1.27 The compilation of data on traffic flows and costs and its continuous analysis during the plan for effective co-ordination and investment programming as well as pricing, taxation and regulatory measures, will be entrusted to a suitable agency like a National Transport Commission at the centre as recommended in the Report of the National Transport Policy Committee. The important policy objectives in the transport sector of the Sixth Plan would be:—

- (a) removal of transport bottlenecks which have acted as serious constraints in the movement of industrial and agricultural goods and in the promotion of international trade;
- (b) creation of adequate additional capacity in the transport sector to meet the requirements of anticipated traffic;



- (c) conservation of energy particularly, diesel, to the maximum extent possible;
- (d) evolution of a high degree of co-ordination, within the transport sector and with user organisations;
- (e) giving priority to the completion of on-going works;
- (f) maximum utilisation of existing assets through higher productivity;
- (g) evolution of a national pricing structure in the public sector transport undertakings so as to ensure their running on profitable basis and
- (h) giving special attention to the transport needs of remote and isolated areas, such as the North Eastern Region.

### Energy

1.28 Reduced dependence on imported oil is a key element of the development strategy of the energy sector. The main features of such a strategy are:—

- (i) The rate of growth of consumption of oil products will be curbed through appropriate pricing policies. Utmost economy and maximum efficiency in the proper use of petrol, diesel and petroleum products will be effected.
- (ii) Efforts for the exploration and development of domestic resources of oil have to be greatly intensified.
- (iii) Expansion in the production of coal and electricity and faster exploitation of India's considerable hydro-potential and further development of nuclear power have to be pursued with greater vigour.
- (iv) In order to economise in the use of kerosene and diesel in rural areas, setting up of biogas plants and energy plantations under the intensive forestry development programme, using waste land and appropriate timber species which grow rapidly, have to be pushed ahead.
- (v) There is a considerable scope for conservation and economy in the use of several industrial processes. An energy audit should invariably become an annual feature of the activities of all major industrial enterprises in the public and private sectors.
- (vi) Research on the development of renewable sources of energy, particularly use of solar energy must receive greater attention than in the past. An alternative Energy Commission has already been set up.

### Minimum Needs Programme

1.29 The Minimum Needs Programme, introduced in the Fifth Five Year Plan will continue during the Sixth Plan period. It lays emphasis on the urgency of providing social services according to nationally accepted norms and its components are:—

- (1) Elementary Education
- (2) Rural Health

- (3) Rural Water Supply
- (4) Rural Roads
- (5) Rural Electrification
- (6) Housing assistance to rural landless labourers
- (7) Environmental improvement of urban slums
- (8) Nutrition

### Science and Technology

1.30 The Sixth Plan calls for linkages and mechanisms for effective application of science in the optimal use of natural resources and in areas such as energy, health, population control, ecology and environment and integrated industrial and rural development.

### Kerala Plan (1980-85)

The Draft Sixth Five Year Plan for Kerala envisaged a State sector outlay of Rs. 2,175 crores and a total investment outlay of Rs. 4,100 crores. The National Development Council approved a State sector outlay of only Rs. 1,550 crores for the five year period 1980-85. On the basis of the recent indications the State anticipates to have a total investment outlay of Rs. 4,200 crores during the Plan period, the State, the Centre and the private sectors contributing Rs. 1,550 crores, Rs. 850 crores and Rs. 1,800 crores respectively. Kerala expects to achieve an overall annual growth rate of 5.2 per cent at the end of the Plan period. This order of growth is the same as postulated in the National Plan. The State's Plan programmes are so drawn up as to exploit the infrastructure already created and the development potential available in the productive sectors of industry and agriculture.

### Objectives

The following objectives are laid down for Kerala's Sixth Plan:

- (i) achieving an overall annual rate of growth of 5.2 per cent, which is the rate postulated for the national economy,
- (ii) maximising production in the commodity producing sectors of industry and agriculture through optimum utilisation of the capacity and infrastructure already built up and through an appropriate investment policy and supporting measures,
- (iii) enlarging employment opportunities by laying stress on employment intensive schemes and projects,
- (iv) developing and implementing schemes and projects based on local level material and manpower resources through decentralisation of planning and with the active involvement of the people,
- (v) bringing about more balanced regional development through judicious allocation of financial resources and more effective exploitation of the resource potential in different regions,

- (vi) strengthening the public distribution system in the State through the introduction of efficient and socially relevant marketing techniques so as to develop it into a stable and permanent instrument for the effective control of the prices of essential commodities and also to achieve equitable distribution,
- (vii) ensuring that the poorer sections of the society including the Harijans and Tribals get an increasing share of the fruits of development, and
- (viii) initiating measures to ameliorate the conditions of living of the weakest sections of the population like the unemployed, the aged agricultural labourers, the physically handicapped etc. by providing direct financial assistance.

1.32 The realisation of the targeted rate of growth of the economy will depend on the scale of investments which materialises in Kerala under the State, Central and private sectors. Out of the total State Plan outlay of Rs. 48,600 crores for all states together Kerala's share of Rs. 1,550 crores is only 3 per cent. The regional location of a major share of the schemes and projects under the central sector for which an outlay of Rs. 47,250 crores is earmarked has not been spelt out in the National Plan document. Hence it has become difficult to estimate the likely central sector investment in the State during the Sixth Plan period. Similar is the case with the all India private sector investment estimated at Rs. 74,710 crores. It is also significant that the bulk of the Central sector investment and a substantial part of the private sector investment are proposed in organised industries and transport which are crucial sectors of the economy.

1.33 Past experience indicates that of the total Central investment in industries, about 3 per cent has materialised in Kerala. Of the total institutional finance disbursed by all India financing institutions only about 3.3 per cent accrued to Kerala. Unless Central and private sector investments take place at rates higher than those indicated above, the realisation of the targeted rate of growth during the Sixth Plan period may be rendered difficult. The State has, therefore, to initiate action in advance to ensure that the Centre allots a reasonable share of the total Central investments for projects in Kerala, to attract more and more of institutional finance through the formulation of viable and feasible projects and to catalyse private sector investment through a planned programme of development of entrepreneurship, provision of technical assistance and incentives and creation of a climate of confidence among the intending entrepreneurs.

1.34 Based on past trends and on the results of a sample survey on savings and capital formation, undertaken by the State Planning Board, it is estimated that private sector investment of the order of Rs. 1,800 crores can materialise in the State's economy during the Sixth Plan period. This estimate is inclusive of the substantial investments likely to be made in private housing, agriculture, animal husbandry and dairying, education and health activities. Similarly

it is reasonable to assume that a Central sector investment of the order of Rs. 850 crores will be made in Kerala during the period 1980-85. This is inclusive of the Central share of centrally sponsored schemes. Together with the State Plan outlay of Rs. 1,550 crores, the anticipated total outlay in Kerala during the Sixth Plan period will be of the order of Rs. 4,200 crores. This order of outlay is likely to result in a compound rate of growth of 5.2 per cent per annum in the State Income of Kerala. The estimated State Income of Kerala in the year 1984-85 and the annual growth rates over the plan period are given in Table 1.8.

TABLE 1.8

### Sector-wise Estimates of State Income and Annual Rates of Growth

(Rs. in lakhs at 1979-80 prices)

Sector	Estimated Income		Annual rate of growth (%)
	1979-80	1984-85	
Agriculture and Allied Sectors	1,25,300	1,53,033	4.1
Mining and Manufacturing	48,040	65,755	6.5
Power	6,785	8,872	5.5
Transport and Communications	18,435	24,736	6.1
Social Services	77,040	1,02,574	5.9
All Sectors	2,75,600	3,54,981	5.2

1.35 The sectoral objectives of the plan have been drawn up with a view to giving primacy to the generation of substantial employment opportunities in the economy. Realisation of the employment objectives of the plan depends crucially on increased labour absorption in agriculture and allied activities as well as in the modern industrial sector. According to the National Sample Survey data relating to the year 1977-78, Kerala with less than four per cent of the population accounted for about 11.09 per cent of the total unemployment and underemployment in the country. Unemployment equivalent in standard person years in Kerala was 21.3 lakhs compared with 191.7 lakhs in India as a whole. A standard person year is taken as the work put in by a person in a full year of 273 working days. A survey on employment and unemployment conducted in Kerala during the same period also gives more or less similar estimates of unemployment. For the estimated population of 272.3 lakhs in March, 1985, there will be an addition of 8.1 lakhs to the labour force. The magnitude of the employment task of the Sixth Plan of Kerala, thus, comes to 29.4 lakhs of job opportunities. It is estimated that the anticipated total outlay of Rs. 4,200 crores can generate additional employment opportunities to the tune of 17.3 lakhs person years. The summary position will be as given in Table 1.9.

TABLE 1.9

Item	In lakh Standard Person Years	
	1979-80	1984-85
Labour Force	84.1	92.2
Expected Employment	62.8	80.1
Employment Gap	21.3	12.1

1.36 In estimating the employment potential of the plan, the generation of direct and indirect employment in the construction phase as well as in the continuing phase has been taken into consideration. The employment gap is likely to narrow down from 21.3 lakhs in 1979-80 to 12.1 lakhs in the terminal year of the plan. Thus, even after investing an amount of Rs. 4,200 crores during the Sixth Plan period, sizeable backlog of unemployment will remain at the end of the plan period. It may be mentioned here that on the eve of the Sixth Plan, work seekers on the live registers of Employment Exchanges exceeded 13 lakhs and it is unfortunate that despite several years of development effort in the country, a large number of people are remaining unemployed for years. Prolonged unemployment of such large numbers has made it necessary to give direct financial assistance to them to mitigate their distress.

1.37 An examination of Kerala's development experience throws up many aspects—some positive and others discouraging. The positive aspects of

Kerala's development so far, are that a good infrastructure has been created, that there is a large body of intelligent and educated work force available and that land reforms, welfare measures and progressive labour policies have given an egalitarian trend to development.

1.38 Some of the discouraging aspects of performance are that growth has been very slow in agriculture (in its widest sense) and in industry, that the real incomes of a vast majority of people are very low, that unemployment has become pervasive and a proper work ethic conducive to rapid development has not been evolved. Costly delays in the completion of some of major irrigation and power schemes, under utilisation of facilities already established and industrial unrest caused by high rate of inflation have not been quite conducive to rapid advance in the reduction of unemployment and the eradication of poverty.

1.39 In the course of the coming twenty years, the State has to consolidate and accelerate the stimulating factors and remove the barriers to rapid progress. Given the necessary political will and an environment for the adoption of consistent policies with dedicated hard work, the State can achieve rapid growth in agriculture and industry, accompanied by rapid creation of employment opportunities. The achievement of the objectives of growth and employment with social justice should be the paramount concern of public policy and development effort in the coming years, so that poverty will be eradicated at the earliest. The strategic objectives, policy framework and the programmes and schemes envisaged in the Sixth Five Year Plan (1980-85) for Kerala are imbued with this perspective.

## CHAPTER II

### SECTORAL STRATEGY

#### Agriculture

High pressure of population on land, divergence in cropping pattern resulting from variations in physiographic features especially topography, simultaneous existence of underdeveloped small farms on the one hand and modernised plantations on the other, dominance of perennial and plantation crops and a high degree of commercialisation and consequent monetisation are all distinctive features of agriculture in Kerala, which have significant relevance to future development planning in this sector. Upto the middle of the sixties, increase in agricultural production was achieved mainly through expansion of area. The scope for further expansion of area under crops is very limited. Moreover, production in the existing area has of late, gone down in many districts, especially in the case of coconut. Under the circumstances, future development in agriculture should lay emphasis on improving the productivity per hectare through appropriate changes in cropping pattern and through the adoption of improved agricultural practices.

2.2 The Sixth Five Year Pplan for agriculture in Kerala has been drawn up based on the following strategies:

- (i) launching a massive programme to check the spread of pests and diseases among crops and adopting an integrated programme of development (including minor irrigation);
- (ii) adopting a comprehensive area development approach paying special attention to the weaker sections in the rural areas and laying emphasis on a co-ordinated approach to the optimum utilisation of land, water and other relevant resources;
- (iii) promoting mixed farming extensively as a means of increasing investment, employment and income per unit of land;
- (iv) diversifying the production base by integrating crop production, animal husbandry, forestry and fisheries;
- (v) laying emphasis on the production of foods of higher nutritive value so as to improve the nutrition and health of the rural population; and
- (vi) ensuring a steady and effective flow of appropriate technology to the field for increasing productivity and to develop the infrastructure adequately so as to promote the adoption of the technology.

2.3 Besides budgetary allocations, substantial financial effort from other sources is involved in the development of agriculture. Particularly important is institutional finance which is a major source of finance in areas like exploitation of groundwater, land development, land reclamation, forestry, animal husbandry, fisheries etc. In order to ensure adequate flow of institutional finance, a higher level of budgetary support is essential.

2.4 The significant aspect regarding farm holdings in the State is that more than 87 per cent of these holdings is below one hectare in extent. The principal task is to make these small farms economically viable through a package of services and increased adoption of mixed farming.

2.5 The utilisation of the limited land resources will need to be optimised without upsetting the ecological system. It is also necessary to continually improve the productive capability of the land. The approach to land use planning will be broadly as follows:

- (i) to restrict cereal production to suitable lands which would not only improve production but also ensure a favourable economic return to the farmer, and
- (ii) to encourage mixed cropping of coarse cereals, pulses and oilseeds in marginal lands and areas having medium to low rainfall.

2.6 Despite a small increase in productivity, the production of pulses in the State has shown a fall because of a sharp decline in the area under this crop. Possibilities of restoring the area under pulses have to be explored. Raising of pulses in the summer rice fallows and intercropping of pulses in garden lands and dry lands appear to possess immense scope.

2.7 In the case of coconut, a major crop of Kerala, there has been a declining trend in productivity and production, attributable largely to the debilitating root (wilt) disease which has affected large tracts in the State. Poor genetic potential of the existing stock of coconut trees and the presence of a large number of senile and unproductive trees are also factors which contribute to the low yield rate. A massive replanting and underplanting programme is obviously needed. Further, this crop is known to respond very favourably to the application of irrigation and fertilisers. A comprehensive coconut development programme has therefore been drawn up. Being an oilseed development programme, this can attract a matching assistance from the Central Government.

#### Land Reforms

2.8 The Kerala Land Reforms Act (1963) came into force in 1970. The programme for abolition of intermediary tenures, tenancy reform and conferment of ownership of Kudikidappu have nearly been implemented in full in Kerala. However, the progress achieved hitherto in respect of the ceiling provision in the KLR Act and the distribution of surplus land has been tardy mainly due to procedural delays. Nearly 45 per cent of the land reform beneficiaries belong to the scheduled castes and tribes.

2.9 The beneficiaries of land reform measures are economically poor and financial support is necessary for their rehabilitation. During the Sixth Plan period,

therefore, it is proposed to develop the necessary infrastructure facilities and also make available the required credit and inputs to the land reform beneficiaries to facilitate their settlement and rehabilitation. It is also necessary to update the land records. A significant share of the Sixth Plan outlay on land reforms is set apart for Resurvey of State and preparation of Record of Rights.

### Soil and Water Conservation

2.10 Because of the undulating topography, and heavy rainfall depletion of soil due to erosion is a serious problem in the State. It is estimated that nearly 15 lakh hectares of land in Kerala requires conservation, against which about 70,000 hectares have been covered under the various programmes so far implemented. A major portion of the remaining area, which requires soil conservation on a watershed basis will be covered under the centrally sponsored Western Ghats Development Programme. During the Sixth Plan period attempts will be made to step up the scale of effort in soil survey and soil conservation and to effect better co-ordination among the Soil Survey Agency, the Land Use Board and the Department of Soil Conservation.

### Agricultural Marketing

2.11 In order to develop the marketing structure that would ensure remunerative prices to the producer, narrow down the price spread between the producer and the consumer and reduce the non-functional margins of the traders and commission agents, the main thrust will be to establish a regulated market system having organic links with the primary markets. Appropriate links will have to be established with the consuming centres and the co-operative banking, marketing and distribution agencies. Arrangements for quality control, enforcement and inspection and improvement in grading will be expanded and streamlined.

### Animal Husbandry and Dairying

2.12 The State has a breedable stock of 13.65 lakh cows and 1.51 lakh she-buffaloes. There is, thus, considerable scope for animal husbandry and dairying. Further, there is a predominance of small and marginal farmers and agricultural labourers in Kerala, for whom animal husbandry offers immense scope as a means of raising the levels of income and employment.

2.13 In the past considerable stress was laid on the overall development of livestock through intensification of the cross-breeding programme, extension support for scientific management of the cattle, provision of a better animal health care system and promotion of poultry and piggery development. The future policy for the development of cattle should lay emphasis on increasing the productivity by upgrading the stock and gradually reducing the number of non-descript variety of cows. The small farmers, marginal farmers and other weaker sections may be provided with the necessary financial, extension and marketing support.

2.14 The activities of the Animal Husbandry Department, the Dairy Development Department and the K.I.D and M.M Board will be co-ordinated in order to avoid overlapping of functions and to derive the maximum results from the efforts made.

2.15 The Operation Flood II programme is to be implemented in the seven southern districts of the State. The development strategy under this programme is based on the urban demand for milk in the State. The milk processing and marketing system in the State has, therefore, to be improved substantially.

2.16 Efforts will be made to diversify the production base of the small farmers by promoting crop-livestock integration in suitable areas.

2.17 The principal objectives of animal husbandry and dairying in the Sixth Plan are the following:

- (i) augmentation of the production of livestock products;
- (ii) promotion of improved animal husbandry practices such as better feeding and breeding, proper management of livestock, production of green fodder etc.;
- (iii) organisation of proper management through a functional system of co-operatives along the lines of the Dairy Cooperative Unions in Gujarat; and
- (iv) extension of insurance cover to the entire stock of cross-bred cows.

### Fisheries

2.18 In the fisheries sector, the past plans laid considerable stress on the mechanisation of small boats for catching prawns and on the modernisation of processing facilities to suit export trade. One of the main objectives of the mechanisation programme was to vest the ownership of boats with fishermen groups organised on co-operative lines. However, only a small fraction of the boats is reported to be under the actual control of fishermen.

2.19 There has been very little improvement in the conditions of the traditional fishermen. The Fifth Plan programme of diversified fishing by mechanised boats, particularly, purse-seining of sardine and mackerel for optimum exploitation is yet to be put into operation. The off-shore and deep sea fisheries remain unexploited. Construction of a number of fishing harbours was started but none has been completed so far. There was no serious attempt to develop and exploit the inland fishery resources of the State.

2.20 In the Sixth Plan, therefore, the following objectives have been set for the development of fisheries:

- (i) socio-economic advancement of the traditional fishermen and elimination of exploitation by middlemen both in production and marketing of fish through the establishment of village co-operatives consisting of all the fishermen in a settlement. This co-operative will be the principal instrument for the implementation of all schemes,
- (ii) increase in the supply of fish for domestic consumption,
- (iii) tapping the untapped potential in the off-shore and deep sea fisheries,
- (iv) development of inland fisheries and promotion of coastal aqua culture and mariculture involving the culture of prawns, mussels etc., and

- (v) revitalisation and restructuring of the organisations and institutions to promote exports.

### Forests

2.21 The main objective of planning in this sector so far has been the development of economic plantations and the setting up of infrastructure facilities for the proper exploitation of forest produce. The area under forests, however, has been steadily declining and is reaching ecologically dangerous proportions. In the Sixth Plan emphasis will be placed on the following aspects:

- (i) organisation of effective conservation and protection of forests in order to prevent further erosion and deterioration and to bring the areas declared as 'Reserve Forests' under effective control measures;
- (ii) promotion of social forestry so as to increase the supply of fuel wood and small timber in rural areas;
- (iii) undertaking of a larger programme of economic plantations;
- (iv) promotion of tribal co-operatives for the collection and marketing of minor forest produce; and
- (v) development of forest based industries.

### Community Development

2.22 In recent years the Community Development Blocks have been charged with the responsibility of implementation of special target group oriented development programmes. During the Sixth Plan period they will have the major responsibility for the Intensive Rural Development and National Rural Employment Programmes. The block level organisation will be suitably streamlined to enable it to undertake these tasks efficiently.

### Panchayats

2.23 The panchayats play a vital role in the implementation of local development programmes. With increasing emphasis being placed on decentralised planning with people's participation, the Panchayat will have to play a crucial role in the years to come. Efforts will, therefore, be made in the Sixth Plan to strengthen the resource base of the Panchayats and to initiate suitable training programmes so as to equip the Panchayats for the tasks ahead.

### Co-operation

2.24 Co-operative credit facilities have expanded considerably both in quality and quantity during the past two decades. Membership of co-operative credit societies increased fivefold, paid up share capital 16 times, deposits 85 times and loans advanced 30 times. However, in order to sustain the tempo of growth in agriculture and allied sectors, it is necessary to re-organise and strengthen the primary agricultural credit societies and to increase the membership so as to enroll 90 per cent of the agricultural families. Steps should also be taken to increase the deposits in societies. A time bound programme has also to be drawn up for the strengthening of primary marketing societies, farming co-operatives, labour contract societies and consumer co-operatives.

2.25 Considering these problems and development needs the following objectives have been set for the co-operative sector:

- (i) building up of co-operatives as one of the major instruments of economic development and social change in the rural areas;
- (ii) developing the co-operatives as a "shield for the weak", launching a massive effort involving the poor and vulnerable sections of society in the co-operative movement, and giving a greater role in co-operation to women;
- (iii) building up a strong, viable and integrated network of co-operatives in the rural areas to promote comprehensive development by progressively strengthening the links between agricultural credit, inputs, marketing and distribution of essential items of consumption;
- (iv) developing the consumer co-operatives so as to enable the public distribution system act as a bulwark of consumer protection and an instrument of price stabilisation; and
- (v) improving the managerial capabilities of the societies through a selective programme of training and recruitment.

### Irrigation

2.26 As at the end of March 1980, Kerala had ten completed major and medium irrigation projects. Eighteen projects are in progress, most of them being ongoing programmes for the past 17 to 25 years. After March 1978 seven new projects have been initiated. The cumulative expenditure on these projects till March 1980 was Rs. 213 crores and an area of nearly 2.1 lakh hectares (net) or 3.2 lakh hectares (gross) has been irrigated.

2.27 The ten completed projects have an ayacut of 1.34 lakh hectares and are irrigating a gross area of 1.47 lakh hectares against an ultimate command of 1.68 lakh hectares. Seven ongoing projects have a total irrigation potential of 2.61 lakh hectares (net) or 4.44 lakh hectares (gross). An investment of about Rs. 166 crores has been made on these projects till March 1980 and the ayacut brought under irrigation is 0.8 lakh hectares (net) or 1.7 lakh hectares (gross). Completion of these projects would require another Rs. 200 crores. The seven new schemes recently initiated are estimated to cost Rs. 165 crores and would benefit an area of 0.8 lakh hectares (net) or 1.6 lakh hectares (gross). Past experience in the implementation of irrigation schemes has brought home the need for thorough investigation of the schemes.

2.28 By the end of March 1980 a net area of 1.2 lakh hectares (1.4 lakh hectares gross), mostly of wet lands have been brought under irrigation by minor irrigation schemes. The on-going schemes including restoration of damaged minor irrigation structures would require over Rs. 12 crores for completion. The potential for minor irrigation is mainly for garden crop mostly through lifting of ground water. This potential has hardly been utilised.

2.29 The objectives of irrigation in the State should be—

- (a) using the existing irrigation capacity to the optimum,

- (b) maximising the production per unit of water used for irrigation and
- (c) making available irrigation water to all commandable wet land within the next ten years.

The strategy should, therefore, be:

- (i) completion of the on-going schemes within the next five to seven years, the most important being the Kallada Project;
- (ii) completion of detailed investigation in respect of the schemes recently initiated and formulation of a group of schemes in untapped river basins within the next three to four years and starting of few of these schemes by the end of the plan period;
- (iii) improvement of the existing conveyance systems and Command Area Development. Modernising and controlling water usage from completed and partially commissioned projects for maximum benefit. Rotation of crops, providing field canals upto 5 hectares size of land, control of flow of water at field sluices, etc., have also to be given high priority;
- (iv) starting of a number of minor irrigation schemes especially by tapping ground water and through lift irrigation to increase the productivity, mainly of cash crops. A suitable organisation which can attract institutional finance for such schemes may have to be conceived;
- (v) carrying out investigation and river valley research to formulate integrated irrigation schemes in future. Selecting new schemes under major and medium irrigation the policy should be to give priority for schemes in untapped basins with extensive irrigable areas and benefiting drought prone areas followed by schemes in tapped basins where large gaps are to be covered.

2.30 For minor irrigation the policy should be to give priority to schemes in those districts where the proportion of irrigated area is low and the potential for minor irrigation is high. Major and minor irrigation should be viewed as complementary constituents of an integrated irrigation system. This would produce higher return in Kerala where the need for irrigation of cash crops is being keenly felt.

2.31 The physical target for irrigation during the Sixth Plan period is to command an additional area of 3 lakh hectares, of which 2.5 lakh hectares will be the target for major and medium irrigation.

### Flood Control

2.32 The undulating topography of the State coupled with the incidence of heavy rains makes Kerala prone to annual flood damage, which is particularly severe in some years. Comprehensive flood control measures could not be taken up so far for want of funds. Construction of embankments to protect river banks

and of drainage channels are the works done so far. Till the end of March 1980 an amount of Rs. 6 crores has been invested on flood control and 65 km. of embankment and 7 km. of drainage channel have been constructed.

2.33 The strategy for flood control in Kerala should be on the following lines:

- (i) a long range plan aimed at controlling the factors that cause floods. Provision of flood storage in future storage reservoirs, raising the levels of existing dams wherever possible, construction of check dams, interconnecting rivers, raising road levels, soil conservation, afforestation etc., are the measures envisaged; and
- (ii) a short range plan to meet the immediate requirements like completion of on-going works and the detailed investigation and formulation of schemes to be implemented in future.

2.34 In the Sixth Plan, the short range plan will be given high priority, especially to schemes which benefit large tracts of agricultural land, cities and areas of high population density. Preliminary arrangements for the implementation of the long range plan are also contemplated.

### Anti-sea Erosion

2.35 Out of a coast length of 562 km. in Kerala about 320 km. require protection. Of this, about 246 km. require immediate protection and the estimated cost for the same is Rs. 55 crores. Till March 1980, nearly Rs. 40 crores has been spent on anti-sea erosion works for protecting a coast length of about 230 km. The strategy for antisea erosion should be to protect the vulnerable 246 km. of coast line within the next five years and to maintain the already protected coast line. Priority should be given to the on-going schemes so as to complete them within the plan period.

### Power

2.36 Till the end of March 1980, over Rs. 450 crores (ie., nearly 28 per cent of the plan investments) has been invested on power development in Kerala. As a result installed power generation capacity has been raised to 1011.5 MW. The hydel power potential of Kerala is estimated to be over 3000 MW at 60 per cent load factor. Power generation last year was more than 5000 MKwh. At present there are seven on-going generation projects (excluding Idukki II stage) which are expected to be completed within the next ten years. These would add 600 MW to the power generation capability and 2350 MKwh to the energy generation capability of the State.

2.37 The present power consumption within the State is about 2500 MKwh. which is hardly 50 per cent of the power generated. More than 70 per cent of the power consumed in the State is by the industries sector. Power consumption for irrigation is low with hardly 75000 pumpsets energised. In future, therefore, it would be advisable to link power development with investments in industry and lift irrigation. Another aspect of importance in the power sector is that loss of power in transmission and distribution is as high as 28 per cent of consumption.

2.38 In the past, generation of power received higher priority with the result, transmission and distribution lagged behind. Owing to the dispersed settlement pattern in Kerala transmission and distribution costs are comparatively high. It is estimated that an investment of Rs. 250 crores will be required to cover the backlog of transmission and distribution. The on-going generation schemes which are in an advanced stage would require an investment of Rs. 40 crores. This does not include Silent Valley, Lower Periyar, Kuriarkutty-Karappara and Idukki Stage II projects.

2.39 The objective of power development in Kerala in the next few years should be to:

- (i) meet the internal demand fully both in terms of quantity and quality;
- (ii) reduce the backlog of transmission and distribution works in a phased manner; and
- (iii) reduce power losses through adequate control measures.

2.40 The strategy during the Sixth Plan will, therefore, be to:

- (i) keep the investments in generation projects low;
- (ii) increase the quality level and points of supply of electrical power; and
- (iii) build up alternate sources of power for the long run requirements.

2.41 To phase out the backlog of transmission and distribution works at least 85 per cent of the total investment in power should be earmarked for transmission and distribution. High priority should also be given to energisation of pumpsets and industrial demand.

2.42 It is, however, essential from a national or regional long term point of view to maximise the use of renewable sources of energy like hydel power. Therefore it would be advisable to accelerate the development of generation projects in Kerala. The funds needed for this would have to be found outside the State Plan as additional assistance.

### Industries

2.43 Kerala continues to be industrially backward despite the existence of infrastructure facilities like abundant power, water, well developed transport system, availability of raw materials and educated manpower. Though there has been savings and surpluses in private hands on account of trading profits and remittances from abroad, a state-based, adequately motivated entrepreneurial class is yet to emerge in the State.

2.44 In the five year plans of India, the bulk of the public sector investment in large and medium industries is contemplated in the Central Sector. For instance, in the Sixth Plan an outlay of Rs. 19018.07 crores is provided for Large and Medium industries including Minerals as against a meagre Rs. 1389.05 crores for all States and Union Territories together. The tempo of industrial development in a State like Kerala will, therefore, depend largely on the quantum of central investment. Investment in industries in

Kerala by the Government of India has been meagre during the earlier plans. Out of a total central industrial investment of Rs. 13705 crores as at the end of March 1978, Kerala could get only about Rs. 325 crores (2.38 per cent). Further, this proportion has also been declining in recent years.

2.45 In the past, allocations in the State plans for industrial development has ranged between 2 to 10 per cent. Though the allocations have been low, the plans have helped to bring into existence a number of public corporations and departmental undertakings. There are about 75 large and medium scale units in the public sector. Many of them have accumulated losses. A few of them have over-lapping functions. It is high time these units are reorganised and their working efficiency toned up.

2.46 The main objectives for the different segments of the industrial sector in the Sixth Plan may be broadly outlined as follows:

- (i) increasing the rate of utilisation of the available capacity;
- (ii) promotion of new industrial units based on technologies appropriate for the resource endowments;
- (iii) setting up of new industrial units in the less developed areas;
- (iv) setting up of certain major units in the central sector having scope for the growth of ancillary small scale ventures;
- (v) reorganisation of public sector units with a view to making them economically viable and efficient in operation;
- (vi) prevention of the shifting of labour intensive traditional industries like cashew, coir and handloom;
- (vii) enhancement of the earning capacity of rural artisans, handloom weavers, craftsman and others employed in village and small industries;
- (viii) promotion of village and household industries in rural and semi-urban areas;
- (ix) developing existing small-scale industries and encouraging the establishment of high value adding new units; and
- (x) evolving a more rational framework for promoting private investment in the State.

2.47 Considerable unutilised capacity exists in industries such as chemicals, rubber-based goods, fertilisers, paper and paperboard. Bottlenecks in the fuller utilisation of capacity should be removed.

2.48 Besides profitability, the capacity to generate employment opportunities, should be an important criterion for industrialisation in Kerala. The results of the Annual Survey of Industries reveal that processing of cashew and tea, cotton spinning and weaving, handloom, manufacture of veneers and plywood, saw mills, printing, manufacture of rubber products, drugs and pharmaceuticals, manufacture of structural clay products and repair of motor vehicles satisfy these criteria. Such industries should, therefore, be given special attention.



2.49 Infrastructure facilities, such as those provided in the conventional programme of industrial estates have not proved to be sufficiently attractive to private entrepreneurs mainly on account of their wrong locations. Locational considerations should, therefore, be carefully weighed in terms of potentialities of development and regional imbalance.

2.50 Besides expansion/diversification of the existing units, the Central Government should set up new ventures in areas like chemicals, drugs and pharmaceuticals, engineering and tool making units, railways and mineral development. Some of these ventures offer possibilities of growth in the small scale ancillary sector. The State has already suggested a number of viable projects like the caprolactum plant of the FACT, Aromatic Complex and Railway Wagon Building Factory for the consideration of the Centre. The Centre should be persuaded to take special interest in the development of industries in Kerala. It would be advantageous, if the State could present a number of viable projects for the consideration of the Centre.

2.51 Traditional industries like coir, cashew, handloom and bidi account for the major share of the industrial labour force in Kerala. Today these industries are beset with a variety of problems and are finding it difficult even to maintain the current levels of production and employment in spite of the special developmental efforts of the concerned Corporations. Shortage of raw materials and lack of adequate marketing facilities and sufficient finances hinder the efforts at rehabilitating these industries.

2.52 There are over 250 cashew processing units in the State. The livelihood of nearly 1.3 lakh cashew workers is in danger owing to the inadequacy of raw nuts for processing. Internal production being grossly inadequate, the industry has so far been sustained by large scale imports from East African countries like Mozambique, Kenya and Tanzania. Over the last few years, these countries have developed processing units. Thus, the traditional sources of raw cashew nuts for Kerala are slowly drying up. Kerala has also to face stiff competition from China and Brazil for the purchase of raw nuts. A timebound programme for cashew cultivation is thus, necessary to augment the domestic supply of raw nuts.

2.53 Coir industry, another major traditional industry of Kerala, supports about 4 lakh workers, majority of them being women and children. There is a large degree of underemployment in this industry and this acts as a deterrent to its modernisation. Attempts were made in the past to organise co-operative societies for bringing the means of production within the reach of actual workers so as to free them from the clutches of middlemen and to ensure steady employment to them at reasonable wages. Several plans for the reorganisation of the industry were drawn up, but the required central assistance for the comprehensive development of the industry could not be obtained in the past. The central assistance received so far is only of the order of Rs. 4.3 crores. The coir co-operatives were also given secured cash credit accommodation from the Reserve Bank of India. Substantial central assistance is needed to modernise this languishing industry.

2.54 Handloom, the second largest traditional industry in Kerala, employs about 2 lakh workers. As

a result of the liberal help extended by the Central and State Governments, this industry could rehabilitate itself to some extent and improve its productive capacity. But the basic problems of soaring prices of raw materials, accumulation of unsold stock and competition from the mill sector still remain. The Central and State Governments have often come to the rescue of this industry by allowing rebate on the sale of handloom cloth. Government participation in the share capital of primary weavers' co-operatives, the Handloom Apex Society, Kerala State Handloom Development Corporation and the setting up of intensive development projects and export promotion projects are other important steps taken for the rehabilitation of this industry. The following measures are suggested for handloom development in the Sixth Plan:

- (i) ensuring a minimum of 300 days of work in an year for the 90,000 and odd looms in the State;
- (ii) diversification of products and improving the quality of goods;
- (iii) checking the cost of production of handloom cloth without adversely affecting the wages of workers; and
- (iv) increasing production by bringing more factories into the co-operative fold and by expansion and organisation of factory type co-operatives.

2.55 The role of the State in the promotion of modern small scale industries consists mainly in the provision of necessary infrastructure and incentives and the creation of a climate of confidence among the intending entrepreneurs. During the Fifth Plan period, the massive mini-industrial estates programme was launched and incorporated in the Plan. This programme has not met with the expected measure of success and action is being taken to overcome the problems confronting these units. The drawbacks of the above programme have been taken into account while formulating the Sixth Plan.

2.56 The District Industries Centres set up in 1978 with the main purpose of creating focal points of development at the district headquarters level will be continued in the Sixth Plan.

2.57 The small scale sector in the State covers a wide range of activities from food processing to manufacture of sophisticated electronic components. More than 800 items of manufacture are exclusively reserved for the small scale sector. The scope of small scale units has been considerably enhanced under the New Industrial Policy Statement announced by the Government of India in July, 1980. This calls for vigorous efforts to cover a wide range of activities in the industrial sector during the Sixth Plan period with special attention to the growth of ancillary industries and the tiny sector with investment in machinery and equipment upto Rs. 2 lakhs.

2.58 A major share of the raw materials like rubber and copra produced in Kerala is being exported to other States and processed there. It is, therefore, necessary to conceive of programmes for the greater industrial utilisation of such raw materials within the State.

2.59 Apart from the State and Central Governments, the major source of industrial investment is institutional finance. Hitherto, Kerala could not attract institutional finance on a significant scale. Of the total institutional finance so far provided, Kerala's share has been only about 3 per cent. Available data indicate that a major part of institutional resources are being attracted by industrially advanced States like Maharashtra, West Bengal, Tamil Nadu and Gujarat. Intensive efforts should be made to prepare a number of viable industrial projects which can attract institutional finance from Central institutions like Industrial Finance Corporation of India, Industrial Credit and Investment Corporation of India and the Industrial Development Bank of India.

2.60 The Kerala State Financial Corporation has been playing a major role in providing long term financial assistance for starting new industrial units and for the expansion of existing units. Public or private limited companies, co-operative societies, partnerships and sole proprietorship are eligible for assistance. The State should provide adequate financial support to this institution to enable it to play a vital role.

2.61 The nationalised and commercial banks operate a number of schemes for providing liberalised credit facilities to small scale industries. The major share of finance required by small industries has to come from financial institutions. However, it may not be immediately practicable to do away with Departmental assistance. Government at present provides seed capital to intrending entrepreneurs on personal security or property security. Financial assistance is also provided to industrial co-operatives. To support the increased industrial activity envisaged in the Sixth Plan, financial assistance from Government will have to be stepped up significantly.

2.62 All efforts to meet raw material requirements of industries will be made during the Sixth Plan period through the setting up of appropriate institutions or agencies.

2.63 Handicraft workers and artisans need a package of services besides close organisational assistance and leadership. The package should comprise the setting up of primary production units and a raw material supply store at sub-regional level for ensuring steady supply of raw materials at fair prices. Provision of social amenities like housing, educational grants to children of artisans, old age pension, health care etc., will also be helpful in improving the productivity of rural artisans.

2.64 The existing village industries in the State have helped to generate full time as well as part time employment to a large number of workers. The State Khadi and Village Industries Board has launched a special employment programme to provide employment to one and a half lakh persons through Khadi and Village Industries. This programme will be given special importance in the Sixth Plan.

2.65 In the long term perspective, major industries based on ship building, electronics, titanium products, silica, ceramics, railways, chemicals, machine tools, steel fabrication, agro-industries like cotton textiles and fish processing, industries linked with

tourism and petro chemicals etc., should be established to strengthen the industrial base. In determining the location of industries, the needs of the backward areas should be kept in mind. During the Sixth Plan period, the emphasis will be on better utilisation of the agricultural and mineral resources of the State like rubber, spices, copra, mineral sands, graphite, limeshell, bauxite, timber and other forest produce, leather etc. Skill intensive industries will be promoted for the better utilisation of the skilled manpower. Adequate attention to modernisation of industries in areas such as textiles will be paid during the plan period. New spinning mills will be established so as to remove the shortage of yarn in the handloom and the mill sector. Efforts will be made to nurse the sick units, especially in the small scale sector. Additional capacity in products like transformers, electric cables etc., will be created to meet the likely increase in demand corresponding to the increased outlay on transmission and distribution of electricity. An attempt at the overall improvement of the public sector enterprises in the State will be made through improvement of management, diversification and expansion.

### Mineral Development

2.66 Kerala possesses sizeable deposits of mineral sands like monozite, ilmenite, rutile, sillimanite, zircon and other atomic minerals, bauxite, clay, silica sand, graphite etc. But the progress achieved in the State under mineral exploration and industrial utilisation of minerals has been meagre. The main deposits found in the coastal tract between Neendakara and Kayamkulam are being mined and processed by the Indian Rare Earths Limited and the Kerala Metals and Minerals Limited. It is felt that apart from these areas, there are many other areas in the hinterland and offshore tracts which are potentially important. The reserves of clay are estimated to be 72.4 million tonnes of china clay, 1.7 million tonnes of ball clay, and 9.6 million tonnes of fire clay, besides abundant reserves of brick and tile clays. Further field work is, however, necessary for the delineation of the different deposits and their mineability. Silica sands, tentatively estimated to be 70 million tonnes, occur as surface deposits in Shertalai taluk of Alleppey District. Graphite, another strategic mineral, is found in several parts of Kerala. Bauxite of a fair grade has been located in Cannanore district and certain parts of Trivandrum and Quilon districts. But these deposits have to be carefully examined with regard to their economics of working, recovery of flakes and feasibility for beneficiation.

2.67 For several decades limeshell has been considered as a minor mineral and private individuals and co-operatives were allowed to exploit limeshell. Owing to indiscriminate mining a large portion of limeshell deposits are left uncovered. No detailed estimates of limeshell deposits have been made so far except in certain pockets where investigations have been carried out recently. It is, therefore, necessary to carry out detailed exploration to locate sizeable deposits of limeshell in the coastal tracts.

2.68 In the Sixth Plan, greater emphasis will be laid not only on the exploration of mineral deposits but also on their mineability, beneficiation and ultimate industrial utilisation. With this aim in view,

the operations of the State Department of Mining and Geology will be further strengthened. It is proposed to set up special units in the Department to exercise Governmental control on exploitation, conservation, marketing and utilisation of valuable mineral resources of the State like gem stones, limshell, silica sand and dimension stones.

2.69 Steps will be initiated during the Sixth Plan period to utilise the bauxite and graphite deposits available in the State for industrial purposes. The Geological Survey of India has estimated the bauxite reserves of Kerala at 9 million tonnes of which seven million tonnes are in the Nileswar region of Cannanore district. The Kerala State Industrial Development Corporation has plans to utilise the graphite ores available at Nagapuzha near Thodupuzha for the manufacture of graphite crucibles, graphite flakes and graphite powder. Since April, 1977 exploitation and evaluation of known and partially known mineral deposits is being done under the Kerala Mineral Exploration and Development Project established with assistance from the United Nations Development Programme. Necessary financial support to this project will be given during the Sixth Plan period.

### **Transport and Communications**

2.70 In the past, transport and communication facilities in Kerala have grown faster than the productive sectors. This sector has contributed at an increasing rate to the State income of Kerala. Besides opening up the interior areas, this sector has helped in providing employment opportunities, both direct and indirect, to a large number of workers.

2.71 Development of rail and air transport is exclusively the responsibility of the Centre and Kerala has always been pressing for a more equitable share of the capital investments on these two items. State investments in transport and communications cover roads and bridges, public sector road transport, inland waterways and ports and harbours other than Cochin port. From the beginning of the First Plan to the end of March 1980, the outlay on these items totalled Rs. 133 crores which works out to about 8 per cent of the total State plan outlay. At the all India level the proportion of outlay on this sector has all along been higher. Roads received about 68 per cent of the outlay on Transport and Communications, leaving very little for the remaining modes of transport. Programmes like Inland Water Transport, which should have received higher priority in the context of the energy crisis, have in the process lagged behind.

2.72 Road development in the Sixth Plan aims at strengthening the existing net work by improving the major roads in the system and by developing a judiciously selected number of link roads and lateral roads. This itself is too big a task for the State to handle alone. The Pande Committee (1980) has indicated the Cochin—Madurai Road (280 k.m.) and the Bangalore—Mysore—Calicut Road (360 k.m.) for take-over by the Centre and inclusion in the National Highway system. The State has also requested the Centre to declare the Main Central Road as a national highway. If the Centre agrees to these proposals, substantial State funds will be released for

investments on lateral roads, village roads and other connecting links and also for bridges and culverts. Efforts will also be made in the Sixth Plan to integrate the rural roads development activities under the different programmes and agencies.

2.73 As regards road transport, the State's direct participation in investment is only in respect of the Kerala State Road Transport Corporation which owns only about a third of the total passenger bus fleet, the rest being in the private sector. There is urgent need to provide more funds for the Corporation to purchase more vehicles and to improve other facilities. The strategy for development of the K.S.R.T.C. in the Sixth Plan will be (i) delineation of routes and areas of operation between the public and private sectors so as to avoid wasteful competition and revenue loss, (ii) stabilisation of the existing level of operations before further expansion, (iii) replacement of old and obsolete vehicles in a systematic manner, (iv) improvement of the operational efficiency at all level, (v) reduction of uneconomic routes to the extent possible (vi) decentralisation of operations to ensure better control and efficiency and (vii) introduction of professionalism in management.

2.74 The extensive net work of waterways had its crucial place in the transport system of Kerala. Recently with the emergence of a well developed system of faster modes of transport like roads and railways, the inland water transport system got neglected. In the present context of the fuel crisis, it is now generally accepted that water transport has certain inherent advantages and that it should be given the rightful place in the transport system of the region. The Government of India is now committed to the improvement of waterways throughout the country. The Ernakulam—Alleppey sector of the system has already been declared as a National Waterway and, in the opinion of the Pande Committee, the entire West Coast Canal satisfies the criteria for consideration as a National Waterway.

2.75 At present three different agencies are involved in the operation of the inland water transport system. In the Sixth Plan steps will be taken to integrate the water transport services and to entrust it to a single agency. An integrated programme for the development of inland waterways and coastal shipping is also being contemplated.

2.76 It is also proposed to undertake detailed surveys and studies on transport in Kerala, with a view to evolving appropriate long term strategy and policies for the balanced development of transport and communications.

### **Tourism**

2.77 Kerala offers immense scope for the development of tourism. Past efforts to promote tourism have not had the desired impact on this sector. Apart from being an important foreign exchange earner, tourism can also play a vital role in the overall development of the State's economy. The State Tourism Department has been mainly functioning as a hospitality wing of the State Government. It is time, a fresh look at tourism development in the

State is taken. The Government of India is aiming at an inflow of 35 lakh foreign tourists by 1990. Tourist inflow of the order of 1 lakh is expected in Kerala. Apart from increased facilities to accommodate tourists, other infrastructure facilities will also have to be built up. The entire strategy of tourism plan for Kerala revolves round the concept of travel circuits connecting important tourist centres catering to varied tourist interests. This has been done with a view to offering a package of facilities to tourists both domestic and foreign. This new concept envisages the flow of tourist traffic along predetermined centres of tourist interest. Taking all these into consideration large scale investments for the promotion of tourism are proposed in the State's Sixth Plan.

### Education

2.78 The first three five year plans laid emphasis on expansion of educational facilities and increase in enrolment. This growth in numbers resulted in a decline in the quality of education. The fourth and fifth five year plans, therefore, undertook measures to improve the quality of education. Revision of syllabus, examination reforms, inservice training to teachers etc., were introduced, but the achievements were not upto the desired level. There was no attempt in the past to relate the intake in educational institutions to the likely growth in employment opportunities. Education in Kerala has become an alternative to remaining unemployed, particularly because private costs of education are low and because there are no 'earnings foregone'. The increasing demand for higher education is being met by expanding the facilities for arts, science and commerce education, although the incidence of unemployment is highest among such graduates.

2.79 During the Sixth plan period, therefore, the main thrust in the field of general education will be on three areas viz:

- (i) universalisation of primary education;
- (ii) improvement of quality of education; and
- (iii) vocationalisation of education.

2.80 Although Kerala is ahead of other States, as regards enrolment, it is estimated that about 10 per cent of the children in the age group 6-11 and 15 per cent in the age group 11-14 are still outside the schools. Provision is made in the Sixth Plan to provide facilities for additional enrolment to these children.

2.81 In a large number of schools, the buildings are far below the prescribed standards. Class-room space is much less than the prescribed norms. Inadequacy of furniture and equipment is a serious problem having its adverse impact on the quality of education. During the Sixth Plan period, special attention will be paid to the improvement of physical facilities in schools.

2.82 The present system of education is largely academic. It tends to create a bias for white collar jobs and neglects the development of skills. The traditional type of learning, thus, needs to be re-structured, with a technical bias. It is also necessary to regulate enrolment in the general academic streams

of secondary and higher education to shift the emphasis to vocationalisation at the secondary stage. For this it is necessary to provide a variety of non-academic courses of technical education and training which are directly useful to the students and which would equip them for employment in different occupations. Efforts in this direction will be made in the Sixth Plan.

2.83 The present intake capacity for Pre Degree course in colleges is only half the out-turn of matriculates. Therefore, until substantial progress in vocationalisation is achieved, it will be necessary to provide additional facilities for enrolment at the University level by opening new colleges. In the Sixth Plan necessary provision for this purpose will be made. As a policy, new colleges will be opened as far as possible only in backward areas. Attempts will be made to make intensive use of the existing facilities by introducing shift system in colleges. Non-formal programmes of higher education will be promoted so as to provide facilities for higher education to all. The Sixth Plan also envisages upgradation of a few colleges and starting of post-graduate courses in some colleges.

2.84 The main emphasis in higher education will however, be on qualitative improvement for which the major programmes proposed are diversification of courses, improvements to laboratories and libraries, production of text books in regional languages, introduction of autonomous colleges, faculty improvement and promotion of research, both fundamental and applied.

### Technical Education

2.85 There are six engineering colleges in the State. In three of these, facilities for postgraduate studies exist and in two colleges part-time degree course is conducted for diploma holders. There are also 18 polytechnics and 21 Junior Technical Schools. Besides these, pre-vocational training centres provide technical education in selected trades to drop-outs from schools.

2.86 There was considerable expansion of technical education in the Second and Third Plans and the enrolment in engineering colleges and polytechnics increased many fold with the result that the supply of technical personnel was far in excess of the demand. Unemployment among technical graduates emerged and the intake in the engineering colleges had to be reduced. In the Fourth and Fifth Plans the emphasis was mainly on qualitative improvements.

2.87 No significant expansion is contemplated in the Sixth Plan. Only one new engineering college is proposed and a few polytechnics in the backward areas will be opened. The plan provides for a phased programme of modernisation of facilities, reduction of wastage and stagnation, curriculum development and faculty improvement. Post graduate education and research will be promoted and the Trivandrum Engineering College will be upgraded through a variety of measures.

## Health

2.88 Health facilities in Kerala have increased significantly during the post independence period. There were only 197 allopathic institutions in 1950-51 with a bed-strength of 6752. At the end of 1978-79, there were 898 allopathic hospitals, with 29,947 beds, raising the number of beds per lakh of population to 119. Regional disparities in modern medical facilities, however, exist. The districts of Quilon, Idukki, Palghat, Malappuram and Cannanore are relatively backward. Under the Indian Systems of medicine, which are very popular in Kerala, there are 474 Ayurvedic and 143 homoeopathic institutions with 1438 and 325 beds respectively.

2.89 The High Power Committee on Health Services constituted by the Government of Kerala to study the drawbacks of the present set up, to identify and analyse the major problems and to suggest remedial measures has pointed out that overcrowding, lack of cleanliness, inefficiency of emergency services, inadequate maintenance of costly equipment and gross inadequacy of drugs and hospital supplies exist in our medical institutions. There is also concentration of institutions, especially in urban areas leading to regional disparities. The Committee has made important recommendations for building up an effective system of delivery of medical services and the Government of Kerala are implementing these recommendations in a phased manner.

2.90 The approach to planning in this sector during the Sixth Plan will be guided by the following considerations:

- (i) Correction of regional imbalance by creating the necessary infrastructure in rural areas;
- (ii) improvement of the quality of medical services by providing specialised medical and paramedical personnel and by stepping up the supply of medicines and essential equipment;
- (iii) ensuring the optimum utilisation of available facilities by avoiding wastage and under-utilisation and by improving performance through strengthening of management and supervision;
- (iv) linking health care with nutrition in the medical institutions and introducing a school health care programme;
- (v) giving more emphasis to preventive aspects; and
- (vi) strengthening the clinical facilities in taluk hospitals.

2.91 Considerable emphasis is laid in the Sixth Plan for developing the taluk hospitals into full fledged hospitals by gradually increasing the bed strength and providing specialities like Ophthalmology, E.N.T., Paediatrics, Skin and V. D. and Dentistry. District hospitals will be developed gradually to the level of referral hospitals.

2.92 There are four medical colleges in Kerala, of which the Kottayam and Alleppey Colleges need substantial improvement. The quality of teaching, training and research also needs improvement. The Sixth Plan makes provision for these items.

2.93 The indigenous systems of medicine are very popular in Kerala. Side by side with the development of allopathic institutions, the Plan aims at the setting up of new institutions of the indigenous system and also qualitative improvement of the existing institutions, so that the public will have within easy reach an institution of the system of their preference.

## Water Supply and Drainage

2.94 By the beginning of the year 1979-80, there were 29 water supply schemes covering all the towns in Kerala. There were also 722 rural water supply schemes in operation. The overall population coverage in urban and rural areas are 65 per cent and 26 per cent respectively.

2.95 The villagers of Kerala mainly depend on well water for drinking purposes. However, in the hilly tracts wells are very deep and they fail in summer. In the coastal areas, there is the serious problem of salinity. The provision of piped water is a necessity in both these regions. It is also necessary to augment the existing schemes to cope with the additional requirements of the growing population. Kerala has been making increased use of finance from Life Insurance Corporation for the water supply schemes. This will be continued in future.

2.96 Only the Corporations of Trivandrum and Cochin have sewerage facilities. In 1978-79, drainage schemes were taken up in Quilon, Trichur and Kozhikode. The other towns are yet to be covered. Considering the heavy investment requirements of sewerage schemes, the State is constrained to limit the outlay on sewerage. However, attempts will be made to progressively increase the coverage so as to include all cities and towns within a period of 10 to 15 years.

2.97 Though attempts have been made in the past to popularise the use of ESP type latrines in the rural areas, actual achievements are meagre in relation to the magnitude of the problem of rural sanitation. This programme will be intensified in the Sixth Plan.

2.98 The strategy for this sector in the coming years will be guided by the following objectives:

- (i) augmentation of the existing urban water supply schemes to achieve 100 per cent coverage,
- (ii) provision of priority in the implementation of rural water supply schemes to coastal and hilly tracts,
- (iii) provision of open draw wells in Harijan colonies and to housing scheme beneficiaries belonging to Scheduled Castes and Tribes,
- (iv) bringing in a phased manner all the urban areas under sewerage schemes and intensifying the programme of providing ESP type latrines in rural areas and
- (v) making efforts at utilising institutional finance for water supply to the maximum extent possible.

## Housing

2.99 Owing to the high pressure of population, the problem of housing is acute in Kerala. Past efforts, though substantial could not make any significant dent into the problem. In order to wipe off the existing housing shortages, replacement needs and the requirements of the growing population, it is estimated that about 2.5 lakhs of housing units will have to be constructed annually for the next 15 years. As against this, the present rate of construction is only about 80,000 houses a year. Shortage of housing is particularly serious among the harijans and other poor and vulnerable sections of the population. The objectives of the Sixth Plan, therefore, is to wipe out the shortages to the maximum extent possible, giving greater weightage to the needs of the rural poor.

Towards this end the following measures are contemplated, in the Sixth Plan:

- (i) augmentation of the resources of autonomous institutions like the State Housing Board, Co-operative Housing Federation and the Development Corporation for Scheduled Castes and Scheduled Tribes so as to enable these bodies to attract institutional finance for housing on a larger scale,
- (ii) co-ordinating the activities of the different agencies involved and streamlining the administrative apparatus to ensure effective implementation of housing programmes;
- (iii) encouragement and promotion of self-help housing,
- (iv) provision of house sites and dwelling houses to the rural landless labourers,
- (v) provision of houses to the economically weaker sections of the community and also to urban slum dwellers,
- (vi) promotion of group and community housing,
- (vii) promotion of low cost houses using locally available materials, and
- (viii) research and development on low cost houses of suitable design.

## Urban Development

2.100 The Department of Town and Regional Planning has prepared master plans for 17 towns including the three city Corporations and also Development plans and traffic operation plans for the urban local bodies. The Kerala Urban Development Finance Corporation is giving loans to urban local bodies for implementing remunerative schemes. There is also a High Power Town and Country Planning Board at the State level to guide and advise the different Planning authorities and to co-ordinate their activities. In the Sixth Plan, the activities of the above bodies will be stepped up. Programmes of slum clearance/improvement will be implemented on an expanded scale.

## Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes

2.101 As on 1st July, 1979, the estimated population of Scheduled Castes in Kerala was 22 lakhs and that of Scheduled Tribes 2 lakhs out of a total population of 252.5 lakhs in the State. The past plans

concentrated on the educational advancement of these sections of the population and as a result there has been significant improvement in their level of literacy. School enrolment among Scheduled Castes has almost reached the level of other communities. In 1979-80, 27.45 per cent of the Scheduled Castes population, and 19.60 per cent of the Scheduled Tribes population attended schools compared with 22.37 per cent of the general population.

2.102 In the Fifth Plan all departments and implementing agencies were to set apart 10 per cent of the respective sectoral outlays exclusively for schemes benefiting Scheduled Castes and Tribes. Since 1979-80, schemes from each sector, costing approximately 10 per cent of the sector's total outlay and benefiting these sections of the population are being listed out and a Special Component Plan is being prepared. Similarly Tribal Sub Plans were prepared for areas having more than 50 per cent tribal population. Under these Tribal Sub Plans, it has been possible to cover about 65 per cent of the tribal population in India, while only 37 per cent of the tribal population in Kerala could be covered. The Kerala State Development Corporation for Scheduled Castes and Tribes is undertaking programmes for the uplift of Scheduled Castes and Tribes. Their programmes include construction of houses, loan assistance for the purchase of agricultural land, and dairy animals, and for starting industrial units etc.

2.103 In the Sixth Plan, the programme in this sector are meant mainly for education and training, provision of housing facilities and such other welfare measures. In the case of tribal welfare special colonisation and hamlet development programme are proposed for the total development of the tribal inhabitants of the area, without unduly upsetting their social and cultural environment. The main thrust of the programme for the welfare of backward classes will, however, be on the full implementation of the Special Component Plan, by effecting better inter-departmental co-ordination to ensure that Scheduled Castes and Tribes actually receive their due share of the benefit of development. A special project for the economic advancement of about 50,000 Scheduled Caste families is also contemplated in the Sixth Plan.

## Labour Welfare

2.104 In Kerala minimum wages have been fixed in all the organised industries and in unorganised industries like coir, handloom, beedi, toddy tapping etc. The Kerala, Agricultural Workers Act, 1974, ensures security of employment, fixation of working hours, payment of minimum wages and other benefits and fair settlement of disputes. The necessary apparatus for the peaceful settlement of industrial disputes and fixation and enforcement of minimum wages has been created. Government have also created welfare funds for various categories of workers. In the Sixth Plan, these arrangements will be strengthened. Measures for the safety and health of industrial workers will be undertaken. There are also programmes for the rehabilitation of bonded labour.

## Social Welfare

2.105 Social welfare programmes cover the weaker sections of the society especially the socially and the physically handicapped. The Sixth Plan envisages

extension and improvement of facilities for the education, training and rehabilitation of orphans, destitutes and physically handicapped children. The year 1981 being the International Year of the Handicapped, a number of programmes will be initiated for the benefit of the handicapped. The Sixth Plan proposals include vocational training, financial assistance for self-employment, supply of orthotic and prosthetic aids, etc. The Kerala State Development Corporation for the Handicapped will be supported in their proposed activities of setting up assembling units for artificial limbs and rehabilitation of the handicapped in self employment.

2.106 Child welfare activities in the Sixth Plan will concentrate on the preventive and promotive aspects covering health, nutrition and immunisation programmes. Women's programmes will emphasise on training programmes and financial assistance to deserving women to equip them for paid employment and self employment, establishment of Ksheinakendras, anganawadis, creches, working women hostels etc.

2.107 Taking into consideration the increasing number of juvenile delinquencies, the probation services will be strengthened and streamlined. Children's Act and other enactments will be more effectively implemented and extended to areas not covered so far. Beggar relief programmes and Borstal schools are also given priority in the Sixth Plan.

### **Nutrition**

2.108 A number of nutrition programmes are currently being implemented in the State by different agencies. The Applied Nutrition Programme and the one-meal a day programme are implemented by the Community Development Department. The Special Nutrition Programme and the non-plan scheme of World Food Programme are implemented by the Social Welfare Department. The Health Department is in charge of the health-based nutrition programme and the mid-day meals programme comes under the Education Department. Except the mid-day meals programme, the rest are all meant mostly for pre-school children. The content of these programmes vary and in the same areas more than one programme is being implemented. During the Sixth Plan Period, while enlarging the coverage of these schemes, steps will be taken to co-ordinate the activities of the different departments in order to avoid waste and duplication of effort and to make the programme more effective.

### **Minimum Needs Programme**

2.109 The National Minimum Needs Programme was introduced in the Fifth Five Year Plan (1974-79). The basic idea behind the programme was to raise the social consumption of the poorest strata of society by the provision of facilities like elementary education, medical care, drinking water, rural roads and rural electrification. This was meant to supplement the improvement in income and personal consumption resulting from the programmes in the various sectors. In the Sixth Plan three more items viz; house sites for landless labourers, environmental improvement of urban slums and nutrition were introduced.

2.110 In respect of most of the components included in the Minimum Needs Programmes, Kerala is ahead of the rest of India. This has necessitated marginal deviation from the all-India norms adopted for the formulation of the components of this programme. Sufficient allocations, however, are being provided in the Sixth Plan for maintaining the tempo of development already achieved.

### **Science and Technology**

2.111 The ultimate purpose of scientific research and invention is the promotion of human welfare. Planning for science and technology should, therefore, aim at deliberately directing man's talent for research and invention to the solution of specific problems, thereby contributing to the welfare of mankind. Promotion of scientific and technological research aimed at the optimal use of the human and material resources of the nation to enhance the production of goods and services is essential. Equally important is the role of science and technology in the solution of environmental and sanitation problems which emerge as concomitants of modernisation.

2.112 Results of research the world over are available and can be adopted for the solution of local problems. But Kerala today faces a number of problems which demand an original approach and adaptive research for their solution. Research findings generate their own applications too. Realising this, the Government of Kerala, during the Fifth Five Year Plan period, set up a few autonomous centres of research in the State. During the Sixth Plan period, it is proposed to strengthen these centres and to promote a variety of other research programmes which have immediate relevance to the economic and social advancement of the State.

2.113 It will be the endeavour during the Sixth Plan period to strengthen the scientific bias in the syllabi and curricula of schools and colleges, to improve the laboratories and research facilities and to reorient the pattern of technical education to meet the emerging needs of skills and know-how. Attempts will be made to popularise science so that scientific attitude and approach will in course of time pervade all sections of society.

2.114 Innovative approach and creative extension of science and technology to a wide range of activities and problems affecting the day-to-day life of man in the fields of agriculture and land use, forestry, irrigation and water management, traditional industries, mineral prospecting and beneficiation, aquaculture and mariculture, animal husbandry and dairying, public health and sanitation, low cost housing and construction etc. will be encouraged and promoted during the Sixth Plan period.

### **Plan Implementation**

2.115 In the past, there has been a wide gap between the Plan and performance. Imperfections in policies and instrumentalities have resulted in glaring distortions in implementation. Inadequacies in project planning and appraisal have not only led to inordinate cost escalation, but have also delayed the accrual of benefits to the people. Redundant levels of administration and centralised financial control

have made the delivery system weak and ineffective. There have been too many agencies operating programmes which are similar or directed to the same target groups. Consequently the impact of many of these programmes have been weak and dispersed. The problem of co-ordination has been difficult. There has been excessive concern for financial achievements without due regard to physical results. Monitoring of programmes and projects has been tardy. As a consequence timely remedial action has been wanting.

2.116 In the Sixth Plan, therefore, the following measures are proposed for toning up the Plan implementation machinery.

- (i) Project identification and formulation capacities of the departments and agencies concerned with plan implementation will be strengthened through appropriate training programmes,

- (ii) Administrative machinery will be streamlined by eliminating redundant layers and by strengthening field agencies with increased delegation of powers,
- (iii) In order to ensure better co-ordination, the planning functions at the district level will be strengthened. Overlapping programmes will be integrated and
- (iv) Monitoring arrangements in the different Departments will be streamlined and strengthened and review of performance will be undertaken at the highest levels.



## CHAPTER III

### SECTORAL PROGRAMMES

#### 3.1 Agriculture and Allied Sectors

##### Agriculture

###### I. Direction and Administration

###### 1. Reorganisation and Strengthening of Agricultural Administration

(Outlay Rs. 1200 lakhs)

The extension machinery of the Department of Agriculture, has all along been following a selective crop-oriented approach confined mainly to crops like paddy, coconut, pepper and sugarcane. All the 489 Intensive Paddy Development Units, 187 Coconut Package Units, 30 Pepper Package Units and 3 Sugarcane Development Units put together serve only about 10 per cent of the net area under cultivation in the State. As a result farmers growing different crops have to approach different sources for technical know-how and other services. It is therefore necessary to re-organise the agricultural extension machinery to cover all the farm holdings and the farming community on an area-wide basis. The Kerala Agricultural Extension Project based on the Training and Visit System of Extension as approved by the World Bank is intended for this purpose. Under this system the hierarchy of agricultural extension personnel attending to agricultural extension work will be as follows: A village level worker at the grass-root level covering 500 to 2500 farming families according to density, an Agricultural Extension Officer at Agricultural Development Unit level (covering 2 to 3 panchayats on an average), Subject Matter Specialists at Sub-Divisional and District levels, and crop and discipline-wise specialists at the State level. With the introduction of this new system of extension, the personnel from the crop-oriented extension units will be re-allocated to this project. The outlay proposed is to meet the pay and allowances of the additional staff, purchase of vehicles, issue of vehicle advance to field staff, construction of office-cum-residence for field staff, training expenses and other operational costs.

###### 2. Strengthening of Supply, Services and Development of the Department of Agriculture

(Outlay Rs. 250 lakhs)

With the introduction of the T&V System, functions like supply, services, plan implementation and other regulatory functions of the Department of Agriculture attended to by 749 crop development units in the State will be entrusted to 125 circle offices. The jurisdiction of each supply and service point would thus be more than one Block area, which from the experience of the three Districts where the project has been introduced is too large to be covered by one unit. In order to ensure timely supply and services to the farmers, this scheme envisages strengthening of the supply, services and regulatory arms of the Department.

###### II. Multiplication and Distribution of Seeds

High yielding varieties programme being the major strategy for increasing rice production in the

State, the target is to increase its coverage from 3 lakh hectares to 6 lakh hectares during the Sixth Plan period. As the State seed farms are mostly concerned with production of foundation seeds, selected farmers have to be enlisted as registered growers and entrusted with the multiplication of the foundation seeds of HYVs supplied by the State Seed Farms. The quality of the seeds produced by the registered growers also has to be ensured.

###### 1. Production and Distribution of Quality Seeds

(Outlay Rs. 22 lakhs)

The plan outlay proposed is for organising seed multiplication through registered growers in the districts by extending financial assistance to the registered growers for meeting a part of the additional production expenses. Procurement and distribution of seeds thus produced will be entrusted to Co-operatives, Agricultural Development Centres, or other Farmers, Organisations. In areas where such agencies do not come forward the Department will resort to direct procurement and distribution. The plan provision is to meet the expenditure on incentives to the registered growers, subsidies on the cost of seed and handling charges towards procurement and distribution.

###### 2. Inspection, Certification and Establishment of a Seed Testing Laboratory

(Outlay Rs. 4.17 lakhs)

In order to cope with the seed certification and quality control measures, the Seed Testing Laboratory at Alleppey requires further strengthening by way of additional equipment, building etc. The outlay is meant for this purpose.

###### 3. Development of Existing Seed Farms

(Outlay Rs. 65 lakhs)

The Department of Agriculture is maintaining 34 seed farms. Many of these require additional facilities like irrigation, land development, fencing, buildings, stores etc., for augmenting the foundation seed production. The Plan outlay is for providing such facilities.

###### 4. Seed Multiplication in Kayal Lands

(Outlay Rs. 25 lakhs)

The plan outlay is for providing infrastructure facilities to the seed multiplication farm in the Kayal lands at Chulatheruvu Government Farm.

###### III. Agricultural Farms

###### District Agricultural Farms

(Outlay Rs. 150 lakhs)

In order to meet the increasing demand for quality planting materials of perennial crops based

on which massive rehabilitation, replanting and fresh planting programmes are envisaged in the Sixth Plan, it is proposed to augment the facilities in the existing District Agricultural Farms. Besides, the two District Agricultural Farms are to be established in Idukki and Trichur Districts where no such farms exist at present. The provision is meant for the above purpose.

#### IV. Manures and Fertilizers

Soils of Kerala are continuously depleted of soil fertility owing to high cropping intensity, high rainfall conditions and undulating topography. Sustained production of crops can be ensured only through maintenance and improvement of soil fertility. Therefore, extensive and increased use of manures and fertilisers has to be ensured to achieve crop production target of the Plan.

##### 1. Procurement and Distribution of Green Manure Seeds

(Outlay Rs. 12.50 lakhs)

In view of the acute shortage for organic manures and high cost of fertilisers, raising of green manure crops and incorporation of it in-situ is the cheapest method of enriching the fertility of soil. It is therefore proposed to encourage the cultivation of green manures by giving an incentive of 33 1/3 per cent subsidy on the cost of green manure seeds. The outlay is for meeting the subsidy.

##### 2. Soil Testing Service

(Outlay Rs. 120 lakhs)

An efficient network of soil testing service is a pre-requisite for optimising fertilizer use. At present soil testing laboratories are functioning in all the Districts except two. The Plan scheme envisages the establishment of one mobile soil testing laboratory attached to each District Soil Testing Laboratory, construction of buildings for the District and Central Soil Testing Laboratories, establishment of two District Soil Testing Laboratories and continuance of the existing Soil Testing Laboratories.

##### 3. Supply of Soil Ameliorants at Subsidised Rates

(Outlay Rs. 45 lakhs)

It is proposed to supply soil ameliorants, at 50 per cent subsidy to growers of paddy, pulses and coconut in the State. The Plan provision is for meeting the subsidy on the cost of soil ameliorants and for the continuance of the existing staff.

##### 4. Quality Control of Fertilisers and Pesticides

(Outlay Rs. 31.50 lakhs.)

It is proposed to strengthen the existing Fertilizer Control Laboratories at Pattambi and Trivandrum and the Pesticides Testing Laboratory at Trivandrum. In order to ensure the quality of fertilizers and plant protection chemicals in the market, samples will be drawn from the dealers and subjected to analysis periodically in the above laboratories. The outlay is meant for meeting the expenses on staff, chemicals and equipment and other incidental expenses.

#### V. Plant Protection

The humid conditions in the State provide congenial environment for the growth of pathogens causing diseases and breeding of insect pests. The major crops which suffer from chronic infestation of pests and diseases are coconut, pepper and cashewnut. The need for a strong plant protection cover is therefore imperative to support the crop production in the State. The strategy therefore calls for (1) an efficient surveillance network so that incidence of pests and diseases can be anticipated and forecasts given for taking up necessary action; (2) an integrated pest control system which will reduce the cost of production, (3) an efficient system of plant protection delivery so that timely action can be taken to help confine the focus of infection and limit the extent of damage.

##### 1. States' Share for the Control of Brown Hopper in Endemic Areas

(Outlay Rs. 25 lakhs).

Brown plant hopper is an endemic pest in the important paddy growing areas in the State. As the crop loss caused by this pest is usually irreparably severe, farmers need assistance to keep this pest under control. The outlay is to accommodate 50 per cent share to be met by the State Government for the continuance of the Centrally Sponsored Scheme.

##### 2. Plant Protection Service

(Outlay Rs. 225 lakhs.)

Timely control of pests and diseases is essential for the success of the high yielding variety programme. It depends upon the availability of and accessibility to plant protection equipments and chemicals. Although plant protection facilities have improved considerably owing to the operation of various schemes in the past efforts in the line will have to continue for some more time. The existing facilities however, require to be supplemented by the maintenance of a pool of plant protection equipments by the Department for hiring out to cultivators. The paddy growers in the State also need assistance by way of subsidy on plant protection chemicals to sustain their interest in the cultivation of high yielding varieties. It is proposed to extend from 1981-82, 50 per cent subsidy on the cost of plant protection chemicals for paddy cultivation with high yield varieties. The Pest and Disease Surveillance Programme, the Biological Control Programme against Nephantis and the campaigns for the control of rodents and storage pests will be continued under this scheme. The plan outlay is for meeting the expenditure on subsidy on plant protection equipments and chemicals, incentives for rodent control and other plant protection campaigns, purchase, repair and maintenance of vehicles and plant protection equipments for the Department, and the spill over commitments on the additional facilities for the existing parasite breeding stations and pest surveillance units.

##### 3. Weed Control

(Outlay Rs. 25 lakhs.)

Salvinia, which infests the fields and waterways of the State, has become a serious threat to crop production. The only effective method for control of this weed at present is to remove it physically by organising community action on an area-wide basis. This

scheme envisages continuance of the weed control campaigns by providing suitable incentives to farmers' organisations, Panchayats and Agricultural Development Centres. Incentives under this scheme will be extended to organise eradication campaigns against other weeds through chemical control measures also. The plan outlay is to accommodate the incentives to be provided for the purpose.

#### 4. *Agricultural Meteorological Service*

(Outlay Rs. 5.60 lakhs).

This scheme is to strengthen the meteorological wing of the Department to ensure regular data collection and interpretation of the weather elements in support of the pest and disease surveillance programme. Regular forecasts on weather and pest incidence will be issued through the press and radio. The outlay is to meet the expenses on staff and spill-over commitments towards establishment of the mini-meteorological centres attached to the Departmental Farms.

#### 5. *Operational Research for Integrated Pest Control*

(Outlay Rs. 7 lakhs).

The Operational Research Project for integrated pest control established as a joint venture of the Department of Agriculture and Kerala Agricultural University with assistance from the ICAR will be continued till the end of 1982-83. The Plan outlay is to meet the expenses on staff, adaptive trials and other items to be met by State Government.

#### 6. *Supply of Metallic Storage Bins to Registered Seed Growers at subsidised Rate*

(Outlay Rs. 6.50 lakhs).

This is a new scheme for the supply of metallic storage bins at subsidised rate in order to promote scientific storage of the seeds produced by registered growers in the State. The provision made in the plan is to meet the subsidy portion of the cost of storage bins.

#### 7. *Contingency Plan to Tackle Sudden Pest Outbreaks*

(Outlay Rs. 10 lakhs).

The scheme envisages establishment of a service system in the Department of Agriculture to pursue emergency action in the case of sudden pest outbreak by enforcing the control measures on a compulsory basis.

### VI. *Commercial Crops*

#### 1. *Pulses*

##### (a) *Pulses Development Programme*

(Outlay Rs. 50 lakhs).

Both the area and production of pulses in the State have declined considerably in recent years. Therefore, efforts during the Sixth Plan will be to bring an area of 50 thousand hectares under pulses cultivation. The summer rice fallows and the garden lands offer scope for expansion of area under this crop. One of the hurdles in this regard is that sufficient quantity of quality seeds is not produced in the State and the growers have to pay high prices to procure seeds. It is therefore proposed to organise an effective seed procurement and

distribution system. The scheme is to organise pulses cultivation in compact areas of 5 hectares and above by subsidising the cost of seeds and fertilizers. The production of rhizobium culture will also be stepped up to cater to the demand of the new areas. The outlay is to meet the subsidies on cost of seed and fertilizers and for establishing a new laboratory for production of rhizobium.

##### (b) *States' Share for the Intensive Pulses Development Programme*

(Outlay Rs. 24.81 lakhs).

The provision is for meeting the 50 per cent share of the State Government for continuance of this Centrally Sponsored Scheme.

#### 2. *Tuber Crops*

##### *Development of Tuber Crops*

(Outlay Rs. 15.70 lakhs).

The development programmes of tapioca will be entrusted to the Tapioca Board proposed to be established during the plan period. However, in the case of other tubers like sweet potato, yams etc., which are mostly used as vegetables, availability of quality planting materials is one of the constraints to expansion of area under these crops. This plan scheme aims at providing assistance for production and distribution of quality planting materials, and incentives for adoption of scientific cultivation practices on an area-wide basis. It also covers organisation of marketing facilities.

#### 3. *Sugarcane Development*

(Outlay Rs. 67 lakhs).

It is proposed to increase the production of sugarcane in the State so as to meet the requirements of the three existing sugar factories. The programme includes provision of additional irrigation facilities by subsidising the investment on individual and community basis, organising a seed multiplication and distribution programme for supplying improved varieties of planting materials at subsidised rate and motivating the sugarcane growers for the adoption of plant protection measures in time by extending suitable incentives. The outlay is for accommodating the subsidies to be given to the growers and expenses on staff.

#### 4. *Oil Seeds*

##### *Seasonal Oil Seeds*

##### (a) *Groundnut Development*

(Outlay Rs. 60 lakhs).

The cultivation of groundnut is still confined to only one district in the State viz., Palghat. Its cultivation as an inter-crop with tapioca in other areas has been found successful. The strategy for expansion of area under groundnut during the Sixth Plan period would therefore be the promotion of inter-cropping of groundnut with tapioca. The seeds would be procured from the traditional areas for supply to the new areas. It would be necessary in the initial years to give some incentive to the tapioca growers for meeting a part of the additional expenses involved in the inter-cropping. The plan provision is for the above purpose.

(b) *Sesamum Development*

(Outlay Rs. 15 lakhs).

In order to promote scientific cultivation practices the scheme provides assistance for (1) multiplication and distribution of the improved variety of sesamum seed-Kayamkulam-1-through selected registered growers, (2) incentives for adoption of scientific cultivation practices on an area-wide basis and (3) assistance for organising mini-kit trials with new cultures under pre-release stage with the Kerala Agricultural University. The outlay is for continuance of this scheme during the Sixth Plan period.

*Perennial Oil Seed Plants*(a) *Coconut Development*

Coconut is the most important traditional cash crop grown in the State accounting for nearly a third of the gross cropped area and agricultural income in the State. It is cultivated in 6.73 lakh hectares of land in Kerala with an annual estimated production of 3,053 million nuts. Unlike other commercial crops grown in the State, coconut is essentially a small holder's crop, with about 90 per cent of the 2.5 million holdings falling below the size of one hectare. The vicissitudes in the economic life of the common man in Kerala is so closely inter-woven with the economy of this crop. Besides, this crop provides employment to agricultural labourers, ranging from 80 to 150 man days per hectare per year depending upon the level of adoption of technology at the farm level.

In spite of the fact that 67 per cent of the area and 61 per cent of the production of coconut in the country come from Kerala State alone, the productivity of this crop in the State is considerably low. More alarming is the decline in productivity noticed in the State during the recent past. The productivity of this crop during the triennium ending 1954-55 was 6919 nuts per hectare which declined to 4630 nuts per hectare by the triennium ending 1978-79. The fall in productivity over a period of 24 years is 33 per cent.

The major problem facing coconut cultivation in Kerala is the high incidence of diseases like root wilt and leaf-rot diseases. No eradication measures have so far been found out against the debilitating root wilt disease which has caused considerable damage to the coconut gardens in the State. One peculiarity noticed with this disease is that the progression of the disease on an infected tree is not so quick in the initial stages, or for some years. The infected tree will continue to yield but at a declining rate. These trees in different stages of infection contribute to a steady decline in productivity of the crop. Yet another reason for the decline in productivity is the presence of quite a large number of senile and unproductive trees of poor genetic stock which require replantation.

A technical break-through in the management of these coconut gardens on an area-wide basis co-ordinating the various factors of production has not taken place so far due mostly to the unorganised nature of enterprise accentuated by the fragmented nature of holdings.

The major emphasis in the development efforts during the Fifth Five Year Plan was on the establishment of 187 Coconut Package Units covering one eighth

of the area under coconut. Comprehensive spraying scheme for the control of coconut leaf diseases, rejuvenation of diseased coconut plantations by under-planting with hybrid seedlings, and subsequent removal of the diseased trees, production and distribution of quality coconut seedlings, promoting irrigation facilities in coconut gardens etc. were the major development programmes implemented by the Government during the Fifth Plan period. Apart from this, under the Kerala Agricultural Development Project assisted by the World Bank a programme for coconut rehabilitation in 30,000 hectares of coconut gardens in four districts and new planting in over 5000 hectares is also under implementation. Although these developmental approaches were in the right direction, quantitatively these efforts and investments were not sufficient to bring about tangible results due to the insignificant coverage of the area under the crop as well as lack of co-ordination in harnessing all the crucial factors of production. An increase in the productivity of coconut ranging from 76 per cent under rainfed conditions to 165 per cent under irrigated conditions through the application of fertilizers and scientific management as obtained by CPCRI, Kasaragod, indicates the development potential of this crop.

The strategy for development of this crop during the Sixth Plan period will be (1) to arrest the decline in productivity that has set in the recent past, and (2) to increase the productivity further through a comprehensive coconut development programme on an area-wide basis. In order to achieve these objectives the strategy during the Sixth Five Year Plan envisages: (1) intensification and enhancement of coverage under the spraying for control of leaf diseases, (2) enlisting the participation of local bodies in the operational efforts, and (3) implementation of comprehensive programme for the all round development of the coconut gardens in a phased manner. Besides, the efforts on the production and distribution of quality coconut seedlings will also be intensified. With these objectives the following schemes are proposed under coconut development:

(1) *State's Share of Centrally Sponsored Schemes*  
(Outlay Rs. 156.07 lakhs).

The Plan outlay is for meeting the 50 per cent share of the State for the continuance of the three centrally Sponsored Schemes viz. (1) T x D seedling production, (2) rejuvenation of unhealthy coconut plantations and (3) package programme for coconut.

(ii) *Production and Distribution of Quality Coconut Seedlings\**  
(Outlay Rs. 375 lakhs).

The proposal is to increase the production of quality coconut seedlings so that the increasing demand of the committed programmes of the Department of Agriculture viz. SADU, ARDC etc., can be met. The outlay is for meeting the cost on hybridisation charges, procurement of seed nuts, nursery costs, land acquisition charges for additional nurseries, improvement of the facilities in the existing nurseries and expenses on staff.

(iii) *Spraying for the Control of Coconut Leaf Diseases\**  
(Outlay Rs. 675 lakhs).

It is proposed to enhance the coverage under spraying in the disease-affected tracts. The Department

would supply the required chemicals and plant protection equipments while the actual spraying operations will be organised by the local body unit after realising a part of the cost from the beneficiaries. The outlay is for meeting the cost of chemicals, equipment, spraying charges, and expenses on staff.

(iv) *Comprehensive Coconut Development Programme*  
(Outlay Rs. 900 lakhs)\*

The project envisages improvement of the coconut gardens by cutting and removing the diseased and unproductive palms yielding less than 10 nuts per year for which an incentive of Rs. 75 per palm will be paid to the grower. The scheme also provides for the supply of quality coconut seedlings at 50 per cent subsidy for replanting, 50 per cent subsidy for adopting scientific manuring on 10 per cent of the number of palms in the holding, and 33 1/3 per cent subsidy on the supply of green manure seeds and the cost of construction of wells and pumpsets for irrigation. The scheme would cover the entire disease-affected tract in a phased manner. The outlay is to meet the incentives to the farmers.

(b) *Development Programme for Oil Palm*  
(Outlay Rs. 9.64 lakhs)

The Plan provision is for the continuance of the Oil Palm Station, Thodupuzha. Expenses on staff, cultivation charges, cost of hydraulic press and maintenance of the Station will be met from the outlay.

#### V. Spices Development

(a) *Spices Nurseries* (Outlay Rs. 70.40 lakhs)

The Plan provision is to meet the cultivation charges of the progeny orchards, cost of seed materials, nursery charges, expenses on staff etc., for continuing the ongoing scheme for multiplication and distribution of planting materials of the hybrid variety of pepper Panniyur-I, improved local varieties of pepper and seedlings of tree spices.

(b) *Pepper Development Programme*  
(Outlay Rs. 247.19 lakhs)

The productivity of pepper has been declining in recent years. Establishment of package units and supply of superior planting materials were the two major strategies adopted in the past. The strategy during the Sixth Plan period will be to rehabilitate the traditional pepper gardens by providing assistance for replanting and fresh planting of pepper vines and promoting scientific manuring and plant protection by giving suitable incentives. The outlay is for meeting the incentives to farmers.

(c) *Development of Ginger Turmeric and Garlic*  
(Outlay Rs. 15.70 lakhs)

It is proposed to promote the scientific cultivation of ginger, turmeric and garlic by arranging the supply of quality planting materials and other inputs at 25 per cent subsidy. The outlay is for the purpose.

#### 7. Cashew Development

The internal production of cashewnut is not even sufficient to cover one third of the processing capacity built up in the State. With rapidly depleting sources

of import the need for increasing production of cashewnut in the State is crucial for sustaining the cashew industry which employs 1.35 lakh workers in the State.

(a) *State's Share for Cashew Cultivation in Private Sector*  
(Outlay Rs. 30.50 lakhs)

The State Government is providing staff and office support for the implementation of the centrally sponsored scheme for cashew cultivation in private sector. In addition to this, State Government has to bear 50 per cent of the incentive subsidies given to the beneficiaries. The outlay is for accommodating the above commitments for the continuance of the centrally sponsored scheme.

(b) *State's Share for Cashew Demonstration*  
(Outlay Rs. 20.22 lakhs)

The Plan provision is for meeting 50 per cent share of the State for the continuance of centrally sponsored scheme for cashew demonstration.

(c) *State's Share for Progeny Gardens for cashew*  
(Outlay Rs. 6.95 lakhs)

The Plan provision is for meeting 50 per cent share of the State for the continuance of the centrally sponsored scheme for progeny garden for cashew.

(d) *Adoption of Plant Protection Measures for Cashew*  
(Outlay Rs. 50 lakhs)

The scheme for adoption of plant protection measures for cashew in private gardens will be continued. Under the scheme two rounds of spraying will be organised after realising a nominal charge of 10 paise per tree per spraying. The outlay is for the purchase of plant protection chemicals, equipment etc.

(e) *Multi-State Cashew Development Project*  
(Outlay Rs. 165.71 lakhs)

The Multi State Cashew Development Project with World Bank assistance sanctioned for implementation from April 1980, envisages the coverage of 10,000 hectares additionally under cashew in Malappuram, Kozhikode, Palghat and Cannanore Districts. Under this project long term loans will be given to cashew growers for fresh planting of cashew routing the finance through ARDC. The project will provide a subsidy Rs. 900 per hectare phased equally during the first three years of planting and shared equally by the Centre and the State.

The outlay is for meeting the State's commitment on this project.

#### 8. Cocoa

(a) *Cocoa Development*  
(Outlay Rs. 13.50 lakhs)

As an inter crop for intensifying land use and supplementing income, cocoa offers considerable potential in Kerala. Therefore the scheme for bringing additional area under cocoa in the private sector will be continued during the Sixth Plan period. The outlay provided is to meet the cost of production and distribution of quality seedlings.

\*Schemes proposed to be additionally included under Centrally Sponsored Schemes with 50 per cent Central assistance.

(b) *Seed Garden for Cocoa*

(Outlay Rs. 4.70 lakhs)

The provision is for the maintenance of the cocoa seed garden established at Chungathara.

(c) *Share Capital Contribution to Cocoa Processing Units.*

(Outlay Rs. 100 lakhs)

Detailed project report for the establishment of a Cocoa Processing Unit is being drawn up by the State Government. The provision is for share capital contribution to the unit.

9. *Tobacco Development*

(Outlay Rs. 4.78 lakhs)

The scheme aims at expansion of area under tobacco by providing incentives to the landless agricultural labourers who cultivate tobacco by leasing in land and also for popularisation of scientific cultivation. The outlay is for meeting input subsidies to the growers.

10. *Tapioca Board*

(Outlay Rs. 0.01 lakh)

In order to develop the production and marketing aspects of tapioca, it is proposed to set up a Tapioca Board. Pending finalisation of draft project report, a token outlay is proposed in the Plan.

11. *Cotton Development*

(Outlay Rs. 20 lakhs)

This is a new scheme which envisages popularisation of improved varieties of cotton through the supply of improved seeds and organising scientific cultivation on an area-wide basis by giving incentives by way of input subsidy. The outlay is for giving incentives and for expenses on staff.

VII. *Extension and Farmer's Training*1. *Farmers' Training Centres*

(Outlay Rs. 42.78 lakhs)

The Plan outlay is meant for the continuance of the existing Farmers' Training Centres and for converting one of these centres into a training institute for conducting various training courses.

2. *Training Programme for Agricultural Demonstrators and Junior Agricultural Officers.*

(Outlay Rs. 2.51 lakhs)

With the introduction of the Training and Visit (T and V) system of extension the on-going schemes for in-service and refresher training courses for the field staff will be dispensed with, as the new project would take care of such requirements. A new scheme will be introduced for imparting training on farm management to the Junior Agricultural Officers and Agricultural Demonstrators working in departmental farms. The outlay is for this purpose.

3. *Training to Departmental Officers*

(Outlay Rs. 4.89 lakhs)

The outlay is for continuing the in-service training programme for mechanics for operation and maintenance of agricultural machinery and also for meeting training expenses of senior departmental officers deputed for special training within and outside the country.

4. *Special Training Leading to Post-graduate Diploma*

(Outlay Rs. 2.16 lakhs)

The Kerala Agricultural University is conducting a post-graduate course leading to Diploma in the disciplines of Water Management, Plant Protection and Agricultural Chemistry. Under the State Plan Scheme the department is deputing 12 officers every year for the above course. The outlay is for continuing the scheme during the Sixth Plan period by meeting the salary and other training expenses.

VIII. *Agricultural Engineering*1. *Expansion of Agricultural Engineering Service*

(Outlay Rs. 55 lakhs)

The agricultural engineering problems in the State have not received adequate attention in the past. The scheme envisages strengthening of the State and District level Agricultural Engineering Wing of the Department to provide timely engineering support to various agricultural development programmes. The outlay is for meeting the expenses on staff, equipment and machinery.

2. *Agro-Industries Corporation*

(Outlay Rs. 45 lakhs)

The outlay is for meeting the share capital contribution of the State to the Agro-Industries Corporation.

IX. *Agricultural Education and Research:  
Kerala Agricultural University*

(Outlay Rs. 1300 lakhs)

(i) *Education*

In addition to its two faculties of Agriculture and Veterinary and Animal Sciences, the Kerala Agricultural University (KAU) has started a new faculty of Fisheries from 1979-80 onwards in which an under graduate programme has been initiated. Besides, new post graduate programmes have been started in disciplines like Agricultural Economics, Agricultural Engineering and Agricultural Statistics. KAU also proposes to strengthen a few more disciplines to meet the growing instructional requirements. New faculties proposed are (i) Faculty of Basic Sciences and Humanities and (ii) Faculty of Forestry. In addition to degree courses, KAU is organising many training programmes for the technical personnel in the Departments of Agriculture, Animal Husbandry, Dairy Development, Milk Marketing Board etc.

(ii) *Extension Education*

In order to ensure the transfer of technology to the rural community in general and the farming community in particular, the extension wing of the KAU proposes to strengthen its Communication Centre, expand the Public Relations Wing, establish a Central Training Institute, start correspondence courses and establish Krishi Vignan Kendras. The extension wing of the KAU also proposes to undertake a middle level technical training programme to benefit the young generation of fishermen who take to the fishing profession. Areas of training will include deep sea fishing, operation, repair and maintenance of motor boats, maintenance, repair and use of fishing nets, canning, pickling and processing and refrigeration technology.

(iii) *Research*

Research in the past, has been mostly crop oriented or discipline oriented. The importance of a multi-disciplinary approach and the need for a crop system approach have already been recognised and a start in this direction has been made. Studies on an integrated farming system involving crop-livestock-fisheries and employing the organic recycling principle at the farm level have been felt necessary. In order to give due weightage to regional problems, research efforts have to be focused on a regional basis also. The KAU, therefore, proposes to undertake intensive research activities in its three campuses and 21 research stations located in different agro-climatic regions of the State. The University has already undertaken several research programmes sponsored by other national and international agencies like ICAR, World Bank, SIDA etc. In order to take up more problem-oriented research KAU proposes to strengthen the infrastructure facilities and staff support.

(x) *Storage and Warehousing*

(Outlay Rs. 70 lakhs)

Scientific storage and warehousing facilities in the State are mostly provided by the Kerala State Warehousing Corporation. The Corporation's owned capacity of godowns is 58,378 tonnes. During the Sixth Plan period, it is proposed to construct additional godown capacity of 58,000 tonnes, to accommodate the increasing demand for scientific storage facilities. The outlay is for meeting the share capital contribution of the Corporation by the State Government.

(xi) *Agricultural Marketing*

In order to develop a marketing structure that would ensure remunerative prices to the producer by narrowing down the price-spread between the producer and the consumer and reducing non-functional margins of the traders and commission agents, comprehensive and rapid expansion of regulated marketing system having organic links with the primary markets and major consuming centres will have to be established. To make the system more effective, it should include facilities for grading and monitoring of prices.

1. *Establishment of Regulated Markets*

(Outlay Rs. 67 lakhs)

The Government of Kerala have already taken a policy decision to introduce regulated markets in the

State. The outlay is for providing initial support required for market development and for rendering necessary management and supervisory support to the regulated marketing system.

2. *Establishment of Grading Laboratories*

(Outlay Rs. 16.45 lakhs)

Commodities graded under 'Agmark' in Kerala are coconut oil, gingelly oil, ground spices and honey (in four Government and three private laboratories). The Plan proposal is for starting seven more State Agmark Laboratories. The outlay is for meeting the expenses on staff, equipment, chemicals etc., for the new as well as existing laboratories.

3. *Grading at Producers' Level*

(Outlay Rs. 1.60 lakhs)

At present no scientific grading of agricultural commodities is done at the producers' level. It is necessary to inculcate the spirit of maintaining quality in the production of agricultural produce as well as ensuring the benefit thereof to the concerned producers. The scheme is to give assistance to cooperative marketing societies, regulated markets, agricultural development centres, and such other organisations for setting up grading facilities.

4. *Market Extension*

(Outlay Rs. 6.05 lakhs)

The cultivators will have to be educated on different aspects of marketing, namely harvesting, processing, packing, grading, market intelligence etc. The scheme proposes to accomplish these through publications, film shows, and the radio. In addition to this, market bulletins on weather conditions, crop prospects, price-trend, market preferences etc., will also be issued. The outlay is for this purpose.

5. *Re-organisation of Marketing Wing*

(Outlay Rs. 24.20 lakhs.)

The Plan outlay is for meeting the staff and office expenses of the Agricultural Marketing Wing, which has to be re-organised and strengthened for intensifying the marketing services during the Plan period.

6. *Market Investigation and Survey*

(Outlay Rs. 6.70 lakhs)

The scheme envisages conduct of market surveys, commodity surveys, price spread studies on different commodities, and adhoc surveys on other aspects of marketing. The outlay is for meeting the expenses on staff and other charges for collection and analysis of data and for publishing the survey reports.

7. *Training of Marketing Personnel*

(Outlay Rs. 3 lakhs)

The outlay is for meeting the training expenses of officers deputed for Diploma course in Agricultural Marketing at Nagpur, Market Secretary's Course at Hyderabad, and Grader's Training at Nagpur.

XII. *Others*1. *Changing Cropping Pattern*

(Outlay Rs. 38.81 lakhs)

The scheme envisages raising of additional crops by suitably adjusting the existing cropping pattern through location-specific development plans and land use programmes. The additional investment on the part of the farmers for adopting the new cropping pattern will be subsidised to the tune of Rs. 250 per hectare. The outlay is for meeting the expenditure on the subsidy.

2. *Projects for Soil and Water Management*

(Outlay Rs. 7 lakhs)

The existing Pilot Project for Soil and Water Management at Chalakudy is due for completion in 1980-81. The proposal is to take up a new pilot project for soil and water management in the ayacut area of Mangalam dam in Palghat district. The outlay is for meeting the spillover commitments on the existing project at Chalakudy and for establishing the new project.

3. *Agricultural Development Programmes for Scheduled Castes/Scheduled Tribes*

(Outlay Rs. 838.20 lakhs)

The agricultural development programmes of the Scheduled Castes and Scheduled Tribes require an approach different from what is generally adopted for other strata of people. The scheme envisages location-specific development programme with emphasis on land development and intensive cropping for which suitable subsidies on investment will be given. The outlay is for meeting the cost of planting materials and other inputs to be distributed free of cost and the subsidy on infrastructure development. The agricultural development support to be provided for the tribal area sub-plan will also be met from the outlay.

4. *Agricultural Development Programme for Weaker Sections*

(Outlay Rs. 184.27 lakhs)

The weaker sections of the society deserve supporting agricultural development programmes for increasing their income and employment. The scheme envisages suitable location specific programmes which will be subsidised on a need-based manner. Planting materials and other inputs will be made available on concessional rates. The outlay is for the purpose.

5. *Agricultural Development Centres*

(Outlay Rs. 25 lakhs)

In order to ensure farmers' participation in the various development programmes and to organise service facilities on a self-help basis, it is proposed to establish agricultural development centres in each local body unit. With the introduction of the T and V system, the field staff would devote their entire attention on extension activities while the supply and services will be taken over to a large extent by the Agricultural Development Centres. The outlay is meant for training

of secretaries, unemployed rural youth as mechanics, kit allowance grant to the Agricultural Development Centres and other expenses incidental to the implementation of this scheme.

6. *Contingency Plan to Meet Natural Calamities*

(Outlay Rs. 36.48 lakhs)

The scheme envisages the maintenance of a buffer stock of paddy seeds for distribution as an immediate measure for re-sowing the areas where crop damages have occurred due to natural calamities. The outlay is for meeting the cost of seeds, storage and other incidental charges.

7. *Horticulture*(a) *Development of Banana, Pineapple and other Horticultural Crops*

(Outlay Rs. 21.19 lakhs)

The scheme envisages increasing the productivity of banana, pineapple and other fruit crops through popularisation of improved varieties and scientific cultivation by conducting demonstration in major production centres. Procurement and distribution of improved varieties of seed materials will also be undertaken. The outlay is for meeting the assistance to farmers.

(b) *Agri-Horticultural Societies*

(Outlay Rs. 1.85 lakhs)

Voluntary organisations like the Agri-Horticultural Societies play a significant role in encouraging the cultivation of fruit trees, vegetables and ornamental plants especially in urban areas. At present Agri-horti societies are functioning only in a few districts. The Plan scheme is to render assistance to the existing societies for enlarging their activities and services and also to establish new societies in districts where no agri-horti societies are functioning at present. The outlay is for this purpose.

(c) *Vegetable Production Programmes*

(Outlay Rs. 47 lakhs)

Vegetable production assumes importance not only from its nutritional point of view, but also from its potential for augmenting the income of small and marginal farmers and agricultural labourers. Bulk of the demand for vegetables in the urban areas is being met by imports from neighbouring States. It is therefore proposed to concentrate on efforts at maximising the production of vegetables in and around city corporations and municipal towns and intensifying the supply and services as well as extending incentive subsidies on inputs.

(d) *Development of Fruit Crops in Selected Areas*

(Outlay Rs. 33.50 lakhs)

The agro-climatic conditions of the State offer wide scope for raising a variety of fruit crops ranging from tropical to semi-temperate types. The scheme envisages concerted efforts at exploiting this potential



by organising the cultivation of fruit crops on an area-wide basis by giving suitable incentives and promoting processing and marketing facilities.

#### 8. Farm Information and Communication

Farm Information Service is an essential support for the successful implementation and realisation of the objectives of the development programmes in the farm sector. It is attended to by the State Farm Information Bureau (FIB). Apart from being an instrument for bridging the gap between the lab-to-land, it has a significant role in educating the people about the programmes and projects undertaken by the Government and other agencies for agricultural development in the State.

##### (a) Organisation of Farm News Service

(Outlay Rs. 20 lakhs)

The farm news programme of the AIR produced by the Farm Information Bureau is a powerful channel to reach vast numbers of the farming community. Considering the effectiveness of the programme this service has to be expanded and location specific materials have to be prepared for stations with independent programme of broadcast. The outlay is for meeting the expenditure on supporting facilities for this programme.

##### (b) Establishment of Rural Exhibition Units

(Outlay Rs. 12 lakhs)

Festivals and fairs in small towns and rural centres, lasting 3 to 4 days, offer scope for communicating new technology and developments to a large number of people through exhibitions. The outlay is for the continuance of the regional exhibition unit already established at Calicut and for starting a new one at Ernakulam.

##### (c) Production of Instructional Films

(Outlay Rs. 8 lakhs)

Film is the most effective visual medium for making a better impact even on illiterate farmers. However, films with themes relevant to Kerala context are very few. The outlay is for producing documentary films within the State.

##### (d) Construction of Photographic Studio and Block Making Unit

(Outlay Rs. 3 lakhs)

The publications undertaken by the FIB, to be more meaningful and effective, require photographic coverage of the developmental activities. A photographic studio and block making unit are essential infrastructure for this. The outlay is for meeting expenditure on staff, building, equipment etc.

##### (e) Supply of Instructional Slides and Visual Aids to T & V Units, IPD Units and ICD Projects

(Outlay Rs. 3 lakhs)

This scheme envisages distribution of slides and slide projectors to field level officers of the Department

of Agriculture, Animal Husbandry and Dairy Development as a support for extension activities. The outlay is for purchase of slide projectors and other slide production materials.

##### (f) Farm Book Corners in Rural Libraries

(Outlay Rs. 5 lakhs)

The scheme envisages supply of books on agriculture and related subjects at one-third subsidy to the existing libraries and provision of 8 mm. projectors, agricultural implements, etc. at two-thirds subsidy to those centres where agriculture seminars, poultry vaccination, veterinary gynaecological camp, mobile soil testing programmes, etc. are arranged. The outlay is for purchase of books, audio-visual aids etc.

##### (g) Organising Kisan Melas

(Outlay Rs. 3 lakhs)

The provision is for organising Kisan melas which combine exhibitions, subject matter seminars, supplies and services at district and State level.

##### (h) Farm News through Daily Newspapers

(Outlay Rs. 3 lakhs)

With the active participation of FIB several newspapers in the State have started special weekly farm feature columns. The scheme is to start a Cell in the FIB for processing the materials received from the various agencies for whom the FIB provides information and communication support and for projecting the same through farm feature service. The outlay is for meeting the expenditure on staff and materials.

##### (i) Farm Information Bureau

(Outlay Rs. 75 lakhs)

The outlay is for covering other activities of the FIB like publication of 'Kerala Karshakan', the fortnightly farm journal, production of technical bulletins and mass communication materials, wall newspapers, organisation of a central film library, participation of FIB in large scale exhibitions, deputation of officers, for job-oriented training, conduct of periodical workshops, strengthening of administration etc.

#### 9. Establishing Departmental Sale Depots in City Corporations and Municipal Areas

(Outlay Rs. 18.60 lakhs)

This scheme envisages the establishment of departmental sale depots in all the City Corporations and Municipal areas for the supply of seeds, seedlings and planting materials produced in departmental farms and fertilizers, plant protection chemicals and agricultural implements, etc. required by the people. Besides, these sale depots would serve as sale points for the agricultural products from the departmental farms. The outlay is for meeting expenses on staff, rent for depots and other incidentals.

10. *Adoption of Cropping Pattern in Areas Covered Under Soil Conservation*

(Outlay Rs. 25 lakhs)

The follow-up action now being taken for the proper utilisation of the areas covered under soil conservation programmes is quite inadequate. It is, therefore, proposed to introduce a new scheme for taking up follow-up activities in soil conserved areas for promoting the best suited cropping pattern by giving suitable incentives. The outlay is for subsidising the cost of inputs and giving incentives to farmers.

11. *Project for Comprehensive Development of Kuttanad*

(Outlay Rs. 400 lakhs)

The project for comprehensive development of Kuttanad formulated by the State Government envisages the overall economic development of the region through increased production and generation of employment opportunities, improvement of communication facilities, supply of protected drinking water, irrigation, flood control, housing for the landless labourers and kudikidappukar, eradication of salvinia and other water weeds and control of water pollution.

The project has many components falling in different sectors of which the Netherlands Government have indicated their interest in supporting the following items estimated to cost approximately Rs. 116.69 crores.

	Rs. crores
1. The Twin Kallar Multipurpose Scheme	50.00
2. Improvements to the leading channel to Thottappally spillway	10.15
3. Housing to landless labourers	25.00
4. Inland Water Transport	14.00
5. Improvements to Drainage, Dewatering units	15.07
6. Integrated Poultry, Piggery and Fishery	2.47
Total	116.69

Pending final negotiations with the Netherlands Government and finalisation of the pattern of financing, a provision of Rs. 400 lakhs is provided for this project under the agricultural sector. Besides, a provision of Rs. 300 lakhs has also been provided in the Plan under flood control for improvement to the leading channel to the Thottappally Spillway so that the total State sector outlay for this project in the Plan will be Rs. 700 lakhs.

12. *Crop Insurance* (Outlay Rs. 10 lakhs)

It is proposed to introduce crop insurance on a pilot basis in selected areas. The provision is meant for expenses on staff and the State share in the venture.

13. *Coconut Development Corporation*

(Outlay Rs. 148 lakhs)

In order to bring about stable conditions in the coconut market the Coconut Development Corporation

was set up in the State during the Fifth Plan Period. By entering into processing activity the Corporation aims at acquiring a commanding position in the market. State support by way of share capital participation to stabilise the activities of the Corporation is envisaged. The outlay is for the purpose.

14. *Kerala Land Development Corporation*

(Outlay Rs. 590 lakhs)

The Kerala Land Development Corporation was established to take up projects on land development by channelising institutional finance. The two major projects taken up by the Corporation are (1) the Kuttanad Development Project and (2) the Trichur Kole Land Development Project. The outlay is for giving share capital contribution by State Government.

15. *Special Agricultural Development Project*

(Outlay Rs. 926 lakhs)

The Kerala Agricultural Development Project, a World Bank assisted programme, for the development of tree crops is under implementation in the State from 1977-78. The total estimated cost of the project with a span of seven years is Rs. 63 crores of which the IDA credit is Rs. 27 crores. The major programmes of the project are:

- (i) Coconut rehabilitation in 30,000 hectares in Cannanore, Kozhikode, Malappuram and Trivandrum districts;
- (ii) Coconut new planting in 5,000 hectares in Cannanore and Malappuram districts;
- (iii) Pepper rehabilitation in 10,000 hectares in Cannanore, Kottayam and Idukki districts;
- (iv) Setting up a seed garden complex in about 500 hectares in Munderi near Nilambur in Malappuram district;
- (v) Rehabilitation of the State-owned cashew plantation of about 2300 hectares and new planting in 1470 hectares in Cannanore district;
- (vi) Establishment of 10 crumb rubber factories, each of 10 tonne/day capacity; and
- (vii) Strengthening of research by Central Plantation Crops Research Institute, Kasargode, (CPCRI) and Kerala Agricultural University (KAU) on tree crops and providing training and technical assistance facilities.

The programme for coconut rehabilitation, coconut new planting, pepper development and the seed garden complex are being implemented by the Special Agricultural Development Unit (SADU), a Department set up by the State Government specially for this purpose. The Cashew Development sub-project is implemented by the Plantation Corporation of Kerala Limited (PCK), the crumb rubber processing sub-project by the Kerala State Co-operative Rubber Marketing Federation and the Co-operative Rubber Marketing Societies and the Agricultural Research Sub-project by the Central Plantation Crops Research Institute and Kerala Agricultural University.

The State Government is to provide funds, facilities and services for implementation of programmes by SADU and for research programmes by KAU. The outlay is to meet these items of expenditure.

16. *Share Capital Contribution to Oil Palm India Ltd.*  
(Outlay Rs. 125 lakhs)

Oil Palm India Limited was registered on 21-11-1977 for taking over the oil palm plantations

cultivated and managed by the Plantation Corporation of Kerala Limited and to expand cultivation of this crop. The project envisages raising oil palm cultivation over an area of 2,000 hectares in Anchal in Quilon district. The outlay proposed is for share capital contribution by State Government during the Sixth Plan Period.

TABLE 3.1

*Agricultural Programmes—Scheme-wise Outlay*

(Rs. lakhs)

Sl.No.	Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>I. Direction and Administration</b>								
1	Reorganisation and Strengthening of Agriculture Administration and introduction of Training and visit system of Extension	8.45	125.00	14.00	1100.00	289.80	201.19	35.75
2	Strengthening of Supply Services and Development of the Department of Agriculture	..	..	..	250.00	..	..	..
Total: Direction and Administration		8.45	125.00	14.00	1350.00	289.80	201.19	35.75
<b>II. Multiplication and Distribution of Quality Seeds</b>								
1	Production and Distribution of Quality Seeds	0.12	0.70	0.70	22.00	..	3.62	..
2	Inspection, Certification and Establishment of a Seed Testing Laboratory	0.46	1.00	1.00	4.17	2.00	0.25	..
3	Development of Existing Seed Farms	17.00	10.20	10.20	65.00	10.00	10.85	3.61
4	Seed Multiplication in Kayal Lands (Government Farm, Chulatheruvu)	14.45	15.00	15.00	25.00	..	0.73	..
Total: Multiplication and Distribution of Seeds		32.03	26.90	26.90	116.17	12.00	15.45	3.61
<b>III. Agricultural Farms</b>								
	District Agricultural Farms	12.29	10.00	10.00	150.00	25.00	8.65	2.50
<b>IV. Manures and Fertilizers</b>								
1	Procurement and Distribution of Green Manure Seeds	1.73	3.00	2.00	12.50	..	2.17	..
2	Soil Testing Service	8.89	10.00	10.00	120.00	18.00	7.96	..
3	Supply of Soil Ameliorants at Subsidised Rate	7.93	10.00	10.00	45.00	..	7.23	..
4	Quality Control of Fertilizers and Pesticides	7.59	6.00	6.00	31.50	..	4.34	..
Total: Manure and Fertilizers		26.14	34.10*	28.00	209.00	18.00	21.70	..

\*1980-81 Outlay includes allocation for

- (1) Establishment of Mechanical Compost Plant (Rs. 5.00 lakhs) and  
(2) Organic Manure Demonstration (0.10 lakh)

Sub. National Systems Unit,  
National Institute of Educational  
Planning and Administration  
17-F, Sri Aurobindo Road, New Delhi-110014  
DCC, New Delhi  
Date.....

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>V. Plant Protection</b>								
*1	State Share for Control of Brown Hopper in Endemic Areas	3.76	5.00	5.00	25.00	..	5.25	..
2	Plant Protection Service	15.34	15.00	14.00	125.00	..	11.20	..
3	Weed Control	..	2.00	2.00	25.00	..	3.00	..
4	Agricultural Meteorological Service	0.94	0.50	0.50	5.60	..	0.50	..
5	Operational Research for Integrated Post Control	1.73	0.10	0.10	7.00	..	1.80	..
†6	Supply of Metallic Storage Bins to Registered Seed Growers at Subsidised Rate	..	..	..	6.50	..	0.50	..
†7	Contingency Plan of Tackle Sudden Pest Outbreak	..	..	..	10.00	..	..	..
‡8	Completed Schemes	6.27	..	..	..	..	..	..
<b>Total: Plant Protection</b>		<b>28.04</b>	<b>22.60</b>	<b>21.60</b>	<b>204.10</b>	<b>..</b>	<b>22.25</b>	<b>..</b>
<b>VI. Commercial Crops</b>								
1	Pulses							
(a)	Pulses Development Programme	5.10	5.00	5.00	50.00	..	6.90	..
* (b)	State share for the Intensive Pulses Development Programme	1.91	3.50	3.50	24.81	..	5.64	..
2	Tuber Crops							
(a)	Development of Tuber Crops	4.71	4.50	4.50	15.70	..	0.70	..
3	Sugarcane Development	0.99	1.50	0.69	67.00	..	6.76	..
4	Oil Seeds							
(a)	Groundnut Development Programme	3.89	10.00	5.00	60.00	..	6.76	..
(b)	Sesamum Development Programme	..	1.00	1.00	15.00	..	1.50	..
<b>Perennial Oil Seed Plants</b>								
(a)	<b>Coconut Development</b>							
* (i)	State Share for on-going Centrally Sponsored Schemes (T X D Seedlings Production, Rejuvenation of unhealthy coconut plantations, and Package Programme for Coconut)	48.83	28.50	22.25	156.07	..	32.25	..
¶ (ii)	Production and Distribution of Quality Coconut Seedlings	86.05	90.00	88.00	375.00	..	50.00	..
¶ (iii)	Spraying for Control of Coconut Leaf Diseases	2.97	17.50	33.75	675.00	..	125.00	..
¶ (iv)	Comprehensive Coconut Development	..	15.00	57.50	900.00	..	115.00	..
(b)	Development Programme for Oil Palm	1.78	1.00	1.00	9.64	..	0.70	..
5.	<b>Spices Development</b>							
(a)	Spices Nurseries	9.05	7.50	7.50	70.40	..	6.76	..
(b)	Pepper Development Programme	27.70	25.00	25.00	147.19	..	30.00	..
(c)	Development of Ginger, Turmeric and Garlic	..	0.50	0.50	15.70	..	0.70	..
‡ (d)	Completed Schemes	7.15	..	..	..	..	..	..
6.	<b>Cashew Development</b>							
* (a)	State Share for Cashew Cultivation in Private Sector	17.65	15.90	15.90	30.50	..	10.00	..
* (b)	State Share for Cashew Demonstration	2.08	1.50	0.75	20.22	..	3.00	..

\*Centrally Sponsored Schemes.

†New Schemes.

‡Schemes which are not pursued further.

¶These are schemes proposed to be additionally included under centrally Sponsored Schemes with 50% Central assistance. The provision includes 50%. State share for the remaining 4 years plus the actual expenditure for the 1st year of the plan period.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
* (c) State Share for Progeny Gardens for Cashew		2.39	0.75	0.37	6.95	..	1.50	..
(d) Adoption of Plant Protection Measures for Cashew		13.03	10.00	10.00	50.00	..	6.76	..
(e) Multi State Cashew Development Project		..	25.00	10.00	165.71	..	30.61	..
<b>7. Cocoa Development</b>								
(a) Cocoa Development		9.58	7.10	7.10	13.50	..	2.00	..
(b) Seed Garden for Cocoa		0.82	1.00	1.00	4.70	..	0.70	..
(c) Share Capital Contribution to Cocoa Processing Unit		..	10.00	10.00	100.00	..	..	..
<b>8. Tobacco Development</b>		1.93	1.00	1.00	4.78	..	0.80	..
<b>9. Tapioca Board</b>		..	..	..	0.01	..	..	..
<b>10. Cotton Development</b>		..	..	..	20.00	..	1.36	..
<b>Total: Commercial Crops</b>		<b>247.61</b>	<b>292.75†</b>	<b>316.31†</b>	<b>2997.88</b>	<b>..</b>	<b>445.40</b>	<b>..</b>
<b>(vii) Extension and Farmers' Training</b>								
1. Farmers' Training Centres		8.67	7.00	7.00	42.78	..	3.61	..
2. Training Programme for Agricultural Demonstrators and Junior Agricultural Officers		1.46	2.50	2.50	2.51	..	0.36	..
3. Training to Departmental Officers		0.93	1.00	1.00	4.89	..	0.72	..
4. Special Training Leading to Post Graduate Diploma		..	0.50	0.50	2.16	..	0.36	..
‡ 5. Completed Schemes		7.13	8.50	8.50	6.61	..	..	..
<b>Total: Extension and Farmers' Training</b>		<b>18.19</b>	<b>19.50</b>	<b>19.50</b>	<b>58.95</b>	<b>..</b>	<b>5.05</b>	<b>..</b>
<b>(viii) Agricultural Engineering</b>								
1. Expansion of Agricultural Engineering Service		1.51	5.00	5.00	55.00	25.00	7.20	..
2. Agro-Industries Corporation—Share Capital Contribution		10.00	10.00	9.25	45.00	45.00	7.25	7.25
<b>Total: Agricultural Engineering</b>		<b>11.51</b>	<b>15.00</b>	<b>13.25</b>	<b>100.00</b>	<b>70.00</b>	<b>14.45</b>	<b>7.25</b>
<b>(ix) Agricultural Education and Research—Kerala Agricultural University</b>								
1. Development Grant					1150.00	290.00	155.00	65.00
2. State Share for ICAR Co-ordinated Projects		80.00	110.00	110.00	60.00	10.00	10.00	10.00
3. Acquisition of Land					90.00	90.00	15.00	15.00
<b>Total: Agricultural Education and Research</b>		<b>80.00</b>	<b>110.00</b>	<b>110.00</b>	<b>1300.00</b>	<b>390.00</b>	<b>180.00</b>	<b>90.00</b>
<b>(x) Storage and Warehousing</b>		10.00	12.00	12.00	70.00	70.00	15.00	15.00
<b>(xi) Agricultural Marketing</b>								
1. Establishment of Regulated Markets		..	2.00	2.50	67.00	..	2.50	..
2. Establishment of Grading Laboratories in Seven Districts		1.49	2.00	2.00	16.45	..	2.89	..
3. Grading at Producers' Level		..	0.50	0.50	1.60	..	0.10	..
4. Market Extension		..	0.10	0.10	6.05	..	1.55	..
5. Reorganisation of Marketing Wing		1.24	4.00	4.00	24.20	..	4.51	..
‡ 6. Processing and Marketing Service for Agricultural Produce		..	1.40	1.40	..	..	..	..
7. Market Investigation and Survey		..	..	..	6.70	..	0.70	..
8. Training of Marketing Personnel		..	..	..	3.00	..	0.75	..
<b>Total: Agricultural Marketing</b>		<b>2.73</b>	<b>10.00</b>	<b>10.50</b>	<b>125.00</b>	<b>..</b>	<b>13.00</b>	<b>..</b>

\* Centrally sponsored schemes

† The Outlay includes an amount of Rs. 10 lakhs provided, and anticipated expenditure of Rs. 5 lakhs during 1980-81 for the scheme Coconut Research Grant to K.A.U.

‡ Schemes which are not pursued further.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(19)
<i>(xii) Others:</i>								
1.	Changing Cropping Pattern	6.37	5.00	5.00	38.81	..	3.60	..
2.	Project for Soil and Water-Management	4.05	3.00	3.00	7.00	..	3.35	..
3.	Agricultural Development Programme for Scheduled Castes/Scheduled Tribes	..	50.00	16.00	738.20	..	72.40	..
4.	Agricultural Development Programme for Weaker Sections	..	10.00	4.50	184.27	..	14.50	..
5.	Agricultural Development Centres	..	2.00	2.00	25.00	..	10.85	..
6.	Contingency Plan to meet Natural-Calamities	..	2.00	2.00	36.48	..	3.60	..
	‡ Completed Schemes	79.12	45.48	111.61	..	..	..	..
7.	<i>Horticulture:</i>							
(a)	Development of Banana, Pineapple and other Horticultural Crops	3.87	3.00	3.01	21.19	..	1.40	..
(b)	Agri-Horti Societies	0.05	0.50	0.50	1.85	..	0.35	..
(c)	Vegetable Production Programme	..	10.00	5.00	47.00	..	7.60	..
(d)	Development of Fruit Crops in Selected Areas	..	..	..	33.50	..	3.50	..
	‡(e) Completed Schemes	3.34	5.00	5.00	..	..	..	..
	Total: Horticulture	7.26	18.50	13.51	103.54	..	12.85	..
8.	<i>Farm Information and Communication</i>							
(a)	Organisation of Farm News Service	5.00	4.00	4.00	20.00	..	7.00	..
(b)	Establishment of Rural Exhibition Units	3.68	3.00	3.00	12.00	..	1.45	..
(c)	Production of Instructional Film	0.67	1.00	1.00	8.00	..	0.70	..
(d)	Construction of Photographic Studio and Block Making Unit	..	2.00	2.00	3.00	3.00	0.70	0.70
(e)	Supply of Instructional Slides and Visual Aids to T & V units, IPD units and ICD Projects	0.09	0.50	0.50	3.00	..	0.35	..
(f)	Farm Book Corners in Rural Libraries	..	0.50	0.50	5.00	..	0.35	..
(g)	Organising Kisan Melas	..	0.50	0.50	3.00	..	0.35	..
(h)	Farm News Service through Daily Newspapers	0.07	0.50	0.50	3.00	..	0.35	..
(i)	Farm Information Bureau	4.58	4.50	4.50	75.00	..	3.25	..
	‡(j) Completed Schemes	0.02	..	..	..	..	..	..
	Total: Farm Information and Communication	14.11	16.50	16.50	132.00	3.00	14.50	0.70
9.	Establishing Departmental Sale Depots in City Corporations and Municipal Areas	..	..	..	18.60	..	3.60	..
10.	Adoption of Cropping Pattern in Areas covered under Soil Conservation	..	..	..	25.00	..	1.45	..
11.	Project for Comprehensive Development of Kuttanad	..	..	..	400.00	300.00	..	..
12.	Crop Insurance	..	..	5.00	10.00	..	2.15	..
13.	Coconut Development Corporation—Share Capital Contribution	50.02	25.00	25.00	148.00	148.00	34.05	34.05
14.	Kerala Land Development Corporation Share Capital Contribution	49.10	128.00	120.00	590.00	590.00	72.40	72.40
15.	Special Agricultural Development—Projects	86.47	143.67	98.51	926.00	92.00	175.61	30.00
16.	Oil Palm India Limited—Share Capital Contribution	..	15.00	15.00	125.00	125.00	10.85	10.85
..	Total: Others	296.50	464.15	437.63	3607.90	1258.00	435.76	148.00
	GRAND TOTAL—Agriculture	773.49	1142.00	1019.69	10189.00	2132.80	1377.90	302.11

† Schemes which are not pursued further.

## Land Reforms

A brief description of the major schemes under Land Reforms is given below:—

### 1. Implementation of Land Reforms Act.

(Outlay Rs. 55 lakhs)

The outlay is to meet the expenditure on staff appointed for the implementation of the various provisions of the Kerala Land Reforms Act.

### 2. Land Board and Land Tribunals under the KLR Act—Updating of Revenue Records

(Outlay Rs. 30 lakhs)

The amount provided is for meeting the administrative expenses of a portion of the staff of Land Board and Land Tribunals and staff attached to the Taluk Land Boards.

### 3. Payment of Compensation for the Lands in Excess of Ceilings under the KLR Act, 1963

(Outlay Rs. 25 lakhs)

The provision under this scheme is for payment of interest on the total amount of compensation to landlords and intermediaries whose rights have been vested in Government under section 72 of the KLR Act, 1963.

### 4. Payment from the Agriculturists' Rehabilitation Fund

(Outlay Rs. 100 lakhs)

The Government will give loans and grants to the persons affected adversely by the KLR Act for organising small scale or cottage industries. Provision is also made for payment of solatium to small holders under section 109 A of the KLR Act under the scheme.

### 5. Contribution by Government to Kudikidappukars' Benefit Fund

(Outlay Rs. 550 lakhs)

The outlay envisaged under this scheme is for meeting the expenditure on (i) payment of acquisition

charges payable by Government under sub-section 3 of Section 72 of the KLR Act, (ii) payment of the purchase price payable by the Kudikidappukar as provided by sub section 8 of section 80 A. and (iii) payment of grant for housing scheme for kudikidappukar, which is proposed to be extended to Trivandrum, Kottayam, Ernakulam and Trichur districts. A part of the outlay is set apart for the benefit of the Scheduled Castes and Scheduled Tribes.

### 6. Payment of Compensation for Vesting of Interests of Landlords in Tenants, under the KLR Act, 1963

(Outlay Rs. 500 lakhs)

The amount provided under this scheme is for payment of compensation to landlords and intermediaries whose rights have been vested in Government under section 72 of the KLR Act, 1963.

### 7. Assistance to Assignees of Surplus Land

(Outlay Rs. 50 lakhs)

The outlay envisaged is for paying the matching share with central assistance in implementing the scheme for financial assistance to assignees of surplus land for undertaking development activities on the lands. The outlay for this scheme comprises a share for Scheduled Caste and Scheduled Tribe beneficiaries.

### 8. Resurvey of State and Preparation of Records of Rights

(Outlay Rs. 1760 lakhs)

Since the new land owners, who obtained land consequent on the implementation of land reforms have no documentary evidence of their possession, the preparation of Records of Rights is of great importance. This is essential to establish their legal ownership on the land and for drawing credit from institutional agencies for developing the land transferred to them. The provision is for meeting the expenditure on staff appointed and for other expenses in the implementation of Resurvey and Preparation of Records of Rights.

TABLE 3.2

### Land Reforms—Scheme-wise Outlay and Expenditure

(Rs. in lakhs)

Sl. No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Implementation of Land Reforms Act	12.88	13.00	13.00	55.00	..	13.00	..
2.	Land Board and Land Tribunals under the KLR Act—Updating of Revenue Records	81.87	96.00	8.00	30.00	..	8.00	..
3.	Payment of Compensation for the Lands in Excess of Ceilings under the KLR Act, 1963.	4.21	6.00	6.00	25.00	..	5.00	..
4.	Payment from the Agriculturists' Rehabilitation Fund	4.54	5.00	10.00	100.00	..	15.00	..
5.	(a) Contribution by the Government to the Kudikidappukars' Benefit Fund	57.92	50.00	50.00	500.00	..	60.00	..
	(b) Special Component Plan for SCs. & STs.	..	..	..	50.00	..	10.00	..
6.	Payment of Compensation for Vesting of Interests of Land lords under the KLR Act, 1963	167.83	127.00	127.00	500.00	..	130.00	..
7.	(a) Assistance to Assignees of Surplus Land—State's Share	3.45	1.75	4.50	40.00	..	8.00	..
	(b) Special Component Plan for SCs. & STs.	..	1.25	1.00	10.00	..	2.00	..
8.	Re-survey of State and Preparation of Records of Rights	284.50	300.00	300.00	1760.00	..	349.00	..
Total—Land Reforms		617.20	600.00	519.50	3070.00	..	600.00	..

## Minor Irrigation

In the development of irrigation facilities in the State, the role of minor irrigation schemes is quite significant because they are quick yielding, less capital intensive and have high employment potential for unskilled and semi-skilled labour. The undulating topography in Kerala breaks the continuity of arable lands, and the small and medium sizes of holdings demand minor irrigation facilities. The estimated potential for Minor irrigation in the State is 10 lakh hectares (net) or 11 lakh hectares (gross). Till March 1980, an investment of Rs. 39 crores has been made to bring nearly 1.2 lakh hectares (net) or 1.42 lakh hectares (gross) under minor irrigation.

During the Sixth Plan period it is proposed to invest Rs. 40 crores under various schemes to develop a minor irrigation facility of over 45,200 hectares (net) or 54,500 hectares (gross) additionally under surface irrigation. The surveys and investigations of the Ground Water Department also open up the possibilities of raising irrigation facilities over 1.27 lakh hectares (gross). It is also proposed to commercialise irrigation facilities for cash crops by attracting investments from financial agencies. The major schemes under minor irrigation are detailed below.

### 1. Investigation and Development of Ground Water

(Outlay Rs. 500 lakhs)

The on-going schemes of ground water survey and development, optimum utilisation of ground water for cash crops, water balance studies in river basins, drought prone area development, Onattukara development, coastal monitoring, geophysical exploration, establishment of central workshop and photogeological unit, etc. are fully provided for. It is also proposed to start schemes on ground water management in the two hill zones of Kerala, ground water consultancy and extension service, prevention of water logging in Kole lands of Trichur district, inducing recharge in the areas of Marayur in Idukki district and conduct studies on infiltration, ground water pollution, etc.

### 2. Lift Irrigation Schemes

(Outlay Rs. 860 lakhs)

Many schemes on Minor irrigation are lift irrigation schemes which are economically viable. During

the plan period it is proposed to irrigate 14,000 hectares (gross) through lift irrigation and adequate outlay has been provided for this item.

### 3. Minor Irrigation (Class I)

(Outlay Rs. 750 lakhs)

The Plan outlay is mainly to complete the on-going schemes and create an additional irrigation potential of 12,000 hectares (gross).

### 4. Minor Irrigation (Class II)

(Outlay Rs. 535 lakhs)

It is proposed to complete the on-going Minor Irrigation Class II works taken up by P. W. D., and also to give additional emphasis for M. I. Class II works with people's participation. These schemes would add 6,200 hectares (net and gross) to the irrigated area.

### 5. Intensive Paddy Development (Yelah Development)

(Outlay Rs. 500 lakhs)

The outlay is to provide irrigation facilities to 5800 hectares of land under intensive paddy development to stabilise paddy crop and increase productivity.

### 6. Repairs to Damages caused to M. I. Structures

(Outlay Rs. 250 lakhs)

Since a large number of Minor Irrigation schemes require repairs to fully utilise their irrigation potential it is proposed to rectify the damages and restore 14,600 hectares of land to irrigation facilities.

### 7. Minor Irrigation—Special Component Plan

(Outlay Rs. 300 lakhs)

It is intended to provide irrigation facilities to areas predominantly inhabited by Scheduled Castes and Tribes, under the Plan. This programme includes lift irrigation, M. I. Class I and M. I. Class II works. It is proposed to develop irrigation facilities in about 2000 hectares through this investment.

TABLE 3.3

### Minor Irrigation—Scheme-wise Outlay

(Rs. in lakhs)

Sl.No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(i)	Investigation and Development of Ground Water Resources	30.97	50.00 *9.50	47.10 *9.50	500.00	210.00	70.00	39.00
(ii)	Construction and Deepening of Wells and Tanks	0.271	1.00	1.00	5.00	5.00	1.00	1.00

\* Central share of Centrally sponsored Scheme.



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(iii)	Lift Irrigation Schemes	112.82	135.00	125.00	850.00	860.00	150.00	150.00
(iv)	<i>Other M.I. Works</i>							
(a)	M.I. Class I	127.12	135.00	120.00	750.00	750.00	150.00	150.00
(b)	M.I. Class II (P.W.D.)	7.86	25.00	16.50	100.00	100.00	25.00	25.00
(c)	M.I. Class II (People's Participation)	69.86	75.00	75.00	435.00	435.00	75.00	75.00
(d)	I.P.D. (Yelah Development)	82.55	85.00	91.00	500.00	500.00	100.00	100.00
(e)	M.I. (Special Component Plan)	..	30.00	20.00	300.00	300.00	30.00	30.00
(f)	Irrigation Facilities to Drought Prone Areas	1.47	..	..	..	..	..	..
(g)	Repairs to Damages caused to M.I. Structures	14.19	23.50	23.50	250.00	250.00	24.00	24.00
(h)	Special Repairs to Rectify Flood/Cyclone Damages	33.40	..	..	..	..	..	..
(v)	<i>Others:</i>							
(a)	Investigation (M.I. Scheme)	0.749	10.00	2.00	100.00	..	10.00	..
(b)	Subsidy to Small and Marginal Farmers for Purchase of Pumpsets in Non-S.F.D.A. and I.R.D.P. Areas	..	10.00	60.00	200.00	..	25.00	..
(c)	Free Supply of Pumpsets to Panchayats	2.17	10.00	10.00				
(d)	Punja De-watering	..	..	15.00				
(e)	M.I./Tube Well Corporation	..	1.00	1.00				
(f)	Others	84.70	9.50	6.37	..	..	5.00	..
Total - Minor Irrigation		568.13	600.00	613.47	4000.00	3410.00	665.00	594.00

## Soil and Water Conservation

Out of the total geographical area of 38.86 lakh hectares in the State, nearly 15 lakh hectares are estimated to be highly vulnerable to soil erosion hazards. The high rainfall together with the undulating topography in the State also aggravate this problem. However with the efforts so far made only about 70,000 hectares have been brought under soil conservation measures. Further the concept of soil and water conservation has to become more broad-based to meet the requirements of efficient and productive use of land. The emphasis is towards an integrated soil and water conservation and crop management planning on watershed basis. A short description of the schemes under soil and water conservation in the Sixth Plan is given below:

### I. Direction and Administration

(Outlay Rs. 25 lakhs)

The Soil Conservation Department consists of two separate branches viz., Soil Conservation and Soil Survey. These two branches require strengthening in areas of direction, planning and monitoring. It is proposed to create a Planning and Monitoring Cell at the headquarters. The outlay is to meet expenditure towards this.

### II. Soil Survey and Testing

#### A. Ongoing Schemes

##### (i) Soil Survey in Command Areas and Problem Areas

(Outlay Rs. 17 lakhs)

Detailed soil survey of command areas of irrigation projects on a priority basis is a pre-requisite for formulating suitable cropping pattern and evolving differential management practices for the altered moisture regime so that maximum benefit is derived from the irrigation potential created. Command areas of a number of projects still remain to be covered under detailed soil surveys. Considerable stretches of lands affected by ingress of salt water and water logging also require detailed survey to ascertain the nature and magnitude of the problems and to suggest remedial measures. The outlay is for this purpose.

##### (ii) Soil Survey in Government Lands and Forest Lands

(Outlay Rs. 13 lakhs)

As part of land reform measures, Government lands and vested forest lands are being distributed to the landless agricultural labourers. Suitability of these lands for agricultural purposes has to be appraised and cropping patterns and management practices have to be suggested. The outlay is for meeting the expenditure on staff for this scheme.

(iii) *Strengthening of Soil Survey Organisation*  
(Outlay Rs. 25 lakhs)

The urgency of basic soil and land resources data for multi-disciplinary purposes entail expanded activities in field soil survey, soil correlation and interpretation. The outlay is for strengthening the existing organisation and for starting a cartographic laboratory at headquarters.

(iv) *Reconnaissance Soil Survey*  
(Outlay Rs. 15 lakhs)

Rational application of soil and land resources data is essential for planning and implementing any programme of area development. The scheme envisages a reconnaissance soil survey of all the Districts in the State to prepare district and taluk soil survey reports and maps during the Plan period itself. The outlay is for meeting expenditure on the surveys.

(v) *Soil Survey of Soil Conservation Areas*  
(Outlay Rs. 6 lakhs)

The scheme envisages intensive soil survey of all the soil conservation scheme areas in the State in order to ascertain the type of soil conservation measures required in each land and to suggest suitable cropping pattern and management practices based on capability of the land. The provision is for undertaking this survey.

(vi) *Soil Survey—Follow-up Activities*  
(Outlay Rs. 5 lakhs)

The information generated through scientific soil survey has not been adequately made use of in the State. A series of follow-up activities are therefore proposed to remedy the situation. The follow-up activities proposed include rendering advice to farmers on better land use and cropping pattern, conducting seminars and workshops to keep the extension workers well informed of the useful data accrued through soil surveys for the effective implementation of the agricultural development programmes. The outlay is for this purpose.

(vii) *Identification and Bench Mark Study of Soils*  
(Outlay Rs. 3 lakhs)

The soils in the State show considerable variability. For the assessment of production potential it is necessary to develop sufficient data on the current levels of fertility and other aspects of soils. For this it is essential to identify the bench mark soils in the State and study them in detail so that the result of research on fertilizer requirements, crop suitabilities etc., obtained can be applied to areas in the State having identical soil characteristics. The outlay is for conducting such studies.

(viii) *Land Use Demonstration*  
(Outlay Rs. 8 lakhs)

The effect of optimum land use based on the recommendations emerging from soil survey need to be demonstrated to convince the farmers the method of

maximising returns from their lands. It is proposed to lay out land use demonstrations covering an area of 1100 hectares during the plan period. The outlay is for meeting the subsidy at the rate of Rs. 1000 per hectare as incentive to the participating farmers.

B. *New Schemes*

(i) *Establishment of Regional Soil Analytical Laboratory and Strengthening of Existing Laboratory*  
(Outlay Rs. 5 lakhs)

Detailed laboratory studies of representative soils are essential for characterising soils with respect to morphology, genesis, classification and behaviours. The existing laboratory at Konni is inadequate to cope with the requirements of the eleven soil survey units working in the State. Delay in getting the laboratory data on soils collected by these eleven soil survey units is a bottleneck to speedier finalisation of soil survey reports. It is therefore proposed to establish two regional soil analytical laboratories, one at Trivandrum and another at Trichur and also to strengthen the existing laboratory at Konni and make it the central laboratory to undertake more sophisticated work connected with soil correlation studies. The outlay is for meeting the expenditure on additional staff, cost of equipments and chemicals etc.

III. *Research, Education and Training in Soil Conservation*  
(Outlay Rs. 25 lakhs)

The present research efforts in Soil Conservation through the existing research unit in the Department are inadequate. The scheme is for improving facilities for expansion of the adaptive research in the research unit of the Department so as to generate sufficient data to tackle the soil erosion problems. Further the personnel in the Department, especially at sub-assistant level, are seldom exposed to the techniques and methods of soil conservation which is essentially an integrated discipline of engineering, forestry and agriculture. Hence it is proposed to impart training to personnel at sub-assistant's level and also to selected farmers. The outlay is for meeting the training expenses as well as for strengthening adaptive research.

IV. *Soil Conservation Scheme*

A. *Ongoing Schemes*

(i) *Soil and Water Conservation in Arable Land*  
(Outlay Rs. 240 lakhs)

Investigation, preparation and execution of soil conservation measures on water shed basis in priority areas spread over all the districts in the State are undertaken as per provisions of Kerala Land Development Act 17 of 1964. The scheme is for protecting the cultivated lands from the hazards of soil erosion and to help increase crop production on a sustained basis. The scheme provides 25 per cent subsidy and 75 per cent loan recoverable in 20 half yearly instalments with interest. It is proposed to extend this programme to cover additionally 4675 hectares during the plan period. The outlay is for this purpose.

(ii) *Reclamation of Water-logged Areas*

(Outlay Rs. 10 lakhs)

Several areas subjected to water-logging could be reclaimed and made productive by providing simple structures like bunds, sluices etc. The plan allocation is for executing programmes of this kind under the provisions of the Kerala Land Development Act, 17 of 1964. The target is to cover an area of 500 ha. during the Sixth Plan period.

(iii) *Soil Conservation and Integrated Development of Land on Water Shed Basis Availing Institutional Finance]*

(Outlay Rs. 25 lakhs)

The scheme aims at taking up soil conservation measures in 1313 hectares during the plan period, availing institutional credit. The direct charges on budget would be limited to making available the technical know-how, supervision and 25 per cent of the cost on works as subsidy which would be adjusted towards the credit advanced by the financial institution.

(iv) *Pilot Scheme for River Training and Control of Stream Bank Erosion*

(Outlay Rs. 10 lakhs)

River bank erosion in the river basins like Bharathapuzha has assumed threatening proportions. The Plan scheme envisages investigation of the magnitude of the problem and adoption of appropriate measures like construction of groyves, marginal embankments river bank rivetment and the adoption of techniques under agronomy, agrostology and forestry. The Plan outlay is for meeting the expenditure on construction and staff for implementing the pilot scheme.

(v) *Soil and Water Conservation in the Catchments of River Valley Projects*

(Outlay Rs. 10 lakhs)

Most of the reservoirs in the State are in danger of being silted up due to erosion resulting from unscientific and unregulated management of land. It is proposed to protect the catchment of major river valley projects in the State by adopting suitable integrated soil conservation measures. The scheme will be implemented under the KLD Act 17 of 1964. The outlay is for meeting the expenditure on staff for investigation, preparation of work plans and for execution of the work.

(vi) *Soil Conservation in Lands Belonging to Harijans and Girijans*

(Outlay Rs. 150 lakhs)

The poor economic base of the Harijans and Girijans do not permit them to make substantial investment on soil conservation measures in lands under their possession, which are generally highly vulnerable to soil erosion. The scheme is for undertaking soil conservation works in the lands belonging to Harijans and Girijans on 100 per cent subsidy basis over an area of 2788 hectare during the plan period. The outlay is for meeting the expenditure on subsidy and staff.

(vii) *Soil Conservation in Irrigated Lands*

(Outlay Rs. 15 lakhs)

Conservation of soil and moisture is a necessary measure for the full utilisation of irrigation potential. The scheme envisages investigation, preparation, of suitable work plan and execution of required soil conservation and water management scheme in the command areas of irrigation projects. The scheme would cover an area of 500 ha. during the plan period.

(viii) *Soil Conservation Survey*

(Outlay Rs. 10 lakhs)

The problem of soil erosion especially in the downhill of High Ranges and in the upper slopes of the midlands has assumed serious proportions. The plan outlay is for meeting the expenditure on a survey on the problems of soil erosion and soil conservation in the State, covering an area of 8000 ha.

(ix) *State Share for Soil Conservation in the Catchment of River Valley Project, Kundah*

(Outlay Rs. 125 lakhs)

This scheme is for the continuance of investigation, preparation and execution of soil conservation works in the Kerala portion of the Kundah catchment with the objective of preventing soil erosion in the catchment, reducing the silt load to the reservoir and enabling increased production. The outlay earmarked is for meeting 50 per cent share of the State Government since it is a centrally sponsored scheme.

*B. New Schemes*(i) *Soil Conservation in Government Lands and Forest Lands to be assigned to SC/ST Evictees, Repatriates etc.*

(Outlay Rs. 9 lakhs)

The on-going scheme for soil survey in Government lands and forest lands to be assigned to landless agricultural labourers needs to be followed up with soil conservation measures so that these lands can be put to immediate agricultural operations. The outlay allocated is for meeting the expenditure on soil conservation works in 129 hectares during the plan period. The entire amount is being treated as subsidy.

(ii) *Strengthening and Re-organisation of Soil Conservation Organisation*

(Outlay Rs. 10 lakhs)

With implementation of the District Administration Bill most of the development programmes will have to be finalised at the district level itself. This will necessitate re-organisation of the Departmental set up at District and Taluk level so that the increased responsibility of planning and execution of soil conservation work and the recovery of part cost (loan portion) of the investment on soil conservation schemes can be effectively taken up at district level. The outlay provided is for meeting the expenditure on additional staff required.

(iii) *Maintenance and Follow-up Activities for Completed Soil Conservation Schemes.*

(Outlay Rs. 5 lakhs)

The soil conservation work in an area is attended to at present by a field unit temporarily stationed in that area, which on completion of the work shifts to new areas. This has resulted in an area treated earlier reverting to their original condition within a few years for want of follow-up action. The present scheme is for establishing one field unit in each district to take care of the maintenance and follow-up activities on the soil conserved areas so that sustained agricultural production from such areas is ensured. The outlay set apart is for establishing field units for this purpose in all the districts in the State.

(iv) *Soil Conservation in the Lands of SC/ST included in the Scheme Processed as per KLD Act.*

(Outlay Rs. 10 lakhs)

Soil conservation schemes on watershed basis undertaken as per the KLD Act 17 of 1964 on arable lands cover lands belonging to SC/ST farmers also. As the repaying capacity of such SC/ST farmers, towards the loan portion involved in the scheme is meagre, the response from this sector of farmers is found to be very poor. As the work is done on a water-shed basis, it is not possible to bypass such patches of areas on the ground that their repaying capacity is poor. It is therefore proposed to get the soil conservation work in the lands belonging to SC/ST included in the schemes processed as per Kerala Land Development Act, by giving 100 per cent subsidy. The outlay is for meeting the grant portion towards the works over an area of 180 hectares during the Sixth Plan period.

(v) *Scheme for providing subsidy and Establishment Charges of Integrated Project for Soil Conservation and Optimum Land Use in Kottarakkara and Kunnathur Taluks.*

(Outlay Rs. 5 lakhs)

Kerala State Land Use Board has prepared a detailed scheme for soil conservation in Kottarakkara and Kunnathur Taluks of Quilon districts at an estimated cost of Rs. 825 lakhs for an area of 16,500 hectares. The scheme is to give incentives and interest subsidy towards this programme. The scheme will be implemented by utilising institutional finance. The outlay is for meeting the subsidy portion involved in the scheme.

(v) *Others*(i) *Thanneermukkom Project*

(Outlay Rs. 200 lakhs)

Construction of a salt water barrier at Thanneermukkom across a narrow gap in Vembanad Lake was taken up to prevent salt water intrusion into Kuttanad area. The first and second stages of the work have been completed covering a third each of the length of the barrier on either side. For the middle one-third portion construction of a bridge-cum-regulator is in

progress. The benefit from the project is being derived since the temporary closing of the middle portion by earthen bund. The outlay earmarked in the Plan is for completion of the third stage of work on the Project.

(ii) *Kattampally Project*

(Outlay Rs. 10 lakhs)

As part of the second stage of a multi-purpose scheme for irrigation, prevention of salt water intrusion flood control, navigation and communication, a pilot project which envisages reclamation of about 410 hectares of marshy area has been taken up under this scheme. The Sixth Plan outlay is for completion of this project.

(iii) *Land Use Board*

(Outlay Rs. 38 lakhs)

The State Land Use Board is engaged in identifying the problems relating to land use and assessing the potential of land resources in the State using modern techniques of survey, including remote sensing. Information developed by the Board is being used by different departments and agencies engaged in land resources development. The Board is also to function as a repository of information on land and related resources.

(a) *Scheme for Land Use Survey Using Remote Sensing Techniques and Preparation of optimum Land Use Plan for the State.*

It is proposed to undertake a land use survey with the following objectives: (1) to prepare the present land use maps of the State at five minutes interval in the scale 1:15000 showing the area under forest, major crops, fallow lands, water logged areas, townships etc; (2) to prepare geomorphological maps showing the area affected by and susceptible to erosion; (3) to identify priority areas requiring urgent soil and moisture conservation measures; (4) to prepare optimum land use plan for all districts taking into consideration all aspects of land use planning; and (5) to develop expertise in interpretation of aerial photos and satellite imageries so that advancement in remote sensing techniques can be advantageously made use of for the development of agriculture and better utilisation of the available land resources in the State.

(b) *Scheme for Setting Up a Data Bank in the Land Use Board.*

One of the important activities of the State Land Use Board is to collect and collate statistics relating to land resources and land use in the State. At present several agencies are engaged in the collection of data on land resource for different purposes independently, resulting in avoidable duplication of work. It is therefore necessary that there be a central agency in the State which can collect and store all such information and make it available to the agencies which require such data. With this objective in view it is proposed to set up a Data Bank in the State Land Use Board.

TABLE 3.1

## Soil and Water Conservation—Scheme-wise outlay

(Rs. in lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I.	Direction and Administration	0.89	5.50	4.00	25.00	..	5.50	..
II.	Soil Survey and Testing							
	A. On-going Schemes—							
	(i) Soil Survey in Command Areas and Problem Areas	3.02	3.20	3.20	17.00	..	3.20	..
	(ii) Soil Survey in Government Lands and Forest Lands	2.17	2.30	2.30	13.00	..	2.30	..
	(iii) Strengthening of Soil Survey Organisation	3.65	4.60	4.60	25.00	..	4.60	..
	(iv) Reconnaissance Soil Survey	0.31	2.75	2.75	15.00	..	2.75	..
	(v) Soil Survey of Soil Conservation Areas	0.19	1.10	1.10	6.00	..	1.10	..
	(vi) Soil Survey Follow-up Activities	0.07	1.00	1.00	5.00	..	1.00	..
	(vii) Identification and Benchmark Study of Soils	0.10	0.55	0.55	3.00	..	0.55	..
	(viii) Land Use Demonstration	0.36	1.00	1.00	8.00	..	1.00	..
	B. New Schemes—							
	(i) Establishment of Regional Soil Analytical Laboratory and Strengthening of Existing Laboratory	..	..	..	5.00	..	..	..
III.	Research, Education and Training in Soil Conservation	5.36	5.50	5.50	25.00	..	5.50	..
IV.	Soil Conservation Schemes:							
	A. On-going Schemes:							
	(i) Soil and Water Conservation in Arable Lands	50.40	63.50	63.50	240.00	..	63.50	..
	(ii) Reclamation of Water Logged Areas	1.37	2.20	2.20	10.00	..	2.20	..
	(iii) Soil Conservation and Integrated Development of Land on Water-shed Basis Availing Institutional Finance	0.18	5.50	5.50	25.00	..	5.50	..
	(iv) Pilot Scheme for River Training and Control of Stream Bank Erosion	..	2.20	2.20	10.00	..	2.20	..
	(v) Soil and Water Conservation in the Catchment of River Valley Projects	2.38	2.20	2.20	10.00	..	2.20	..
	(vi) Soil Conservation in the Lands Belonging to Harijans and Girijans	47.09	33.00	33.00	150.00	..	33.00	..
	(vii) Soil Conservation in Irrigated Lands	1.12	4.40	4.40	15.00	..	4.40	..
	(viii) Soil Conservation Survey	..	2.50	2.50	10.00	..	2.50	..
	(ix) State Share for Soil Conservation in the Catchment of River Valley Project, Kundah	6.27	15.00	15.00	125.00	..	15.00	..
	B. New Schemes—							
	(i) Soil Conservation in Government Lands and Forest Lands to be Assigned to SC/ST Evictees, repatriates etc.	..	..	..	9.00	..	..	..
	(ii) Strengthening and Reorganisation of Soil Conservation Organisation	..	..	..	10.00	..	..	..
	(iii) Maintenance and Follow-up Activities for Completed Soil Conservation Schemes	..	..	..	5.00	..	..	..
	(iv) Soil Conservation in the Lands of SC/ST Included in the Schemes Processed as per KLD Act.	..	..	..	10.00	..	..	..
	(v) Scheme for Providing Subsidy and Establishment Charges of Integrated Project for Soil Conservation and Optimum Land Use in Kottarakkara and Kunnathur Taluks	..	..	..	5.00	..	..	..
	(v) Other Schemes:							
	(i) Thanneermukkom Project	41.85	7.00	8.00	200.00	200.00	7.00	7.00
	(ii) Kattampally Project	..	5.00	2.19	10.00	10.00	5.00	5.00
	(iii) Land Use Board	6.21	10.00	10.00	38.00	..	10.00	..
	Total—Soil and Water Conservation	172.99	180.00	176.69	1029.00	210.00	180.00	12.00

## Special Area Programmes for Rural Development

### 1. *Command Area Development*

(Outlay Rs. 725 lakhs)

The programmes under Command Area Development envisage modernisation of irrigation system, enlargement of supporting agricultural supplies and services such as demonstrations, training and visits, adequate credit, improved varieties of seeds and other inputs, improved storage and processing and marketing facilities. During the Sixth Plan period Command Area Development Programme is proposed to be implemented in the twelve irrigation projects, viz. Malampuzha, Mangalam, Pothundy, Gayathri, Walayar, Chitturpuzha, Cheramangalam, Peechi, Chhalakudy, Cheerakuzhi, Vazhani and Neyyar. Within the period of five years, 45,000 hectares of land in the command areas will be brought under the scheme. The Government would provide as grant 50 per cent of the cost of laying out field channels in the Command Areas and the remaining as loan. In the case of small, medium and marginal farmers the subsidy part will be still higher.

The Command Area Development Programme is a Centrally Sponsored Scheme with fifty per cent Central assistance. The outlay proposed under this scheme comprises the State share to meet the cost of construction of field channels, cost of detailed survey of areas selected for development, subsidy to small and marginal farmers for on-farm development, contribution to equity capital of Kerala Land Development Corporation and Special Loan Fund Account for the benefit of other farmers and the overheads for implementing the programme.

### 2. *Development of Backward Areas*

(Outlay Rs. 250 lakhs)

On account of specific resource constraints and regional specialities backward areas in the State like Kasargode and Wynad and certain regions in Malappuram and Idukki require area planning for their comprehensive development. The schemes envisaged in the Plan are provision of transport and communication facilities, construction of roads, minor irrigation and soil conservation works, dairying, opening of health centres and rehabilitation of tribal population.

The outlay proposed also includes provision for the Kasargod Area Development Authority which has recently been constituted to execute and implement several schemes contained in the report of the Kasargod Development Committee, for the overall development of Kasargod area.

### 3. *Integrated Rural Development (IRD)*

(Outlay Rs. 2450 lakhs)

The Integrated Rural Development Programme is a Centrally sponsored scheme with 50 per cent

Central assistance. IRD programmes are a package of schemes aimed at improving the economic status of the weaker sections of the society by enhancing their productivity, employment and income. The objective is to raise the participating families above poverty line by designing schemes taking into account their capabilities skill, aptitude and resources like land and manpower.

The IRD programme will be implemented in all the 144 blocks in the State during the Sixth Plan period. The scheme is to cover 600 families in each development block every year. District Rural Development Agencies have been constituted in all districts for implementing the various rural development programmes under IRDP. Under the IRDP, small farmers are to be given assistance in the form of subsidy to the extent of 25 per cent to enable them to raise their income above poverty line. Marginal farmers are eligible for 33½ per cent and Girijans 50 per cent by way of subsidy. The balance amount in all these cases is to be provided through institutional finance. The funds will also be utilised for setting up rural industries and providing training and other assistance to rural artisans which will help generate additional employment in rural areas.

### 4. *Scheme for Social Inputs in Area Development - (UNICEF assisted programme)*

(Outlay Rs. 10 lakhs)

This is a UNICEF sponsored programme proposed to be implemented with the State's financial participation. The programme envisages: (i) improvement of the economic viability with particular emphasis on skill development for full employment of weaker sections of the community; (ii) complete health coverage to the vulnerable group, particularly, mothers and children; (iii) provision of water; (iv) extended pre-school formal and non formal education to achieve total literacy; (v) strengthening of infrastructural facilities in the field of health, rural industries, marketing and voluntary organisations and (vi) effective community participation.

It is proposed to implement the programme in the 28 coastal blocks in five districts viz., Trivandrum, Alleppey, Ernakulam, Malappuram and Kozhikode. Projects have already been prepared for these districts. The outlay proposed is towards advance action for implementing the programme.

### 5. *Small Farmer Development*

(Outlay Rs. 50 lakhs)

This outlay has already been incurred in 1980-81 in the Small Farmer Development Agency areas for the programmes carried over to the Sixth Plan.

TABLE 3.5

## Special Area Programme for Rural Development—Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Command Area Development—State Share	0.34	80.00	19.28	725.00	75.00	120.00	15.00
2.	Development of Backward Areas	45.16	50.00	50.00	250.00	..	50.00	..
3.	IRDP—State Share	173.71	147.50	150.00	2450.00	..	424.999	..
4.	Scheme for Social Inputs in Area Development (UNICEF Assisted Programme): Advance Action.	..	..	4.34	10.00	..	5.00	..
5.	Completed Schemes (Small Farmer's Development Agency, Subsidy for Minor Irrigation Works and Special Programme for Rural Poor)	71.51	72.50	50.00	50.00	..	..	..
6.	Other Schemes	21.15	0.001	97.00	..	..	0.002	..
Total—Special Area Programme for Rural Development		311.87	350.00	370.62	3485.00	75.00	600.00	15.00

## Food

## 1. Price Support Scheme for Paddy, Tapioca and Sugarcane.

(Outlay Rs. 250 lakhs)

Owing to the increasing cost of inputs and prevalence of a relatively low level of prices of agricultural commodities like paddy and tapioca, there is a tendency among the cultivators to shift from such crops to the cultivation of perennial crops. In view of the chronic and widening food deficit, it is essential to maintain at least the present level of food production in Kerala. It is in this context that production incentive in the form of support price is being provided to the cultivators of paddy and tapioca. Provision is made in the Plan under the price support scheme for adjusting the possible loss sustained in the procurement and sale of paddy and tapioca by Government.

## 2. Strengthening of the Public Distribution System

(Outlay Rs. 250 lakhs)

The Kerala State Civil Supplies Corporation is the State agency dealing with the public distribution system within the State. For various reasons, particularly financial constraints, the Corporation has been able to cover only a very small portion of the trade in essential commodities. In order to strengthen the public distribution system the Civil Supplies Corporation requires enhanced equity capital. The outlay proposed is for share capital contribution to the Corporation.

TABLE 3.6

## Food-Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Implementation of Price Support Scheme for Paddy and Tapioca	1.06	25.000	13.000	250.00	..	25.000	..
2.	Scheme for Strengthening Public Distribution System—Share Capital Contribution to Kerala State Civil Supplies Corporation	..	0.001	0.001	250.00	250.00	0.001	0.001
Total—Food		1.06	25.001	13.001	500.00	250.00	25.001	0.001

## Animal Husbandry

During the earlier plan periods under animal husbandry programmes more stress was laid on cattle development by establishing Key Village Blocks with artificial insemination centres. Subsequently the emphasis was shifted to Intensive Cattle Development Projects which have a wider scope than the Key Village Blocks. The ICDP envisages genetic improvement, health care and scientific management and proper feeding of cattle population. In the development of goats, no real break-through could be achieved in the past. Therefore, a goat farm mainly intended for taking up studies on selective breeding of indigenous goats and for evolving a good milch strain of Malabari goats has been set up. The Intensive Pig Development Project which is intended for piggery development provides subsidies for rearing of pigs and weaners for fattening etc. Poultry farming in the rural areas of the State is done extensively as a backyard enterprise with rearing of low productive desi and high yielding improved strains of fowls. Therefore, the strategy for animal husbandry development in the Sixth Plan (1980-85) is evolved with a view to developing the cattle, pig, goat and poultry resources of the State.

The objectives of the plan are: intensification of efforts for increasing the availability of livestock products in the State, extension of insurance cover to the entire cross bred cows, improvement of the economic status of the rural poor and tribals by providing additional employment opportunities and income through poultry keeping, goat rearing, piggery development etc. The plan also lays emphasis on veterinary service and animal health, development of jersy breeding-cum-cross bred farm, genetic improvement of poultry breeding, organisation of poultry clubs in schools, duck farming, broiler production etc.

The animal husbandry development programme for the plan period envisages an outlay of Rs. 15.17 crores. Of this total outlay an amount of Rs. 1.42 crores is earmarked exclusively for the benefit of scheduled castes and scheduled tribes under the Special Component Plan and Tribal Area Sub Plan. By the end of the plan period it is estimated that the milk production in the State will increase from 8.73 lakh tonnes to 11.63 lakh tonnes. The egg production is expected to go up to 1160 million from the present level of 954 million. A short description of the various schemes proposed is given below.

### 1. Administration and Training

#### 1. Administration and Co-ordination

(Outlay Rs. 34 lakhs)

In the context of the introduction of District Administration in the State, it is necessary to reorganise the administrative set up of the Animal Husbandry Department. The district level office of the Department will be brought under the control of a Deputy Director with necessary supporting staff for the effective co-ordination, control and supervision of all activities of the Department in the district. In addition, the Livestock Production Wing, Audit Wing, Poultry Development Cell and the Stores Purchase Section of the Directorate will also be strengthened with supporting staff for implementing the development programmes visualised in the Plan.

### 2. Training Programme

(Outlay Rs. 17.50 lakhs)

It is proposed to impart training in selected disciplines of veterinary science to departmental personnel and para veterinary personnel to man the developmental programmes. The proposal is to give advanced training and short term training to veterinary officers and inservice training to livestock assistants during the plan period.

Under the scheme weaker sections of the farmers including scheduled castes and scheduled tribes will also be given training in modern livestock and poultry rearing practices.

## II. Veterinary Services and Animal Health

### 1. Biological Production Complex

(Outlay Rs. 55 lakhs)

The project was started during the Fifth Plan period with a view to step up the internal production of the biologicals such as ranikhet disease vaccine, fowl pox vaccine, pigeon pox vaccine, H.S. vaccine, duck plague vaccine etc. Anthrax vaccine, black quarter vaccine, rabies vaccine and rinderpest vaccine will also be manufactured in the complex on commercial lines. Besides, the production of biologicals, the project also aims at carrying out research studies on the improvement of biologicals and on epidemiological problems. The plan provision is for completing the construction of the complex and other ancillary units, purchase of equipment and vehicles for the project and for additional staff.

### 2. Strengthening and Reorganisation of Veterinary Hospitals

(Outlay Rs. 220 lakhs)

The scheme is for improving the existing veterinary services with modern veterinary aids and laboratory support for arriving at prompt and correct diagnosis of animal diseases and providing facilities for undertaking surgical operations by specialists in the branches concerned. The outlay is for purchase of equipment, medicines, vehicles and appointment of staff and for construction of buildings for veterinary institutions. Part of the outlay is intended for providing veterinary services to economically weaker sections and the tribal population.

### 3. Disease Investigation Laboratory

(Outlay Rs. 32 lakhs)

The Chief Disease Investigation Laboratory at Palode was started with the ambitious objective of taking up detailed investigation of various animal diseases in order to check effectively the out-break of such diseases especially in the areas of intensive livestock production. The plan provision is for completing the construction of the laboratory buildings and for purchase of equipment, chemicals and vehicles required for the institution and appointment of staff.

### 4. Control of Foot and Mouth Disease (State's Share)

(Outlay Rs. 20.75 lakhs)

This centrally sponsored scheme envisages distribution of the vaccine for foot and mouth disease of animals at 50 per cent subsidy to farmers belonging



to financially weaker sections, provided the balance is met by the beneficiaries. However, in the event of an outbreak of the disease in the intensive areas of live-stock production, all the cattle of the affected area will be vaccinated free of cost and the cost will be equally shared by the Central and State Governments. The plan provision is to meet the State's share of the expenditure to carry out 3 lakh vaccinations during the plan period.

Part of the outlay is earmarked for vaccinating the animals owned by scheduled castes and scheduled tribes free of cost.

5. *AICRP on Epidemiological studies of Foot and Mouth Disease (State's Share)*

(Outlay Rs. 1.15 lakhs)

The plan provision is for meeting 25 per cent share of the expenses on the State unit of the All India Co-ordinated Research Project on Epidemiological Studies of Foot and Mouth Disease. The scheme is introduced in collaboration with the ICAR in order to wipe out the virus responsible for outbreak of the disease in the State.

6. *Control of Foot and Mouth Disease*

(Outlay Rs. 7.75 lakhs)

The scheme is for subsidising the cost of foot and mouth disease vaccine required to vaccinate the animals in the areas not covered by the centrally sponsored scheme of foot and mouth disease control. During the plan period about 1.7 lakh animals including the animals owned by the scheduled castes/scheduled tribes will be vaccinated.

7. *Control of Avian Diseases*

(Outlay Rs. 16 lakhs)

Poultry diseases such as ranikhet, selinenellosis, mareke's disease and helminthiasis are prevalent in Kuttanad and other regions of the State. Therefore, a full fledged laboratory to carry out systematic study and investigation of the incidence of the diseases is proposed to be established so as to control the same effectively. The outlay is for construction of buildings for the laboratory, purchase of equipment, chemicals, biologicals, vehicles and appointment of necessary staff.

8. *Mobile Farm Aid Units*

(Outlay Rs. 80 lakhs)

Mobile farm aid units will be established in Community Development Blocks in a phased manner so as to provide efficient and prompt veterinary services to the farmers located far away from the veterinary institutions. The mobile units will visit every panchayat within the block area and will carry out veterinary treatment, preventive inoculation and support extension activities. Part of the outlay is for the Special Component Plan of the scheme.

9. *Organising Infertility Camps*

(Outlay Rs. 4.20 lakhs)

The programme is to organise camps in rural areas to detect and treat the infertility among cross-

bred cattle. The provision is for purchase of medicines and for meeting the incidental expenditure for organising about 4000 camps during the Plan period.

10. *Rabies Control*

(Outlay Rs. 17 lakhs)

The proposal is to control and eradicate rabies by multifaced action programme of conducting detailed survey on the occurrence of the disease, identification of the foci of infection, destruction of stray dogs and vaccination of licenced dogs. The target is to vaccinate 2.2 lakh licenced dogs and to destroy 3 lakh stray dogs during the Plan period.

11. *Mastitis Control*

(Outlay Rs. 4.10 lakhs)

Mastitis is a disease mostly associated with high yielding animals. Two Diagnostic Laboratories have already been established in the ICIDP areas to detect the organism responsible for the disease in the shortest possible time and suggest suitable measures to control the disease. The outlay is for purchase of equipment and chemicals for the laboratories.

12. *Disease Free Zone*

(Outlay Rs. 15.50 lakhs)

The programme envisages establishment of a Marine Products Inspection-cum-Certification Laboratory at Cochin to inspect livestock and marine products exported from the State and strengthen the rinderpest check posts in the State border in order to prevent the movement of diseased animals which are potential carries of animal diseases. The plan provision is for staff, construction of buildings, purchase of equipment and chemicals.

13. *Rinderpest Eradication (State's share)*

(Outlay Rs. 5.20 lakhs)

This Centrally Sponsored Scheme envisages the control and eradication of rinderpest as recommended by the National Commission on Agriculture. Under the scheme epidemic pockets of the disease will be located by carrying out systematic investigation and affected animals will be destroyed on payment of compensation to the owners. Containment vaccination will also be done to all the animals in and around the pockets of incidence of the disease. The plan outlay is for meeting the State's share of expenditure on the scheme.

14. *Cattle Insurance*

(Outlay Rs. 36.50 lakhs)

Cattle insurance will encourage the farmers to rear improved cross-bred cows and buffaloes and enable them to obtain credit and invest more on livestock production. Under the scheme, all the animals insured will be protected against infections/contagious diseases on a priority basis. Fifty per cent of the first year's premia and 25 per cent of the subsequent year's premia to insure the animals will be given as subsidy under the scheme.

In the case of scheduled caste and scheduled tribe farmers, first years' premia will be fully subsidised and fifty per cent of the annual premium will be paid as subsidy during the subsequent years.

#### 15. *Expansion of Central Veterinary Stores*

(Outlay Rs. 15 lakhs)

In the past, considerable difficulties were experienced in the purchase and distribution of medicines and equipment for animal health for want of proper organisational set up, improved storage facilities and proper arrangements for distribution. It is, therefore, proposed to expand the three Regional Stores, establish District Depots and to build up a Central Organisation to investigate and assess the requirement of medicines and equipment, effect timely purchase of the items and monitor their distribution. The outlay earmarked is for purchase of vehicles and furniture construction of buildings and for providing required staff.

### III. *Investigation and Statistics*

#### 1. *Planning and Monitoring Cell*

(Outlay Rs. 3.75 lakhs)

The plan proposal is to reorganise and strengthen the Planning and Monitoring Cell attached to the Directorate of Animal Husbandry. The cell will prepare suitable programmes for the planned development of the animal husbandry sector and will also identify and formulate projects for obtaining assistance from World Bank and other financial institutions. Besides starting a data bank, the Cell will monitor the schemes under implementation and evaluate the programmes already implemented.

#### 2. *Animal Husbandry Statistics and Sample Surveys*

(Outlay Rs. 24.75 lakhs)

The proposal is for the continuance of the sample survey on "estimation of economic loss on account of mortality, loss in milk production and reduction in working capacity, due to various animal diseases" and the integrated sample survey for estimation of the production of milk, eggs and other livestock products. New surveys and studies recommended by the Central Statistical Organisation and similar agencies will also be undertaken during the Plan period.

#### 3. *Livestock Census*

(Outlay Rs. 18.40 lakhs)

The provision made in the Plan is for taking up the preliminary work on the 13th Quinquennial Livestock Census falling in April 1982.

### IV. *Cattle Development*

#### 1. *Jersey Breeding cum Cross Bred Farm*

(Outlay Rs. 125 lakhs)

The Plan proposal is to complete the construction work in the Jersey Breeding Cum Cross Bred Farm at Vithura and its extension unit at Palode as well as to

equip and strengthen the farm for taking up the breeding programme and to extend the fodder cultivation in the farm. The farm will have 100 pure bred jersey animals and 300 cross bred cows for production of cross bred bulls.

#### 2. *Establishment of Intensive Cattle Development Projects*

(Outlay Rs. 82 lakhs)

The Plan provision is for continuance of the Intensive Cattle Development Projects in the northern part of the State and to set up new projects in the southern part. The existing Key Village Blocks in the area proposed to be covered by the ICDP will form part of the new set up and new units will be opened wherever necessary. The project would cover one lakh breedable cows providing the entire need of supplies and services including credit facilities for procurement of cattle, feed and fodder and housing of cattle.

A portion of the outlay will be set apart for giving subsidy for purchase of animals and construction of cattle sheds to farmers belonging to scheduled castes and scheduled tribes.

#### 3. *Distribution of Crossbred Heifers and Assistance to Economically Weaker Sections to take up Cattle Rearing*

(Outlay Rs. 62.40 lakhs)

The scheme envisages distribution of cross bred heifers at 50 per cent subsidy to economically weaker sections of small farmers, marginal farmers and agricultural labourers and provision of subsidy for construction of cattlesheds.

Under the Special Component Plan, scheduled caste and scheduled tribe farmers will be provided with 75 per cent subsidy to purchase cross bred cows. Subsidy will be given to them for construction of cattle sheds also.

#### 4. *Calf Feed Subsidy Programme*

(Outlay Rs. 195.75 lakhs)

As the weaker sections of farmers find it financially difficult to rear cross bred calves properly, the calves do not grow well and become less productive in spite of their improved genetic potential. Therefore, it is proposed to assist the weaker sections of farmers by providing necessary package of services and inputs by way of loans and subsidy for rearing the cross bred female calves up to production stage. Small and marginal farmers will be given 50 per cent subsidy and agricultural labourers two-third subsidy for the feed required to raise the calf from 4th month to 28th month or till they calve whichever is earlier. Necessary health and insurance cover will also be provided to these animals.

A part of the outlay of the scheme is earmarked for the Special Component Plan.

#### 5. *Expansion of Livestock Farms*

(Outlay Rs. 11 lakhs)

The provision is for taking up land development, construction of buildings and purchase of animals and equipment for the livestock farm at Kodappanakunnu

in Trivandrum district and the drystock farm at Kuriotumala in Quilon district, so as to expand the farms suitably and produce buffalo bulls required to take up buffalo development in the State.

#### V. Poultry Development

##### 1. Poultry Farms and Central Hatchery

(Outlay Rs. 46 lakhs)

The components of the scheme are continuation of the breeding work at the Central Hatchery, Chengannur, completion of the construction works of the poultry farms at Malappuram and Idukki, introduction of turkey breeding at the Poultry Farm, Quilon, expansion of the cross breeding activities of poultry at the Feeding Analytical Laboratory etc. Under the scheme, cross breeding activities of poultry to evolve a suitable strain of chicks which is relatively disease resistant and capable of thriving on village feed and lay about 160-180 eggs per annum will be taken up to encourage backyard poultry farming.

##### 2. Poultry Training Institute

(Outlay Rs. 9 lakhs)

The provision is for continuing the Poultry Training Institute at Chengannur. The Institute will impart inservice and refresher training to extension personnel, para-veterinary staff and farmers in modern poultry rearing practices.

##### 3. Chick Sexing School

(Outlay Rs. 5.25 lakhs)

The plan provision is for strengthening the chick sexing school at Chengannur, so as to train 40 chick sexers in a year in two batches for a period of 5 months each.

##### 4. Distribution of Poultry to Economically Weaker Sections

(Outlay Rs. 26 lakhs)

The provision is for distribution of 6-8 week old pullets at subsidised rates to farmers belonging to weaker sections and rehabilitate lepers with a view to encouraging them to take up backyard poultry keeping as a source of additional income. While the poor farmers will be granted 75 per cent subsidy, the lepers will receive them free of cost. A portion of the outlay is for distribution of pullets free of cost to farmers belonging to scheduled castes.

##### 5. Duck Farm

(Outlay Rs. 12.25 lakhs)

The scheme envisages development of a commercial type of duck suitable for the agro-climatic conditions of Kerala by cross breeding 'desi' ducks with superior exotic breeds. The production of suitable breed strains will be undertaken at the duck farm, Niranam. For the multiplication and distribution of the ducklings, a duck farm will be established at Tiruvalla. The provision is for the construction of duck houses and other buildings, purchase of equipment and breeding stock etc.

##### 6. Broiler Production

(Outlay Rs. 28 lakhs)

The broiler production units will be strengthened suitably to produce sufficient number of broiler chick

from parent stock procured from reputed farms. The provision is for purchase of parent stock and creation of the necessary infrastructure facilities.

##### 7. Poultry Clubs in Schools

(Outlay Rs. 9 lakhs)

In order to generate interest and awareness in poultry farming among school children poultry clubs will be organised in selected schools. Necessary training for rearing poultry will be given to the children. Each student will be given five pullets free of cost, to be reared in the backyard. The cost of feed will have to be met by the students themselves.

##### 8. Poultry Development through Farmer's Organisation.

(Outlay Rs. 32 lakhs)

The scheme envisages organisation of Primary co-operatives of poultry farmers and provision of share capital contribution and managerial assistance to them. The primary societies will be brought under District Co-operatives which in turn will have an Apex Sate Co-operative. The assistance from NCDC to these co-operatives will be channelised through the Sate Co-operative. These societies will be encouraged to take up the full spectrum of activities under poultry development including breeding, hatching activities, rearing of stock both egg type and meat type, feed production and marketing of egg and other poultry products.

#### VI. Pig Development.

##### 1. Pig Breeding Farm

(Outlay Rs. 24.70 lakhs)

The outlay proposed is for establishing a pig breeding farm at Kanjirappally for the production of high quality piglings for distribution to farmers. Three recognised breeds of pigs namely, Canadian Dinee, Large White Yorkshire and Landrace/Tamworth will be maintained for cross breeding. The provision is for land acquisition, civil constructions, purchase of livestock, feeding charges, vehicle etc.

##### 2. Intensive Pig Development Programme

(Outlay Rs. 12.50 lakhs)

High quality pigs will be distributed to selected farmers for breeding purposes at subsidised rates. Feed and medicines will be made available at subsidised rates for the piglings produced under the breeding programme. The participants of this programme will be eligible for financial assistance in the form of grant for the construction of pig sties and subsidy for the maintenance of boar.

##### 3. Assistance to Meat Products of India for Pig Development

(Outlay Rs. 5 lakhs)

The provision is for giving financial assistance to 'Meat Products of India' to take up special programmes of pig development.

#### VII. Goat Development

##### 1. Expansion of Goat Farms

(Outlay Rs. 18.50 lakhs)

The provision is to expand the existing goat farm at Komeri and to take up selective breeding and cross

breeding with the object of evolving a dual purpose breed suitable for milk and meat. Selection and breeding of Malabari goats will be continued. The provision is for purchase of goats, feeding charges and construction of buildings. A part of the provision of this scheme is set apart for the benefit of scheduled tribe families.

## 2. Goat Villages—Special Component Plan

(Outlay Rs. 12.60 lakhs)

The proposal is to establish goat villages in selected compact areas where there is a concentration of Scheduled castes. The scheduled caste families in these areas will be supplied with kids and improved varieties of bucks for breeding. The programme will benefit largely the rural poor among the target groups.

## VIII. Fodder Development

### 1. Fodder Development

(Outlay Rs. 4 lakhs)

Fodder nurseries will be set up at the livestock and poultry farms and other departmental institutions where sufficient land is available to improve fodder production. Fodder trees will also be planted. Planting of fodder trees will be taken up by local bodies and other organisations as a part of social forestry programme in the departmental land available in all the cattle, dry stock and poultry farms in the State.

## IX. Other Livestock Development

### 1. Modernisation of Slaughter Houses and establishment of Meat Board.

(Outlay Rs. 5 lakhs)

The present system of slaughtering of animals in an unhygienic and crude manner requires all round improvement if wholesome meat is to be made available to consumers. Therefore, it is proposed to assist the City Corporations and Municipalities to construct

modern slaughter houses. Of the total cost, two-thirds will be borne by the Government and the rest will be met by the Corporation/Municipality. To give necessary assistance and guidance in this direction a Meat Board is proposed to be set up with the assistance of Government of India.

## 2. Tribal Area Sub Plan

(Outlay Rs. 36 lakhs)

The object of the scheme is to accelerate the progress of tribal development through Animal Husbandry Programmes. It is proposed to distribute cross bred cows, goats and poultry among the tribals in identified tribal sub plan areas. Financial assistance will be given under the scheme to the beneficiaries to construct low cost village type poultry houses and cattle sheds.

## 3. Karshika Vignan

(Outlay Rs. 5.50 lakhs)

The proposed outlay is for educating the farmers about modern animal husbandry practices through seminars, cattle shows, calf rallies, milk yield competition etc. Farm Information Bureau will also be actively involved in implementing the programme. The provision is for the above activities and for making an audio-visual film.

## 4. Special Livestock-Production Programme (State, share)

(Outlay Rs. 121 lakhs)

The provision is for the continuance of the Centrally Sponsored Special Livestock Production Programme, being implemented in the districts of Trivandrum, Trichur and Cannanore. The cost of feeding the calves owned by weaker sections of farmers will be subsidised. Assistance to start poultry and pig breeding units will also be given to these weaker sections. A part of the provision is earmarked for giving feed subsidy to calves owned by scheduled castes/scheduled tribes. The outlay is for meeting the State's share of expenditure.

TABLE 3.7

### Animal Husbandry—Scheme-wise—Outlay and Expenditure

(Rs in lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>I. Administration and Training</i>								
1.	Administration and Co-ordination	0.15	5.50	5.50	34.00	..	6.00	..
2.	(1) Training Programme	2.07	3.15	3.15	17.00	..	3.40	..
	(2) Special Component Plan	..	0.35	0.35	0.50	..	0.10	..
Total: Administration and Co-ordination		2.22	9.00	9.00	51.50	..	9.50	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>II. Veterinary Services and Animal Health</i>								
1.	Biological Production Complex	6.26	12.00	12.00	55.00	10.00	15.00	5.00
2.	(1) Strengthening and Re-organisation of Veterinary Hospitals	29.74	30.00	30.00	218.00	40.00	39.00	7.50
	(2) Special Component Plan	..	..	..	2.00	..	1.00	..
3.	Disease Investigation Laboratory	11.85	7.00	7.00	32.00	16.00	8.00	5.50
4.	(1) Control of Foot and Mouth Disease—State share	2.77	3.38	3.38	18.00	..	3.84	..
	(2) Special Component Plan	..	0.37	0.37	2.75	..	0.41	..
5.	AICRP on Epidemiological Studies of Foot and Mouth Disease—State share	..	0.20	0.20	1.15	..	0.20	..
6.	(1) Control of Foot and Mouth Disease	3.17	3.75	3.75	7.00	..	0.90	..
	(2) Special Component Plan	..	..	..	0.75	..	0.10	..
7.	Control of Avian Diseases	1.13	4.50	4.50	16.00	3.50	4.00	1.00
8.	(1) Mobile Farm Aid Units	10.94	8.00	8.00	75.00	..	9.00	..
	(2) Special Component Plan	..	..	..	5.00	..	1.00	..
9.	Organising Infertility Camps	0.54	0.80	0.80	4.20	..	1.00	..
10.	Rabies Control	4.90	3.00	3.00	17.00	..	3.50	..
11.	Mastitis Control	0.86	1.00	1.00	4.10	..	1.00	..
12.	Disease Free Zone	1.08	3.00	3.00	15.50	2.50	3.50	0.50
13.	Rinder Pest Eradication State share	1.12	2.00	2.00	5.20	..	0.80	..
14.	(1) Cattle Insurance	0.14	1.35	24.00	30.50	..	4.00	..
	(2) Special Component Plan	..	0.15	2.50	6.00	..	1.00	..
15.	Expansion of Central Veterinary Stores	..	..	..	15.00	..	3.50	..
Total: Veterinary Services and Animal Health		74.50	80.50	105.50	530.15	72.00	100.75	19.50
<i>III. Investigation and Statistics</i>								
1.	Planning and Monitoring Cell	0.33	0.75	0.75	3.75	..	0.75	..
2.	Animal Husbandry Statistics and Sample Surveys	3.06	4.25	4.25	24.75	..	4.75	..
3.	Livestock Census	0.06	..	..	18.40	..	1.00	..
Total: Investigation and Statistics		3.45	5.00	5.00	46.90	..	6.50	..
<i>IV. Cattle Development</i>								
1.	Jersey breeding-cum-Crossbred Farm	11.76	25.00	25.00	125.00	40.00	25.00	10.00
2.	(1) Establishment of Intensive Cattle Development Projects	4.60	7.00	16.00	75.00	10.00	12.50	3.00
	(2) Special Component Plan	..	..	..	7.00	..	1.50	..
3.	(1) Distribution of Crossbred Heifers and assistance to economically weaker sections to take up cattle rearing	..	0.001	8.40	32.40	..	9.00	..
	(2) Special Component Plan	..	..	..	30.00	..	9.00	..
4.	(1) Calf Feed Subsidy Programme	..	0.001	43.10	180.75	..	37.00	..
	(2) Special Component Plan	..	..	..	15.00	..	3.00	..
5.	Expansion of Livestock Farms	..	..	..	11.00	2.50	2.50	0.50
Total: Cattle Development		16.36	32.001	92.50	476.15	52.50	99.50	13.50

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>V. Poultry Development</b>								
1.	Poultry Farms and Central Hatchery	4.02	11.00	11.00	46.00	15.00	12.00	4.50
2.	Poultry Training Institute	0.63	2.00	2.00	9.00	4.25	2.50	1.50
3.	Chick Sexing School	1.61	1.00	1.00	5.25	..	1.25	..
4.	(1) Distribution of Poultry to economically weaker sections	0.13	..	6.50	15.00	..	2.25	..
	(2) Special Component Plan	1.49	1.50	1.50	11.00	..	2.25	..
5.	Duck Farm	1.29	2.50	2.50	12.25	5.00	2.00	1.00
6.	Broiler Production	4.51	3.00	3.00	28.00	5.00	6.50	1.50
7.	Poultry clubs in Schools	0.75	1.50	1.50	9.00	..	1.50	..
8.	Poultry Development through Farmers Organisations	2.04	3.00	3.00	32.00	..	4.00	..
9.	Expansion of Feed Analytical Laboratory	..	1.50	1.50	..	..	..	..
	Total: Poultry Development	16.47	27.00	33.50	167.50	29.25	34.25	8.50
<b>VI. Pig Development</b>								
1.	Pig Breeding Farm	2.20	4.00	4.00	24.70	10.00	4.50	1.50
2.	Intensive Pig Development Programme	1.99	2.50	2.50	12.50	..	2.50	..
3.	Assistance to Meat products of India for Pig Development	..	..	..	5.00	..	5.00	..
	Total: Pig Development	4.19	6.50	6.50	42.20	10.00	12.00	1.50
<b>VII. Goat Development</b>								
1.	(1) Expansion of Goat Farms	1.95	3.50	3.50	16.50	6.00	4.00	1.50
	(2) Special Component Plan	..	..	..	2.00	..	1.00	..
2.	Goat Villages—Special Component Plan	..	..	..	12.60	..	3.00	..
	Total: Goat Development	1.95	3.50	3.50	31.10	6.00	8.00	1.50
<b>VIII. Fodder Development</b>								
1.	Fodder Development	..	..	..	4.00	..	1.00	..
	Total: Fodder Development	..	..	..	4.00	..	1.00	..
<b>IX. Other Livestock Development</b>								
1.	Modernisation of Slaughter Houses and establishment of Meat Board	..	0.001	4.00	5.00	5.00	2.00	2.00
2.	Tribal Area Sub-Plan	3.56	4.00	13.00	36.00	..	5.50	..
3.	Karshika Vignan	0.28	1.50	1.50	5.50	..	1.00	..
4.	(1) Special Livestock Production Programme—State Share	30.59	29.50	29.50	110.00	..	27.90	..
	(2) Special Component Plan	..	1.50	1.50	11.00	..	2.10	..
	Total: Other Livestock Development	34.43	36.50	49.50	167.50	5.00	38.50	2.00
	Total: Animal Husbandry	153.57	200.00	305.00	1517.00	174.75	310.00	46.50

## Dairy Development

Development in dairy farming could be achieved only through a comprehensive programme of genetic improvement of milch animals, better animal health cover, improvement of feed and fodder availability and better management practices. Therefore, the Sixth Five Year Plan (1980-85) envisages adoption of improved animal husbandry practices such as better breeding, feeding and management for improving the productivity of livestock. While the Animal Husbandry Department will be looking after the animal health cover programme the Dairy Development Department and the KLD and MM Board will be working in close liaison for achieving the goals of genetic improvement of cattle, intensification of the production of feed and fodder and better management practices.

Genetic improvement of cattle could be achieved through the process of artificial insemination. The proposal is to establish 1300 cattle breeding centres during the Plan period, with facilities for supply of frozen semen, so as to achieve the target of 14.48 lakh inseminations with exotic bull semen, by the end of 1984-85. For fodder development the target is to produce/procure and distribute fodder seeds to the tune of 60 tonnes during the Plan period. The target set for milk production in the Plan is 11.63 lakh tonne in 1984-85. The additional production proposed to be achieved during 1980-85 is 2.90 lakh tonnes. By the end of the plan period, the number of primary societies of milk producers, which form the base level organisation of milk marketing will go up from 935 to 2200. Besides, the existing district dairy co-operatives will be reorganised into three regional unions.

The total outlay envisaged in the Plan for 1980-85 under dairy development is Rs. 7.21 crores. Of this, the programmes under KLD & MM Board involve an outlay of Rs. 3.72 crores. A short description of the schemes is given below:

### I. Direction and Administration

#### 1. Dairy Development Staff

(Outlay Rs. 15 lakhs)

The Dairy Development Department has an important role to play in the field of cross breeding, fodder development, development of dairy co-operatives and provision of extension services. The administrative machinery of the Department has therefore, to be suitably strengthened to take up the added responsibility and volume of work associated with the programme of dairy development envisaged in the Plan. It is proposed to strengthen and re-organise the administrative machinery at the headquarters and at the regional and district levels. A planning and monitoring cell will be formed at the Directorate for the formulation and monitoring of development schemes and for the evaluation of the schemes already implemented.

### II. Dairy Development

#### 1. (a) Rural Dairy Extension and Advisory Service and Scheme for Improving Milk Production Potential of Cows and Augmenting Milk Production

(Outlay Rs. 45 lakhs)

The object of the scheme is to educate the rural farmers on modern and improved dairy practices so

as to improve the productive efficiency of cattle reared by them. The scheme for giving subsidy to weaker sections of farmers to construct model cattle sheds will be continued on a wider scale. The on-going scheme for improving the milk production potential of cows through cross breeding by artificial insemination utilising the services of self-employed lay inseminators known as Cattle Improvement Assistants will be continued during 1980-85 also. It is also proposed to strengthen and restructure the dairy extension and farm advisory service with a view to disseminate improved technology in dairying among larger number of farmers in the State.

#### (b) Special Component Plan Scheme for Distribution of Milch Cows/Heifers to Weaker Sections including Scheduled Caste/Scheduled Tribes

(Outlay Rs. 5 lakhs)

Under this scheme it is proposed to give subsidy for the distribution of milch cows/heifers to the weaker sections of people including those belonging to scheduled castes and scheduled tribes. The scheme also envisages construction of cow sheds for housing the milch cows. The entire cost of construction will be borne by Government.

#### 2. Operation Flood-II and Project for Milk Production and Marketing with Assistance from Indian Dairy Corporation-State's Share

(Outlay Rs. 60 lakhs)

The Kerala Co-operative Milk Marketing Federation Limited has already been registered as the agency vested with the authority to implement the Operation Flood-II programme in the State. According to this programme, the State has to provide land, water, power etc., for creating the infrastructure for milk marketing and for production of inputs like cattle feed. The outlay proposed is to meet the State's share of expenditure under the programme.

#### 3. Production and Supply of Inputs for Cattle Breeding Programme of the KLD & MM Board

(Outlay Rs. 278 lakhs)

This scheme comprises production of inputs like high quality frozen semen of selected bulls under a specific breeding policy, supply of frozen semen to the cattle breeding units operated by the Animal Husbandry Department and Dairy Development Department and production of liquid nitrogen (LN2). Liquid nitrogen will be produced by operating LN2 plants and supplied to the cattle breeding units at regular intervals for preserving the semen.

#### 4. State Government contribution towards Swiss-Assisted Dairy Project in Northern Districts

(Outlay Rs. 1 lakh)

A proposal has been submitted to Government of India for starting a dairy development project on lines similar to those of Operation Flood-II with Swiss financial assistance. The project will cover the northern districts of Cannanore, Calicut, Malappuram and Palghat. Only token provision is proposed under this scheme.

#### 5. Production of Buffalo Frozen Semen

(Outlay Rs. 6 lakhs)

Under this scheme high quality frozen semen of Murrah breed of buffalo for artificial breeding will

Le provided. More buffalo bulls will be purchased from Punjab and Haryana for the production of frozen semen which will be used through the existing cattle breeding centres.

6. *Herd Book Organisation* (Outlay Rs. 10 lakhs)

This scheme is for setting up of a herd book organisation for registering and maintaining records of animals belonging to new breeds. This will provide information on various breeds and help breeding activities of the future.

7. *Quality Control Programme* (Outlay Rs. 5 lakhs)

It is proposed to set up mobile quality control units in each district to enforce quality pricing of milk and for giving guidance to milk co-operatives in quality control work. The scheme also envisages the establishment of one central laboratory with facilities for conducting analysis of milk and milk products as well as cattle feed.

III. *Fluid Milk Plants*

1. *Milk Supply Scheme Calicut, Cannanore and Palghat* (Outlay Rs. 20 lakhs)

(a) *Calicut Milk Supply Scheme*

The Calicut Dairy Plant is being operated by the Calicut Co-operative Milk Supply Union under the control of the Dairy Development Department. The installed capacity of the Calicut Dairy Plant is 6,000 litres of milk per day. The daily through-put of milk in the Calicut Dairy Plant has now exceeded 10,000 litres. It is, therefore, necessary to provide additional equipment like compressor, milk storage tanks etc., to enable the union to handle the additional quantity of milk at the dairy.

(b) *Cannanore Milk Supply Scheme*

The Cannanore Milk Supply Project with a capacity to handle 10,000 litres of milk per day established by the Department was handed over to the KLD & MM Board for regular operation. For the smooth functioning of the dairy plant, it is essential to instal a generator and provide a well for water supply purposes.

(c) *Palghat Milk Supply Scheme*

The Palghat Dairy Plant has a capacity to handle 6,000 litres per day. As the quantity of milk handled by the plant has increased considerably exceeding its present capacity, the plant needs additional facilities like pouch filling machine.

The provision proposed is for additional facilities and equipment needed for the three dairies at Calicut, Cannanore and Palghat.

IV. *Education and Training*

i. *Training of Personnel* (Outlay Rs. 10 lakhs)

Under this programme it is proposed to impart training to the departmental officers in various disciplines of dairying.

2. *Dairy Training Centre*

(Outlay Rs. 10 lakhs)

Since majority of the farmers are ignorant of modern improved dairy practices, it is essential that facilities are provided for giving training to the farmers. Under this programme a Dairy Training Centre will be established in the State. Short term training programmes will be organised for the rural farmers, educated youth and the dairy co-operative personnel. The expenses of the trainees during the training period will be met by Government. A full fledged dairy laboratory will also form part of the Training Centre.

3. *Training of Scheduled Castes/Scheduled Tribes in Dairying*

(Outlay Rs. 1.50 lakhs)

It is proposed to depute persons belonging to scheduled castes/scheduled tribes for undergoing dairy courses at recognise dairy institutions like National Dairy Research Institute, in order to make up for the paucity of candidates to fill up position in the State service. About 10 persons will be deputed for such training during the Plan period.

V. *Feed and Fodder Development*

1. *Improvement to Sewage Farm, Valiathura.*

(Outlay Rs. 10 lakhs)

The Sewage Farm, Valiathura, is a fodder farm under the Department. The farm has to be provided fencing to prevent trespassing by cattle. It is also proposed to expand the farm by extending cultivation in the vacant area and to further improve the Sewage Farm.

2. *Inter-cropping of Fodder in Coconut gardens—Cultivation of Catch Crops in Rice Fallows—Cultivation of Grass Legume—Mixtures and Quick Maturing Fodder Crops in Crop Rotation.*

(Outlay Rs. 45.50 lakhs)

The on-going scheme of inter-cropping high yielding varieties of nutritious fodder grasses in coconut gardens will be continued during the Plan period. Under this programme, the farmers are encouraged to take up cultivation of fodder in their own lands. It is proposed to cover an area of 1710 hectares under the scheme during the Plan period, 1980-85. About 10 per cent of the above fodder plots will be selected and maintained as "Demonstration plots". The on-going scheme for raising catch crops like cow-pea, horsegram etc. in rice fallows will be continued. It is proposed to encourage the farmers to cultivate quick maturing fodder crops in rotation with tapioca by providing subsidy towards the cost of seeds.

3. (a) *Fodder Seed Farm and Certified Seed Production*

(Outlay Rs. 30 lakhs)

The object of the scheme is to produce and provide inputs for fodder development in the form of seeds of high yielding grasses and legumes. A fodder seed farm is being established with the assistance of Swiss Government. The provision is for meeting the expenditure on the seed farm, certified seed production and promotion.



(b) *Special Component Plan for Scheduled Caste/Scheduled Tribes*

(Outlay Rs. 3 lakhs)

This scheme is intended for the benefit of scheduled castes/scheduled tribes. The provision is for supply of fodder seeds of high yielding grasses and legumes to these categories of people.

4. *Scheme for Conservation of Fodder as Silage, Hay making in Forest Grass Lands and Fortification of Paddy Straw using Urea, Starch and Molasses*

(Outlay Rs. 9 lakhs)

Natural grasses and cultivated fodder produced in excess of requirement during monsoon can be conserved as silage for feeding livestock during the lean summer months. It is proposed to give subsidy for construction of silo pits and for meeting the handling charges of silage.

Subsidy will be given to milk co-operatives for maintaining natural grass lands for making hay for distribution among the members. Subsidy will be given to the societies towards the cost of fertilizer as well as handling charges for hay making.

5. *Fodder Banks*

(Outlay Rs. 8.50 lakhs)

Milk co-operative societies will be encouraged to set up fodder banks to take advantage of the surplus of fodder during harvest season which can be procured at cheaper rates for the benefit of its members. Subsidy for the construction of stores for stocking paddy straw, hay etc. as well as interest subsidy for working capital requirements for setting up fodder banks will be given to the societies under this scheme. A society will be eligible for a subsidy of not more than Rs. 10,000 for the above purposes. Subsidy under the scheme will be extended to 100 milk societies during the coming years.

6. *Organisation and Administrative set up for Fodder Development in KLD & MM Board and Dairy Development Department*

(Outlay Rs. 27 lakhs)

The Kerala Livestock Development and Milk Marketing Board has to strengthen its staff for undertaking the production of fodder seeds through certified seed growers and market the same, through the Dairy Development Department, Co-operative Societies and other agencies. The increased target set for fodder cultivation can be achieved fully by strengthening the organisational set up for fodder extension activities. The outlay proposed is to meet the expenditure on additional staff for fodder development under the two departments.

VI. *Others*1. *Tribal Area Sub Plan*(a) *Scheme for Distribution of Milch Cows*

(Outlay Rs. 5 lakhs)

Under the scheme it is proposed to give subsidy for the distribution of cross-bred milch cows to the tribal

beneficiaries and to provide cow sheds free of cost for housing the milch cows. Each beneficiary will be given one cross-bred cow costing not more than Rs. 2500.

(b) *Training of Tribals in Dairy Production*

(Outlay Rs. 2.50 lakhs)

It is necessary to impart training to the tribal families on modern dairy farming and milk production practices. The scheme envisages selection of young couples belonging to the tribal families who will be able to assimilate modern practices better and train them in modern dairy farms attached to the Universities or Dairy Training Institutes for a period of not less than six months. It is proposed to train 50 tribal couples during the coming years.

2. *Assistance to Dairy Co-operatives*

(Outlay Rs. 53 lakhs)

The primary milk co-operatives are financially weak and hence require assistance for their development into viable units. Therefore, the societies are now assisted by giving subsidy for the purchase of milk cans, milk testing equipment and office furniture, appointment of qualified staff, construction of office building-cum-milk collection room, working capital grant etc. In addition to these types of assistance, it is proposed to give subsidy to the societies for allowing interest rebate to their members to encourage prompt repayment of loans. It is also proposed to provide for subsidy under the N.C.D.C. scheme for acquisition of vehicles to the co-operative societies/unions.

(b) *Special Component Plan.*

The outlay is intended for distribution of milch animals through Dairy Co-operative Societies to scheduled caste beneficiaries.

3. *Investment and Loans to K. L. D. & M. M. Board.*

(Outlay Rs. 30 lakhs)

The dairies and chilling plants will continue with the KLD and MM Board at least for a period of another two years. The provision now proposed is for a minimum investment on these dairies.

4. *Special Component Plan for Scheduled Castes*(a) *Intercropping of Fodder in Coconut Gardens, Cultivation of Catch Crops in Rice Fallows, Cultivation of Grass Legume Mixture and Quick Maturing Fodder Crops in Crop Rotations*

It is proposed to give free planting materials as well as seed mixtures of grasses and legumes to the scheduled caste beneficiaries for fodder plots upto a maximum extent of 50 cents per beneficiary. According to the scheme, it is proposed to cover about 200 hectares of fodder plots belonging to scheduled castes.

## (b) Assistance of Scheduled Castes for taking Shares in Dairy Co-operatives

In order to encourage members of scheduled castes and scheduled tribes to join the dairy co-operatives, it is proposed to give assistance to them for taking shares in the dairy co-operatives at the rate of Rs. 9 per share, the value of share being Rs. 10. The balance will be met by the beneficiary himself. Under this scheme each beneficiary will be eligible for subsidy for taking not more than two shares.

## (c) Scheme for distribution of Cross-bred Cows and construction of Cattle Sheds.

Under this programme, it is proposed to give subsidy for the distribution of cross-bred milch cows to scheduled castes and to construct cow sheds for milch cows. During the Plan period it is proposed to distribute 500 high yielding cross-bred cows to scheduled caste families and to construct cattle sheds for those cows.

TABLE 3.8

## Dairy Development—Scheme-wise Outlay and Expenditure

(Rs. lakhs)

Name of Project/Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved outlay	Anticipa- ted expendi- ture	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>I. Direction &amp; Administration</b>							
1. Dairy Development Staff	0.01	3.00	1.00	15.00	..	4.00	..
Total: Direction and Administration	0.01	3.00	1.00	15.00	..	4.00	..
<b>II. Dairy Development</b>							
1(a) Rural Dairy Extension and Advisory Service and Scheme for Improving Milk Production Potential of Cows and Augmenting Milk Production	5.74	9.00	9.00	45.00	10.00	12.60	..
(b) Special Component Plan	..	..	..	5.00	..	1.40	..
2. Operation Flood II and Project for Milk Production and Marketing with Assistance from Indian Dairy Corporation—State Share	..	36.50	32.50	60.00	60.00	20.00	20.00
3. Production and Supply of Inputs for Cattle Breeding Programme of the KLD & MM Board	47.38	25.00	25.00	278.00	40.00	55.00	14.00
4. State Government Contribution Towards Swiss Assisted Dairy Projects in Northern Districts	..	1.00	1.00	1.00	1.00	1.00	1.00
5. Production of Buffalo Frozen Semen	..	1.00	1.00	6.00	3.00	2.00	0.80
6. Herd Book Organisation	1.00	1.00	1.00	10.00	3.00	2.00	1.00
7. Quality Control Programme	..	..	..	5.00	4.00	8.00	6.00
8. Intensive Dairy Production and Marketing Blocks	..	23.50	18.50	..	..	..	..
Total: Dairy Development	54.12	97.00	88.00	410.00	121.00	102.00	42.80
<b>III. Fluid Milk Plants</b>							
1. Milk Supply Schemes—Calicut, Cannanore and Palghat	17.71	17.70	13.70	20.00	20.00	2.30	2.30
Total: Fluid Milk Plants	17.71	17.70	13.70	20.00	20.00	2.30	2.30
<b>IV. Education and Training</b>							
1. Training of Personnel	0.47	1.00	0.70	10.00	..	2.00	..
2. Dairy Training Centre	..	..	..	10.00	7.50	5.50	4.50
3. Training to Scheduled Castes/Scheduled Tribes in Dairying	..	..	..	1.50	..	0.20	..
Total: Education & Training	0.47	1.00	0.70	21.50	7.50	7.70	4.50

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>V. Feeds and Fodder Development</b>								
1.	Improvement to Sewage Farm, Valiathura	1.17	3.70	3.00	10.00	5.00	3.00	3.00
2.(a)	Inter cropping of Fodder in Coconut Gardens— Cultivation of Catch Crops in Rice Fallows— Cultivation of Grass Legume Mixture and Quick Maturing Fodder Crops in Crop Rotation	3.73	4.21	4.21	45.50	..	6.30	..
3.(a)	Fodder Seed Farm and Certified Seed Pro- duction	1.00	6.00	6.00	30.00	6.00	6.30	..
(b)	Special Component Plan for SC/ST	..	..	..	3.00	..	0.70	..
4.	Scheme for Conservation of Fodder on Silage, Hay Making in Forest Grass Lands and Fortification of paddy, straw using Starch, urea, Starch and Molasses	5.40	0.60	0.60	9.00	..	2.00	..
5.	Fodder Banks	..	..	..	8.50	..	1.50	..
6.	Organisational and Administrative set up for Fodder Development (Seed Production, Promotion and Extension) in KLD & MM Board and Dairy Development Department	3.00	2.00	2.00	27.00	1.00	5.00	..
7.	Spillover Expenditure in Respect of Schemes/ Institutions Transferred to the Kerala Live- stock Development	0.60	..	..	..	..	..	..
<b>Total: Feeds and Fodder Development</b>		<b>14.90</b>	<b>16.51</b>	<b>15.81</b>	<b>133.00</b>	<b>12.00</b>	<b>24.80</b>	<b>3.00</b>
<b>VI. Others</b>								
1.	(a) Scheme for Free Distribution of Milch cows	1.06	3.00	1.00	5.00	..	2.00	..
	(b) Training of Tribals in Dairy Production	..	..	..	2.50	..	0.50	..
2.	(a) Assistance to Dairy Co-operatives	4.50	6.50	6.50	53.00	..	9.00	..
	[(b) Special Component plan	..	..	..	6.00	..	1.00	..
3.	Investment and Loans to KLD & MM Board	54.50	25.00	25.00	30.00	30.00	20.00	20.00
4.	Special Component Plan for SCs							
	(a) Inter Cropping of Fodder in Coconut Gardens	..	0.29	0.29	10.00	..	1.70	..
	(b) Assistance to Scheduled Castes for taking shares in Dairy Cooperatives	..	..	..	5.00	..	1.00	..
	(c) Scheme for Free Distribution of Cross Bred Cows and Construction of Cattle Sheds	..	..	..	10.00	..	4.00	..
<b>Total: Others</b>		<b>60.06</b>	<b>34.79</b>	<b>32.79</b>	<b>121.50</b>	<b>30.00</b>	<b>39.20</b>	<b>20.00</b>
<b>Total—Dairy Development</b>		<b>147.27</b>	<b>170.00</b>	<b>152.00</b>	<b>721.00</b>	<b>190.50</b>	<b>180.00</b>	<b>72.60</b>

### Fisheries

While the past developmental efforts in fisheries have tended to concentrate on the exploitation of prawn resources and fostering of the sea food export trade, very little attention was given to development of the traditional sector. One of the significant programmes introduced for the benefit of traditional fishermen was the distribution of mechanised boats for prawn trawling. However, many of the boats thus issued, later passed into the hands of middle men and money lenders, for various reasons. The fishermen cooperatives formed to protect the interests of the fishermen also have miserably failed to serve the purpose. Against this background it is imperative

that the traditional sector is exposed to a new outlook and orientation with regard to development during the years to come. To achieve this objective the fishermen, both marine and inland, shall be organised under a comprehensive programme of village development. During the Sixth Plan period a Fishermen Village Society will be organised in each fishing village, covering all active fishermen, headload and cycle load fish distributors and net makers belonging to fishermen families. The village society will function as a nodule of all development and welfare activities in the fishing village. It will also be instrumental in organising a system of regulated marketing of the fish catches for the benefit of the fishermen.

The Department of Fisheries and the Fishermen Welfare Corporation can provide the organisational leadership as well as capital and technical aid required for the growth and development of fishing village economy. The Kerala Fisheries Corporation, the Kerala Inland Fisheries Development Corporation and the research institutions will channelise all their developmental and welfare inputs through the Fishermen Village Society for the benefit of fishermen.

The Fisheries Development Programme during the plan period 1980-85 envisages an outlay of Rs. 20 crores. As a result of this investment, the aggregate fish production of the State is expected to increase to 5.38 lakh tonnes in 1984-85 from the present level of 3.54 lakh tonnes. The schemes proposed for the plan period are given below:

#### I Direction and Administration

*Strengthening of Administration, including Planning and Statistical Cell.*

(Outlay Rs. 20 lakhs)

To ensure the proper implementation of the development schemes envisaged in the plan, the administrative machinery shall have to be strengthened. The outlay is to meet the expenses connected with the expansion of the Directorate of Fisheries including Planning and Statistical Cell.

#### II Extension

##### 1. Extension

(Outlay Rs. 10 lakhs)

In the context of the introduction of Fishermen Village Societies it is necessary to establish an information and publicity unit to undertake extension work such as audio-visual education, publicity, seminars and exhibitions. The provision is for this purpose.

#### III Fish Farms

##### 1. Fish Seed Farms

(Outlay Rs. 50 lakhs)

The provision made is for completing the construction of fish seed farms at Polachira, Parappanangadi, Kuttiyadi, Alwaye, Pallom and Kanjiyar and organising two more seed farms during the plan period.

##### 2. Composite Fish Culture

(Outlay Rs. 15 lakhs)

The scheme envisages composite fish culture in ponds over an extent of 300 ha. The outlay is to meet the Government share of expenditure required to supply the inputs in kind to fish farmers at the rates of full, half and one-third during the first, second and third year respectively. The remaining part of the cost of inputs from the second year onwards shall be met by the fish farmers.

##### 3. Brackish water Fish/Prawn Culture including Survey of Inland and Brackish Water Resources

(Outlay Rs. 31.50 lakhs)

The components of this project are production of prawn seeds, identification and selection of suitable brackish water areas, construction of prawn farms, supply of inputs, cultural operations, renovation and

maintenance of existing brackish water fish farms and harvesting and marketing of fish/prawn. The proposal is to survey inland and brackish water resources and organise prawn culture in 1500 ha. during the plan period by using the prawn seeds from departmental hatcheries.

#### 4. Fish Farmers' Development Agency

(Outlay Rs. 15 lakhs)

The outlay is to meet the State's share of the Fish Farmer's Development Agencies in Palghat, Trichur and Quilon.

#### IV Hatchery

##### 1. Fish Seed Production

(Outlay Rs. 10 lakhs)

The scheme is to produce 35 million fish fry in the reservoir heads to meet the fresh water fish seed requirements.

#### V Research

##### 1. Assistance to Kerala Agriculture University for Inland Fisheries Research including setting up of a Fisheries College.

(Outlay Rs. 5 lakhs)

Under the scheme financial assistance will be provided to the Kerala Agriculture University for carrying out applied research in inland fish culture and setting up a Fishery College.

##### 2. Establishment of Market Research Unit

(Outlay Rs. 5 lakhs)

The programme is to complete the Market Survey undertaken in 1979-80 by the Cochin University and establish a Market Research Unit in the Department.

#### VI Education and Training

##### 1. Strengthening of Fishermen Training Centres and Establishment of Regional Fisheries Technical High Schools

(Outlay Rs. 50 lakhs)

The provision is for continuance of the Regional Fisheries Technical High Schools at Trivandrum, Ernakulam and Cannanore and setting up of nine more Regional Fisheries Technical High Schools in the remaining marine districts. Strengthening of the existing Fishermen Training Centres is also envisaged under the scheme. Part of the outlay (Rs. 5 lakhs) is earmarked for the special component plan under the scheme.

##### 2. Training to Pisciculturists

(Outlay Rs. 2 lakhs)

The programme is to provide training to prospective pisciculturists to equip them with the necessary technical knowledge for undertaking the fish/prawn culture envisaged in the plan.

##### 3. Inservice course for Fisheries Personnel

(Outlay Rs. 5 lakhs)

The provision is for establishing a Fisheries Management Technical Institute with a view to training the departmental personnel.

## VII Inland Fisheries

### 1. Development of Reservoir Fisheries

(Outlay Rs. 20 lakhs)

This scheme aims at extension of fish culture in reservoirs. The target fixed is to extend the area under fish culture from 6751 ha. to 9000 ha. during the plan period. Besides, the scheme envisages the development of Pookote Lake, under Tribal Sub Plan.

### 2. Patrolling in Backwaters and Development of Small Water Areas

(Outlay Rs. 6.50 lakhs)

The provision is for constructing an inland fish landing platform at Cheriakadavu in Quilon district and to introduce two patrolling boats to check illicit fishing in backwaters.

### 3. Mariculture of Mussels and Pearls

(Outlay Rs. 20 lakhs)

The programme envisaged is to extend mussel culture over some selected fishing villages duly transferring the technology of mussel culture developed in the Pilot Project at Vizhinjam. Besides, the pearl culture project at Vizhinjam will be reorganised on commercial lines with suitable collaboration.

### 4. Organisation of Inland Fisheries Corporation

(Outlay Rs. 20 lakhs)

The outlay provided is for organising the Kerala Inland Fisheries Development Corporation so as to avail institutional finance for the development of inland fisheries.

## VIII Fishing Harbours and Landing Facilities

### 1. Engineering Wing

(Outlay Rs. 2.50 lakhs)

It is proposed to convert the post of Chief Mechanical Engineer in the Department into that of a Civil Engineer for assisting the Fisheries Project Cell.

### 2. Development of Vizhinjam Fishing Harbour

(Outlay Rs. 307 lakhs)

The provision made under the scheme is for meeting the State's share of the construction cost of the second stage of Vizhinjam Fishing Harbour.

### 3. Development of Neendakara Fishing Harbour

(Outlay Rs. 185 lakhs)

It is proposed to construct a fishing harbour at Neendakara having landing and berthing facilities for 1500 mechanised boats. The outlay is for meeting the State's share of this Centrally Sponsored Project.

### 4. Fishery Terminal Organisation

(Outlay Rs. 5 lakhs)

Fishery terminal organisations will be set up to manage fishing harbours at Baliapattam, Neendakara and Vizhinjam. The project will have provision for repair and servicing regulation of traffic, sanitation, fish auctioning and fish processing.

### 5. Development of Fish Landing Centres

(Outlay Rs. 50 lakhs)

Under this Centrally Sponsored Scheme, it is proposed to construct along the coast of Kerala 21 fish landing centres for small mechanised boats. The outlay is for State's share.

## IX Off Shore and Deep Sea Fishing

### 1. Offshore Fishing

(Outlay Rs. 40 lakhs)

The scheme envisages introduction of 43 1/2 ft. boats for organising dory fishing.

### 2. Deep Sea Fishing and Tuna Fishing

(Outlay Rs. 10 lakhs)

The programme aims at introducing deep sea fishing vessels on joint venture basis to exploit the fishery resources of our Economic Zone. Part of the outlay is meant for purchase of vessels for marine patrolling as envisaged in the Kerala Marine Fishing Regulation Act, 1980.

## X Processing, Preservation and Marketing

### 1. Storage, Processing and Marketing including Cold Chains and Large Fish Markets

(Outlay Rs. 42 lakhs)

Part of the outlay is for meeting the spillover requirements of Baliapattom ice plant and for establishing a new ice-cum-freezing plant at Vizhinjam. The 'cold chain' component of the scheme contemplates mopping up of the fish catches and making them available in the hinterland region. Under the scheme large fish markets will be established in the Corporation areas of Trivandrum, Cochin and Calicut.

### 2. Village Infrastructure Facilities including Link Roads and Guide Lights

(Outlay Rs. 200 lakhs)

The plan provision is for completion of the infrastructure schemes at Ambalapuzha and Cheruvathur and also for providing necessary infrastructure facilities in selected coastal fishing villages.

### 3. Organisation of Regulated Markets

(Outlay Rs. 5 lakhs)

The scheme envisages organisation of regulated marketing of fish through the Fishermen Village Societies so as to ensure the fishermen better prices as well as freedom from exploitation by the middlemen.

The outlay is to introduce pilot markets in a few villages and on the basis of the experience of these markets, the programme will be extended to more villages.

### *XI Mechanisation and Improvement of Fishing Crafts*

#### *1. Small Boat Mechanisation*

(Outlay Rs. 100 lakhs)

The programme is to complete the package schemes at Tanur, Cheruvathur and Karunagappally and gill net scheme at Vizhinjam, besides continuing the ARDC Projects at Parappanangadi, Puthiyappa and Anjengo and the Special Package Scheme at Vypeen. Part of the outlay is for meeting the insurance and repair charges of boats issued under mechanisation programme and introduction of gill netters by availing bank finance.

### *XII Others*

#### *1. Assistance to Traditional Fisheries including Supply of Catamarans and Canoes, Engines and Fibreglass Fishing Craft*

(Outlay Rs. 75 lakhs)

The scheme which is intended to be implemented by the Kerala Fishermen's Welfare Corporation, envisages supply of catamarans, dug-out canoes, plank built canoes and fibreglass crafts to traditional fishermen including Scheduled Castes engaged in fishing activities, and mechanisation of the country craft with suitable outboard engines.

#### *2. Repair and Refitting Facilities*

(Outlay Rs. 5 lakhs)

The plan provision is for meeting the spill over works at Baliapattom.

#### *3. Rehabilitation of Fishermen Families at Vizhinjam and subsidised Housing Programme*

(Outlay Rs. 250 lakhs)

The outlay is for meeting the Government share of the investment required for the subsidised housing programme implemented by the Fishermen's Welfare Corporation and the rehabilitation of 2000 fishermen families evicted from the Harbour Project, Vizhinjam. Part of the outlay is for covering the spillover works of the Housing Grant Scheme operated by the Department for the benefit of fishermen and Scheduled Castes engaged in fishing activities.

#### *4. Dispensaries*

(Outlay Rs. 30 lakhs)

The plan provision is for completing the spill over works of dispensary buildings and constructing new dispensary buildings.

#### *5. Assistance to Fishermen Cooperative Societies*

(Outlay Rs. 3 lakhs)

The provision is for revitalising the Regional Fish Marketing Cooperative Societies.

#### *6. Organisation of Fishermen Village Societies*

(Outlay Rs. 65 lakhs)

The programme is to organise Fishermen Welfare Societies, one for each fishing village registered under the Kerala Fishermen Welfare Societies Act, 1980. All active fishermen in the village, as well as head-load and cycle load fish distributors and net makers in the fishermen families will be members of the village society. The society will function as a machinery for all development and welfare activities in the fishing village. The provision is for organising Fishermen Village Societies covering all marine and inland fishing villages in the State, during the plan period.

#### *7. Fishermen's Welfare Fund including Relief Measures, Financial Assistance for the Marketing of Fish, Insurance and Debt Relief*

(Outlay Rs. 250 lakhs)

The programme contemplates provision of a package of welfare measures to fishermen including scheduled castes engaged in fishing, such as distress relief, old age benefits, financial assistance for death and marriage ceremonies, financial assistance to small scale fish trade, social insurance etc. Part of the outlay is intended for meeting the State's share of debt relief measures.

#### *8. Assistance to Kerala Fisheries Corporation*

(Outlay Rs. 35 lakhs)

The provision is for rendering financial assistance to the Kerala Fisheries Corporation for organising deep sea fishing and fish marketing activities.

#### *9. Assistance to Kerala Fishermen's Welfare Corporation*

(Outlay Rs. 50 lakhs)

The outlay is for giving financial support to the activities of the Kerala Fishermen's Welfare Corporation.

#### *10. Land Acquisition Charges for the Rehabilitation of Displaced Families from the Cochin Fishing Harbour Area*

(Outlay Rs. 0.50 lakhs)

The outlay is for clearing the liabilities in respect of the land acquired for re-settling the fishermen who have been evicted from the Cochin Fishing Harbour Area.

#### *11. Establishment of Aquarium*

(Outlay Rs. 5 lakhs)

The scheme envisages establishment of a marine aquarium at Cochin.

TABLE 3.9

## Fisheries—Scheme-wise Outlay and Expenditure

(Rs. lakhs)

Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
		Appoved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>I. Direction and Administration</b>							
1. Strengthening of Administration including Planning and Statistical Cell	1.33	3.00	2.87	20.00	2.00	3.00	1.00
Total: Direction & Administration	1.33	3.00	2.87	20.00	2.00	3.00	1.00
<b>II. Extension</b>							
1. Extension	2.89	2.00	2.08	10.00	..	3.00	..
Total: Extension	2.89	2.00	2.08	10.00	..	3.00	..
<b>III. Fish Farms</b>							
1. Fish Seed Farms	8.67	9.00	5.37	50.00	45.00	10.00	8.00
2(a) Composite Fish Culture	..	3.15	9.50	15.00	..	3.60	..
(b) Special Component Plan	..	0.35	0.35	..	..	0.40	..
3. Brackish Water Fish/Prawn Culture Including Survey of Inland/Brackish Water Resources	4.04	14.00	9.47	31.50	25.00	7.00	4.50
4. Fish Farmer's Development Agency	3.20	3.00	2.93	15.00	..	3.00	..
Total: Fish Farms	15.91	29.50	27.62	111.50	70.00	24.00	12.50
<b>IV. Hatcheries</b>							
1. Fish Seed Production	0.06	..	..	10.00	5.00	3.00	1.50
Total: Hatcheries	0.06	..	..	10.00	5.00	3.00	1.50
<b>V. Research</b>							
1. Assistance to Kerala Agriculture University for Inland Fisheries Research including Setting up of a Fisheries College	..	2.00	2.00	5.00	..	2.00	..
2. Establishment of Market Research Unit	0.60	0.50	0.50	5.00	..	0.50	..
3. Research in Marine Fisheries	0.05	..	..	..	..	..	..
Total: Research	0.65	2.50	2.50	10.00	..	2.50	..
<b>VI. Education and Training</b>							
1. (1) Strengthening of Fishermen Training Centres and Establishment of Regional Fisheries Technical High Schools	7.03	9.30	8.30	45.00	36.00	18.00	10.50
(2) Special Component Plan	..	0.70	0.70	5.00	4.00	2.00	1.50
2. Training to Pisciculturists	0.01	..	..	2.00	..	0.50	..
3. (1) In service Course for Fishery Personnel	..	0.36	0.36	5.00	..	0.90	..
(2) Special Component Plan	..	0.04	0.04	..	..	0.10	..
4. Subsidy to Private Pisciculturists	1.28	..	..	..	..	..	..
Total: Education and Training	8.32	10.40	9.40	57.00	40.00	21.50	12.00

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>VII. Inland Fisheries</b>								
1. (1) Development of Reservoir Fisheries	7.43	5.00	5.24	15.00	4.00	4.00	0.80	
(2) Tribal Sub Plan—Development of Pookote Lake	..	..	..	5.00	1.00	1.00	0.20	
2. Patrolling in Backwaters and Development of Small Water Areas	3.39	2.50	2.59	6.50	1.50	2.50	0.50	
3. Mariculture of Mussels and Pearls	4.27	3.50	3.39	20.00	..	4.00	..	
4. Organisation of Inland Fisheries Corporation	..	5.00	5.00	20.00	20.00	5.00	5.00	
<b>Total: Inland Fisheries</b>	<b>15.09</b>	<b>16.00</b>	<b>16.22</b>	<b>66.50</b>	<b>26.50</b>	<b>16.50</b>	<b>6.50</b>	
<b>VIII Fishing Harbours and Landing Facilities</b>								
1. Engineering Wing	0.69	0.50	0.03	2.50	..	0.50	..	
2. Development of Vizhinjam Fishing Harbour	3.70	72.00	72.00	307.00	307.00	72.00	72.00	
3. Development of Neendakara Fishing Harbour	7.25	20.00	20.00	185.00	185.00	25.00	25.00	
4. Fishery Terminal Organisation	..	..	..	5.00	..	1.50	..	
5. Development of Fish Landing Centres	3.52	7.00	7.00	50.00	50.00	8.00	8.00	
<b>Total: Fishing Harbours and Landing Facilities</b>	<b>15.16</b>	<b>99.50</b>	<b>99.03</b>	<b>549.50</b>	<b>542.00</b>	<b>107.00</b>	<b>105.00</b>	
<b>IX. Off-Shore Fishing and Deep Sea Fishing</b>								
1. Off-shore fishing	0.01	8.00	..	40.00	..	5.00	..	
2. Deep See fishing and Tuna fishing	..	2.00	..	10.00	10.00	5.00	5.00	
<b>Total: Off-shore and Deep Sea fishing</b>	<b>0.01</b>	<b>10.00</b>	<b>..</b>	<b>50.00</b>	<b>10.00</b>	<b>10.00</b>	<b>5.00</b>	
<b>X. Processing, Preservation &amp; Marketing</b>								
1. Storage, Processing and Marketing including Cold Chain and Establishment of Large Fish Markets	1.82	7.00	5.00	42.00	30.00	8.00	4.00	
2. Village Infrastructure Facilities including Link Roads and Guide-lights	28.31	32.50	29.96	200.00	180.00	60.00	50.00	
3. Organisation of Regulated Markets	..	0.50	0.50	5.00	..	1.00	..	
<b>Total: Processing, Preservation and Marketing</b>	<b>30.13</b>	<b>40.00</b>	<b>35.46</b>	<b>247.00</b>	<b>210.00</b>	<b>69.00</b>	<b>54.00</b>	
<b>XI. Mechanisation &amp; Improvement of Fishing Craft</b>								
1. Small Boat Mechanisation	15.46	30.00	34.00	100.00	70.00	25.00	20.00	
<b>Total: Mechanisation and Improvement of Fishing Craft</b>	<b>15.46</b>	<b>30.00</b>	<b>34.00</b>	<b>100.00</b>	<b>70.00</b>	<b>25.00</b>	<b>20.00</b>	
<b>XII. Others</b>								
1. (1) Assistance to Traditional Fisheries (Supply of Catamarans and Canoes, Engines and Fibre Glass Fishing Craft)	20.07	8.10	5.00	60.00	7.00	18.00	2.40	
(2) Special Component Plan	..	0.90	0.90	15.00	3.00	2.00	0.40	
2. Repair and Refitting Facilities	1.12	1.00	1.00	5.00	2.50	0.50	0.25	
3. (1) Rehabilitation of Fishermen Families at Vizhinjam and Subsidised Housing Programme	88.91	105.60	109.15	248.00	130.00	104.60	60.00	
(2) Special Component Plan	..	0.40	0.10	2.00	..	0.40	..	



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4. Dispensaries	3.94	8.00	5.00	30.00	30.00	10.00	10.00
5. Assistance to Fishermen Cooperative Societies	4.56	2.00	2.00	3.00	..	1.00	..
6. (1) Organisation of Village Societies	..	2.00	2.00	65.00	..	9.00	..
(2) Special Component Plan	..	..	..	..	..	1.00	..
7. (1) Fishermen's Welfare Fund (including Relief Measures, Financial Assistance for Marketing of Fish, Insurance and Debt Relief)	30.00	13.60	33.60	234.00	..	13.50	..
(2) Special Component Plan	..	0.40	0.40	16.00	..	1.50	..
8. Assistance to Kerala Fisheries Corporation	56.00	7.00	7.00	35.00	35.00	7.00	7.00
9. Assistance to Kerala Fishermen's Welfare Corporation	20.00	8.00	8.00	50.00	50.00	10.00	10.00
10. Land Acquisition Charges for the Rehabilitation of Displaced Families from the Cochin Fishing Harbour Area	0.62	0.001	2.77	0.50	0.50	0.001	0.001
11. Establishment of Aquarium at Cochin	..	0.10	0.10	5.00	5.00	0.10	0.10
12. Development of Vizhinjam and Kovalam	14.38	..	..	..	..	..	..
Total: Others	239.60	157.10	177.02	768.50	263.00	178.60	90.15
Total—Fisheries	344.61	400.00	406.20	2000.00	1238.50	463.10	307.65

## Forests

Forests play a significant role in economic development. They provide subsistence, shelter and employment to a large number of persons and resources for the development of other sectors. In addition to being a readily convertible and largely self generating store of wealth, forests exert a beneficial impact on the natural environment and provide innumerable products of vital use to man.

The major objectives of planning in forestry in the past have been building up of economic forest plantations and stepping up of the infrastructure facilities for exploiting the forest produce to an optimum level.

The Fifth Five Year Plan aimed at a package programme in developing forestry in Kerala. It included among other things a distinct policy to maintain the present extent of forests in tact and a programme to develop and utilise the forest resources to the optimum level. The latter was to be achieved through the creation of more and more forest plantations, effective management, improvement of logging and timber extraction practices, provision of adequate roads and buildings and promotion of forest research. The strategy for raising forest plantation on a massive scale led to the setting up of a Forest Development Corporation in the State sector. For speedy execution of construction work an Engineering Wing was organised in the Forest Department. For providing necessary research and development support a Forest Research Institute was also established.

The strategy for the development of the forestry sector during the Sixth Plan period may be spelled out as follows:—

1. The area under forest plantations will be increased to the maximum extent possible.

2. In the development of social forestry, programmes like farm forestry, extension forestry, reforestation of degraded forests, recreation forestry and afforestation of special sites will be taken up. Both farm forestry and extension forestry are to be implemented by involving voluntary organisations, students and teachers besides village level officials.
3. The present system of collection of forest produce through contractors will be replaced by Departmental operations engaging labourers directly.
4. Industrial complexes, each consisting of saw mill, seasoning plant, treatment plant, joinery furniture unit, window manufacturing unit, chipper mill, particle board unit and decorative veneer unit will be set up.
5. An integrated development project involving teak forests and wood based industries shall also be launched for which World Bank assistance should be sought.
6. For maintaining the forest area in tact, a strong Forest Police Contingent will have to be constituted.
7. The Engineering Wing in the Forest Department will have to be strengthened to ensure speedy implementation of construction programmes such as provision of adequate communication facilities and buildings in the forest areas.

The package deal for forestry development consists mainly of the following components:

- (i) maintenance of the available forest area in tact.

- (ii) strengthening of forest based industries by availing institutional finance.
- (iii) adoption of an "aggressive forest policy" as recommended by the N. C. A. for meeting the requirements of forest products and maintenance of the ecological balance.
- (iv) involvement of the local people, particularly the tribals, in forest development works.

The objectives of forest development under the Sixth Plan are listed below:

- (i) optimisation of exploitation of forest resources for augmenting supplies of timber, pulp wood and other industrial raw materials and fuel wood.
- (ii) increasing the area under forest and tree growth by promoting social forestry so as to meet the needs of fuel wood and small timber in the rural areas.
- (iii) organisation of mechanised logging, extraction and marketing of timber and firewood.
- (iv) development of forest based industrial complexes.
- (v) organisation of effective conservation and protection of forests in order to prevent erosion and deterioration of the forests.
- (vi) maintenance of a few biospheres (natural reserves) for the preservation of certain species of fauna and flora in their natural environment.
- (vii) promotion and encouragement of tribal co-operatives for collection and marketing of forest produce.
- (viii) provision of necessary infrastructure like roads and buildings, besides research and training support for implementing the programmes.

The Schemes proposed during the plan period 1980-85 under forestry are given below:

### I. Research Education and Training

#### 1. Forest Research

(Outlay Rs. 40 lakhs)

Forest Department has a Silvicultural Research Division to carry out routine research and field trials such as nursery trials, species trials, introduction of exotics cultural and tending methods etc. Work is also carried out on specific problems posed by territorial officers. This Division arranges for collection of teak and other seeds for supply outside the State, after testing their quality. The provision is for staff and works in the Division, equipment for a seed testing laboratory, establishment of a Teak Museum and Research Centre and for field trials undertaken by eucalyptus fungus investigation unit. The two Centrally Sponsored research schemes being implemented by Kerala University also come under this head.

#### 2. Education and Training

(Outlay Rs. 45 lakhs)

The provision is to meet the expenditure towards the cost of training programmes for various categories of staff including award of studentship, scholarship etc.

### II. Inventory Planning and Resource Development

#### 1. Survey, Demarcation and Settlement of Forest Areas (Outlay Rs. 45 lakhs)

In order to conserve forest resources, maintain forest boundaries and prevent encroachment, it is necessary to survey and demarcate the boundary of the forests by erecting cairns along the boundaries. Essential maps are also to be prepared dividing the Forest into blocks and compartments. The provision is to meet the expenditure in this connection.

#### 2. Forest Resources Survey (Outlay Rs. 15 lakhs)

Only two thirds of the area of the Forest of the State had been covered by preinvestment survey of forest resources. The rest of the area was surveyed by the Resources Survey Party. This was done before 1972 and there is an urgent need for revision. For this purpose a Resource Survey Division is to be established. The outlay proposed is for meeting the expenditure on this. Since updating of plantation and other maps after resurvey has to be carried out continuously, provision is also made to establish a small cartography unit.

#### 3. Working Plans (Outlay Rs. 5 lakhs)

In order to improve the efficiency and quality of work turned out by the Working Plan Division, the equipment being used by different Working Plan Divisions have to be substituted by more sophisticated and modern ones. The provision is for implementing this scheme.

#### 4. Cultural Operations (Outlay Rs. 55 lakhs)

A number of older plantations of various species need cultural operations particularly special tending. The outlay is for meeting the expenses involved under the scheme.

### III. Organisation and Institutions

#### 1. Intensification of Forest Management (Outlay Rs. 32 lakhs)

The volume of work both in the field and office has gone up as a result of the acceleration of developmental activities. It is essential to have smaller units for management in intensively worked areas or areas vulnerable to encroachment. It is also essential to provide necessary equipment and accessories and to appoint additional staff in the offices and field. The provision is for appointing additional staff, purchase of equipment etc.

#### 2. Kerala Forest Development Corporation (Outlay Rs. 5 lakhs)

Kerala Forest Development Corporation aims at raising plantations of fast growing species over an area of 20,000 hectares, soft wood on 2000 hectares and tea and cardamom on 500 hectares and 2000 hectares respectively. The provision is for giving assistance to the Corporation for carrying out its development activities.

#### IV. Infrastructure Development

##### 1. Communications

(Outlay Rs. 200 lakhs)

The provision is for constructing 450 kms. of new roads improving 400 kms. of existing roads, 15 bridges and 500 culverts during the plan period.

##### 2. Buildings

(Outlay Rs. 150 lakhs)

It is proposed to construct building complexes to accommodate offices at headquarters of the forest circles at Calicut, Trichur and Quilon and Forest Inspection Bungalows in the forest areas of Trichur, Malayattur, Thenmala, Ranni, Thekkady, Neyyar and Achancoil on a phased manner. Provision is also made for construction of about 530 staff quarters for the field staff such as Foresters and Guards.

##### 3. Engineering Wing

(Outlay Rs. 50 lakhs)

The outlay proposed is for additional staff and purchase of necessary machinery and equipment for the engineering wing that was sanctioned to the Forest Department for effective implementation of construction programmes of the Department.

#### V. Production Forestry

##### 1. Plantation of Quick Growing Species

(Outlay Rs. 59 lakhs)

The programme is to raise plantations of quick growing species. The provision is to meet the establishment charges and planting expenses.

##### 2. (a) Plantation of Economically Important Species

(Outlay Rs. 300 lakhs)

Forest Department will be raising plantations of various commercially important species like teak, softwood, rosewood, balsa etc., in 22360 hectares. The provision is towards planting expenses, construction of quarters, cost of staff and development of roads within the plantation areas. Part of the outlay is earmarked for the Special Component Plan.

##### (b) Sandal Wood Plantation

(Outlay Rs. 12 lakhs)

The provision is to meet the planting expenses and to carry out cultural operations in the existing sandalwood areas. It is also proposed to bring an additional area of 150 hectares under sandalwood plantation during the Plan period.

##### (c) Wattle Plantation

(Outlay Rs. 15 lakhs)

It is proposed to raise wattle plantation in 500 hectares in grass lands in Munnar Division during the plan period. The provision is to meet the expenditure connected with the planting work, cultural operation and construction of roads for the implementation of the scheme.

##### (d) Regeneration of Evergreen Forests

(Outlay Rs. 44 lakhs)

The object is to improve the yield of valuable timber species suitable for plywood and other industries

from Evergreen Forests. Tending operations are to be carried out to induce regeneration of valuable species and to carry out cultural operations to favour the existing regeneration and augment natural regeneration, wherever necessary, by artificial planting. The provision is for this purpose.

##### 3. Plantation Crops in Forests

##### (a) Cashew Plantations

(Outlay Rs. 24 lakhs)

It is proposed to raise new cashew plantations on suitable forest areas and to plant new seedlings in the place of diseased, dead and dying cashew trees in the plantation areas.

##### (b) Package Programme for Cashew

(Outlay Rs. 49 lakhs)

The scheme aims at augmenting the supply of seedlings, manuring of weak plants and spraying against pests and diseases.

##### (c) Supplemental Crops Plantations

(Outlay Rs. 30 lakhs)

The object of this scheme is the cultivation of pepper and medicinal plants as an inter crop in finally thinned teak plantation and pepper in softwood plantations. The provision is for meeting the planting cost, equipments, additional staff, maintenance of roads, construction of quarters etc.

#### VI. Social Forestry

##### 1. Farm Forestry

(Outlay Rs. 66 lakhs)

In order to encourage homesteaded forestry it is proposed to distribute 15 lakh seedlings of timber, matchwood, fuel, fodder species, fruit and ornamental trees free of cost. The provision is to meet the expenditure involved in the scheme. Part of the outlay is earmarked for Special Component Plan.

##### 2. Extension Forestry—Raising of Mixed Plantations

(Outlay Rs. 37 lakhs)

The scheme aims at raising mixed plantations outside reserve forest under social forestry. This is also a Centrally Sponsored Scheme transferred to State sector from 1979-80.

##### 3. Reforestation of Degraded Forests

(Outlay Rs. 13 lakhs)

The object of this scheme is the reforestation of degraded forests of over 3100 hectares during the plan period with species such as pines, eucalyptus, albizia and acacias. This is a Centrally Sponsored Scheme now transferred to the State sector.

##### 4. Recreation Forestry

(Outlay Rs. 10 lakhs)

It is proposed to extend facilities like places nature parks and nature trails picnic spots—guided tours—bridle paths and road side parks and camping grounds at places of recreational potential such as Neyyar, Ponnudi, Adirappally, Munnar, Thunakadavu and Wynad.

### 5. *Extension Forestry Organisation*

(Outlay Rs. 5 lakhs)

The scheme is for setting up an Extension Forestry Wing in the Department for effective implementation of social forestry programmes.

### 6. *Fuel Wood Plantations*

(Outlay Rs. 70 lakhs)

It is proposed to raise fuelwood plantations in 2200 hectares during the Plan period to meet the requirement of firewood. The provision is to meet the expenditure involved in the scheme.

## VII. *Wild Life and Environmental Conservation*

### 1. *Afforestation of Special Sites*

(Outlay Rs. 7 lakhs)

The provision is for planting 25 km. of trees along the reservoir fringes at Neyyar and Idukki to prevent soil wash into the lake and resultant silting of reservoirs.

### 2. *Wild Life Management and Conservation*

(Outlay Rs. 100 lakhs)

In accordance with the Government of India guidelines a beginning has been made to organise a wild life wing with the wild life wardens and necessary field staff and office staff. The developmental activities in the sanctuaries will include improvement of habitats like creating water and fodder resources, salt licks, prevention of grazing by local cattle etc. A safari park is also proposed to be opened. Construction of a snake park at Malampuzha will be taken up and completed. Works on maintaining and improving the crocodile breeding centres at Neyyar and Pillaperuvanna malavaram will be taken up. A separate scheme of protection of the endangered species of Lion Tailed Macaque will be launched.

The provision is to meet the expenditure involved in this scheme. Provision is also intended to provide matching contribution for the Centrally Sponsored Scheme under wild life.

### 3. *Protection of Forests*

#### (a) *Forest Protection*

(Outlay Rs. 100 lakhs)

The scheme aims at ensuring better protection of reserve forests, effective checking of illicit transport of forest produce from forests and efficient management of check posts. The provision is for additional staff, construction of checking stations, purchase of equipments etc.

#### (b) *Fire Protection*

(Outlay Rs. 110 lakhs)

The plantations raised by the Department have to be fire protected by engaging fire watchers and clearing fire lanes etc. The provision is for this purpose and also for the fire depot-cum-training centre at Kulamavu with assistance of New Zealand. Part of the outlay is earmarked for Special Component Plan.

## VIII. *Resource Development and Utilisation*

### 1. *Organisation for Extraction and Supply of Timber, Firewood and other forest produce—Mechanised Logging*

(Outlay Rs. 3.50 lakhs)

The provision is for forming an organisation for extraction, supply and distribution of timber,

fuel wood and other forest produce. It also provides for expenditure connected with land acquisition for stocking timber, training of workers in mechanised logging operation, extraction etc.

### 2. *Development of Forest Based Industries*

(Outlay Rs. 3.50 lakhs)

The scheme envisages the establishment of two wood based integrated industrial complexes. Each complex will consist of a saw mill, seasoning plant, treatment plant, a joinery, furniture unit, chippermill, particle board unit and a decorative veneer unit. This scheme also includes the project already proposed to be established at Nilambur for planting 42,000 hectares with teak and for setting up an integrated wood industry complex of saw mill, plywood factory, fibre plant, furniture unit etc.

### 3. *Development of Minor Forest Produce*

(Outlay Rs. 20 lakhs)

This scheme is for the maintenance of cardamom plantations under the Department. Considering the scope for increasing the production of Minor Forest Produce, cultivation of fodder, regeneration of canes etc. are some of the developmental activities that are envisaged under the scheme.

## IX. *Others*

### 1. *Forest Publicity—Public Relations Unit*

(Outlay Rs. 30 lakhs)

A Forest publicity wing will be established at Headquarters and in each circle with necessary staff and equipment such as projectors, films, vans etc. for field publicity. It is also proposed to produce pamphlets, folders and books and participate in exhibitions and also conduct short-term course for school teachers in nature conservation and forestry.

### 2. *Planning and Statistical Cell*

(Outlay Rs. 24 lakhs)

The scheme aims at improving the statistical base of the forestry sector. The provision is for meeting the expenditure on staff and equipment.

### 3. *Amenities to Labour and Tribal Welfare*

(Outlay Rs. 50 lakhs)

The outlay is to provide essential amenities like schools, wells, dispensaries, medical aid, store shed etc. Development of communications leading to the tribal settlements is also proposed as a part of the scheme.

### 4. *Assistance to Tribal Co-operative Societies for collection of Minor Forest Produce*

(Outlay Rs. 8 lakhs)

The scheme envisages providing financial assistance to tribal co-operatives for collection of minor forest produce.

5. *Elimination of Private Contract in the Forest Department*

(Outlay Rs. 0.50 lakh)

Government proposed to eliminate gradually the private contract system in the Forest Department and to create a separate wing for logging and marketing. The token provision is for this purpose.

6. *Constitution of Vested Forest Development Authority*

(Outlay Rs. 0.50 lakh)

It is proposed to constitute a Development Authority for vested forests for the proper utilisation of private forest lands taken over by the Government. The token provision is to meet the expenditure involved under this scheme.

TABLE 3.10

**Forests—Scheme-wise Outlay**

(Rs. in lakhs)

Sl. No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>I. Research, Education and Training</b>								
1.	Forest Research	3.72	8.00	8.00	40.00	15.00	8.00	3.00
2.	Education and Training of Personnel	5.46	7.00	7.00	45.00	5.00	7.00	..
Total: Research, Education & Training		9.18	15.00	15.00	85.00	20.00	15.00	3.00
<b>II. Inventory Planning and Resources Development</b>								
1.	Survey, Demarcation and settlement	2.16	7.00	7.00	45.00	15.00	5.00	3.00
2.	Forest Resources Survey	..	1.50	1.50	15.00	5.00	2.00	..
3.	Working Plans	..	0.50	0.50	5.00	1.00	1.00	..
4.	Cultural Operations	14.60	10.00	10.00	55.00	20.00	7.00	..
Total: Inventory Planning & Resources Development		16.76	19.00	19.00	120.00	41.00	15.00	3.00
<b>III. Organisation &amp; Institutions</b>								
1.	Intensification or Management	..	4.00	4.00	32.00	15.00	4.00	..
2.	K. F. D. C.	..	1.00	1.00	5.00	5.00	1.00	..
Total: Organisation & Institutions		..	5.00	5.00	37.00	20.00	5.00	..
<b>IV. Infrastructural Development</b>								
1.	Communications	15.68	28.00	28.00	200.00	200.00	30.00	30.00
2.	Buildings	9.56	27.00	27.00	150.00	150.00	28.00	28.00
3.	Engineering Wing	6.42	7.50	7.50	50.00	10.00	4.50	1.00
Total: Infrastructural Development		31.66	62.50	62.50	400.00	360.00	62.50	59.00
<b>V. Production Forestry</b>								
1.	Plantation of Quick Growing Species	6.82	8.00	8.00	59.00	40.00	8.00	5.00
2.	Plantation of Commercial uses							
A.	1. Teakwood		33.00	33.00	208.00	130.00		
	2. Softwood		8.00	8.00	62.00	50.00		
	3. Rosewood		0.50	0.50	5.00	3.00		
	4. Balsa		0.25	0.25	3.00	..		
	5. Bamboos		0.25	0.25	3.00	..		
	6. Miscellaneous Species		1.50	1.50	19.00	..		
		36.23					44.00	14.00
B.	Sandalwood Plantations	0.06	1.00	1.00	12.00	10.00	1.00	1.00
C.	Wattle Plantations	1.18	1.50	1.50	15.00	10.00	2.00	2.00
D.	Regeneration of Evergreen Forests	6.82	4.00	4.00	44.00	24.00	4.00	1.00
E.	Raising of Coffee Plantations	0.03	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>3. Plantation Crops in Forests</b>								
A. Cashew		4.42	2.00	2.00	24.00	15.00	2.00	2.00
B. Package Programme for Cashew Plantation		3.17	5.00	5.00	49.00	15.00	6.00	..
<b>4. Supplemental Crops (Vanalekshmy)</b>								
		5.22	16.00	16.00	30.00	10.00	11.00	4.00
<b>Total: Production forestry</b>		<b>63.95</b>	<b>81.00</b>	<b>81.00</b>	<b>533.00</b>	<b>307.00</b>	<b>78.00</b>	<b>29.00</b>
<b>VI. Social Forestry</b>								
1. Farm Forestry		1.385	5.00	5.00	66.00	15.00	5.00	..
2. Extension Forestry—Mixed Plantation		1.86	4.00	4.00	37.00	15.00	4.00	2.00
3. Reforestation of Degraded Forests		3.42	3.00	3.00	13.00	5.00	3.00	1.00
4. Recreation Forestry		0.36	2.00	2.00	10.00	10.00	1.00	1.00
5. Extension Forestry Organisation		..	4.00	4.00	20.00	5.00	4.00	1.00
6. Fuelwood Plantations		9.985	8.00	8.00	84.00	70.00	9.50	5.00
<b>Total: Social Forestry</b>		<b>17.01</b>	<b>26.00</b>	<b>26.00</b>	<b>230.00</b>	<b>120.00</b>	<b>26.50</b>	<b>10.00</b>
<b>VII. Wild Life and Environmental Conservation</b>								
1. Afforestation of Special Sites		1.19	0.50	0.50	7.00	5.00	1.00	1.00
2. Wild Life Management and Conservation		11.85	20.00	20.75	100.00	20.00	23.00	15.00
<b>3. Protection of Forests</b>								
A. Forest Protection		15.28	10.00	10.00	100.00	20.00	10.00	2.00
B. Fire Protection		15.24	20.00	20.00	110.00	20.00	20.00	2.00
<b>Total: Wild life &amp; Environmental Conservation</b>		<b>43.56</b>	<b>50.50</b>	<b>51.25</b>	<b>317.00</b>	<b>65.00</b>	<b>54.00</b>	<b>20.00</b>
<b>VIII. Resources Development and Utilisation</b>								
1. Mechanised Logging		0.13	0.50	0.50	3.50	..	0.50	..
2. Development of Forest based Industries		..	0.50	0.50	3.50	..	2.50	2.00
3. Development of M. F. P.		2.24	1.00	1.00	20.00	10.00	3.00	1.00
<b>Total: Resources Development &amp; Utilisation</b>		<b>2.37</b>	<b>2.00</b>	<b>2.00</b>	<b>27.00</b>	<b>10.00</b>	<b>6.00</b>	<b>3.00</b>
<b>IX. Others</b>								
1. Forest Publicity		4.48	6.00	6.00	30.00	5.00	6.00	2.00
2. Planning and Statistical Cell		3.55	4.50	4.50	24.00	..	4.00	..
3. Amenities Staff and Labourer		1.49	10.00	10.00	50.00	50.00	10.00	8.00
4. Tribal Co-operative Societies for Collection of MFP—Grant in Aid		2.14	2.50	2.50	8.00	..	3.00	1.00
5. Elimination of Private Contract in the Forest Department		..	0.001	..	0.50	..	0.001	..
6. Constitution of a Vested Forest Development Authority		..	0.001	..	0.50	..	0.001	..
7. Other Schemes		..	1.002	1.002	..	..	..	..
<b>Total: Others</b>		<b>11.66</b>	<b>24.004</b>	<b>24.002</b>	<b>113.00</b>	<b>55.00</b>	<b>23.002</b>	<b>11.00</b>
<b>Total -Forests</b>		<b>196.15</b>	<b>285.004</b>	<b>285.752</b>	<b>1862.00</b>	<b>998.00</b>	<b>285.00</b>	<b>133.00</b>

## Investment in Agricultural Financial Institutions

(Outlay Rs. 1100 lakhs)

The Kerala Co-operative Central Land Mortgage Bank Limited has to mobilise resources through

debentures for providing loan finance for various agricultural development programmes. The provision is meant for State Government's contribution towards debentures to be floated by Kerala Co-operative Central Land Mortgage Bank during the Sixth Plan period.

TABLE 3.11

### Investments in Agricultural Financial Institutions Outlay and Expenditure

(Rs. lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Kerala Co-operative Central Land Mortgage Bank—Purchase of Debentures	109.88	150.00	150.00	1100.00	1100.00	150.00	150.00

## Community Development and Panchayats

### A. Community Development

#### 1. C.D. Programmes

##### (i) Agriculture

(Outlay Rs. 27.5 lakhs)

It is proposed to give assistance in kind such as seeds, seedlings etc. to the weaker sections for raising kitchen gardens. It is also proposed to popularise intensive farm development programmes and other methods of scientific cultivation among the farmers. The outlay is to meet the expenditure on these.

##### (ii) Minor Irrigation

(Outlay Rs. 28 lakhs)

The outlay proposed under the scheme is meant for meeting the expenditure on Minor irrigation works and giving grants to individual farmers for purchasing pumpsets, digging wells, constructing tanks etc.

##### (iii) Animal Husbandry

(Outlay Rs. 22.5 lakhs)

Expansion of activities like poultry keeping and goat rearing will help the rural people to generate additional income. They will be encouraged to take up such activities by providing financial assistance for construction of cattle sheds and poultry runs.

##### (iv) Industries

(Outlay Rs. 5 lakhs)

The outlay is for giving assistance to the rural artisans, village craftsmen etc. for purchase of improved tools and equipment. Assistance will also be provided for starting village industries.

##### (v) Education

(Outlay Rs. 60 lakhs)

The main activity envisaged under the scheme is provision of assistance to organisations like Mahila

Samajams, youth clubs, sports clubs etc. for carrying out their socio-development works and other literary and cultural programmes aimed at improving the literary and educational standards of the rural masses.

##### (vi) Health and Sanitation

(Outlay Rs. 4 lakhs)

This scheme is meant for improving the health conditions, environmental sanitation and cleanliness of living atmosphere of the weaker sections of society. Construction of urinals and supply of squatting slabs are the other activities proposed under this scheme. The outlay provided is for meeting the expenditure in connection with the above items of work.

##### (vii) Roads

(Outlay Rs. 5 lakhs)

The objective of the scheme is construction of foot bridges, culverts and link roads in the remotest parts of the villages with people's participation. The entire amount is intended for the benefit of scheduled castes and scheduled tribes and the scheme has substantial employment content.

##### (viii) Strengthening of Block Administration

(Outlay Rs. 35 lakhs)

The outlay is for meeting the additional administrative expenditure on strengthening of staff and providing training facilities to them. It is also proposed to strengthen the block machinery at various levels.

#### 2. Extension—Strengthening of Supervisory Machinery for Women Workers

(Outlay Rs. 3 lakhs)

The scheme aims at strengthening of supervisory machinery for women workers. The outlay is for meeting the expenditure towards the pay and allowances of the co-ordinator, special officers and district officers of women's welfare.

### 3. *Demonstration and Training* (Outlay Rs. 12 lakhs)

The scheme is for continuing the training programmes for official and non-official functionaries conducted at the extension training centres.

### 4. *Publication of Monthly Journal 'Gramabhoomi'* (Outlay Rs. 5 lakhs)

The provision is for meeting the expenditure towards printing and publishing of the monthly journal 'Gramabhoomi'.

### 5. *National Rural Employment Programme* (Outlay Rs. 2400 lakhs)

The major objectives of the scheme are (i) to create employment opportunities in rural areas by undertaking schemes of labour intensive type (2) to strengthen the rural infrastructure for the rapid growth of rural economy by creating durable community assets especially with people's participation and (3) to improve the general standard of living of the rural people.

The panchayats can play a vital role in the implementation of the scheme. Hence they have to be properly motivated by provision of adequate technical and financial support. The NREP includes the scheme, 'Grants to Panchayats' and is implemented in accordance with the guidelines of the Central Government. The outlay is for meeting the state's share of the expenditure on the scheme.

### 6. *UNICEF Assisted Schemes* (Outlay Rs. 54 lakhs)

The major UNICEF assisted schemes are (i) Assistance to Mahilasamajams and Youth clubs for production programmes (such as goat rearing soap making etc.) (2) Training programmes (for different functionaries in rural areas) (3) Awards to Mahilamandals (for outstanding performance) (4) purchase and supply of garden tools for farmers and (5) Assistance to farmers for purchase of seeds and fertilisers. The outlay envisaged is for meeting the State's share of the expenditure on these programmes.

## B. Panchayats

### 1. *Training Institutions in Local Administration* (Outlay Rs. 25 lakhs)

The outlay is for meeting the establishment charges and investment on buildings for training institutes to impart training to the official and non-official personnel of panchayat administration which would contribute to efficient administration of the local bodies.

### 2. *Publication of Panchayat Raj Journal* (Outlay Rs. 10 lakhs)

The Panchayat Raj Journal is the monthly publication conveying information and knowledge on the progress and achievements in the socio cultural and developmental activities of the panchayats. This also helps to propagate the ideas of planning and mass co-operation among the rural population. The outlay is for meeting the printing and publishing charges of the journal.

### 3. *Loans to Panchayats* (Outlay Rs. 500 lakhs)

This scheme is meant for providing Loans to Panchayats for the creation of remunerative community assets in Panchayat areas.

### 4. *Environmental Amenities for the poor* (Outlay Rs. 444 lakhs)

The aim of the scheme is to provide living amenities like drinking water, power, sanitation, approach roads etc., to the rural population especially the beneficiaries of the 'One lakh housing scheme and inhabitants of the Harijan and Girijan colonies who are badly in need of these amenities. The outlay for this scheme will be utilised for the provision of the aforesaid amenities.

## C. Rural Development Board

### *Remunerative Development Schemes* (Outlay Rs. 500 lakhs)

The outlay proposed is for providing assistance to the rural development board for the construction of shopping centres, market stalls, lodging houses, office buildings etc. These works are undertaken by the Board through the PWD on specific requests from the panchayats in the locations recommended by them and after the completion of the schemes they are handed over to the panchayats.

TABLE 3-12

### Community Development and Panchayats—Scheme-wise Outlay and Expenditure

(Rs. lakhs)

Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

#### A. Community Development

##### 1. C.D. Programmes

(i) (a) Agriculture	10.40	4.50	4.50	25.00	..	4.50	..
(b) Special Component Plan for Scheduled Castes and Scheduled Tribes	..	0.50	0.50	2.50	..	0.50	..



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(ii) (a) Minor Irrigation	8.56	5.67	5.67	25.00	..	5.67	..
(b) Special Component Plan for Scheduled Castes and Scheduled Tribes	..	0.63	0.63	3.00	..	0.63	..
(iii) (a) Animal Husbandry	8.75	4.05	4.00	20.00	..	4.00	..
(b) Special Component Plan for Scheduled Castes and Scheduled Tribes	..	0.45	0.50	2.50	..	0.50	..
(iv) (a) Industries	1.10	0.90	0.90	4.50	..	0.90	..
(b) Special Component Plan for Scheduled Castes and Scheduled Tribes	..	0.10	0.10	0.50	..	0.10	..
(v) Education	8.88	12.00	12.00	60.00	..	11.70	..
(vi) (a) Health and Sanitation	0.01	0.40	0.40	2.00	..	0.40	..
(b) Environmental Sanitation—Special Component Plan	0.85	0.40	0.40	2.00	..	0.60	..
(vii) Roads—Special Component Plan	2.01	1.00	1.00	5.00	..	1.00	..
(viii) Strengthening of Block Administration	2.60	6.50	16.50	35.00	..	6.50	..
2. Extension—Strengthening of Supervisory Machinery for Women Workers	0.19	0.50	0.50	3.00	..	0.50	..
3. Demonstration and Training	1.07	2.00	2.00	12.00	..	2.50	..
4. Publication of Monthly Journal "Gramabhoomi"	..	0.40	0.40	5.00	..	1.00	..
5. National Rural Employment Programme—State's Share	32.82	31.50	811.50	2400.00	..	600.00	..
6. Maintenance and Improvement of Village Roads	0.79	..	..	..	..	..	..
7. (a) Special programme for Rural Poor	33.59	47.70	..	..	..	..	..
(b) Special Component Plan for Scheduled Castes and Scheduled Tribes	1.41	5.30	..	..	..	..	..
8. Command Areas, DPA, SFDA, IRDP	104.00	..	..	..	..	..	..
9. UNICEF Aided Scheme							
(a) Assistance to Mahila Samajams and Youth Clubs for Production Programmes	..	..	..	30.00	..	..	..
(b) Training Programmes	..	..	..	5.00	..	..	..
(c) Awards to Mahila Mandals	..	..	..	4.00	..	..	..
(d) Purchase and Supply of Garden Tools	..	..	..	7.50	..	..	..
(e) Purchase and Supply of Seeds, Seedlings and Fertilisers	..	..	..	7.50	..	..	..
Total (A)	217.03	124.50	861.50	2661.00	..	641.00	..
<i>B. Panchayats</i>							
1. Training Institutions in Local Administration	1.82	4.00	4.00	25.00	..	6.00	..
2. Publication of Panchayat Raj Journal	1.46	1.00	1.00	10.00	..	3.00	..
3. Assistance to Panchayat Raj Institutions—Loans to Panchayats	8.85	10.00	260.00	500.00	..	113.00	..
4. Environmental Amenities to the Poor	..	..	100.00	444.00	..	55.00	..
5. Government Properties Leased out at subsidised Rates—Grant-in-aid	0.17	..	..	..	..	..	..
Total (B)	12.30	15.00	365.00	979.00	..	179.00	..
<i>C. Rural Development Board</i>							
1. Remunerative Development Schemes	55.00	60.50	60.50	500.00	500.00	100.00	100.00
Total (C)	55.00	60.50	60.50	500.00	500.00	100.00	100.00
Total—Community Development and Panchayats	284.33	200.00	1287.00	4140.00	500.00	920.00	100.00

## Co-operation

3.2 The period between 1970 and 1980 was a decade of spectacular growth and development for the co-operative movement in Kerala. Membership of co-operative credit societies in the State during the period 1973-74 to 1978-79 increased by 61 per cent, paid up share capital by 63 per cent, deposit by 400 per cent and loans advanced by 173 per cent. As on 30-6-1979 the percentage of overdues had come down to 19.6 per cent in respect of the loans to primary agricultural credit societies and 9.85 in respect of loans to District Co-operative Banks as against 29.3 per cent and 14 per cent during 1977-78. Sixty-three A.R.D.C. schemes were under implementation by the Kerala Central Co-operative Land Mortgage Bank for the development of agriculture and allied activities in the State. The unemployment relief measures of the State Government are being now administered through the Co-operative institutions.

As regards the reorganisation of primary agricultural credit societies, there were 1630 societies at the end of 1977-78 out of which 1200 were viable. Sixty-seven per cent of the rural population and 65 per cent of the agricultural families were covered by primary agricultural credit societies. All the District Co-operative Banks were viable and their deposits at the end of 1977-78 amounted to Rs. 70.15 crores.

In 1977-78 there were 154 Primary Housing Societies and one Apex Housing Co-operative in the State. Till 1977-78 loans were sanctioned for the construction of 4631 houses of which 3138 were completed. Two Collective Farming Societies, 9 Joint farming societies, 11 labour contract societies were organised. Till the end of 1977-78 assistance was provided for the construction of 92 marketing godowns and 1126 rural godowns. Out of these 84 marketing godowns and 998 rural godowns have been completed. Eighty College Co-operative Societies and 2000 School Co-operatives were newly organised during the period 1974-78. Nineteen new Harijan/Girijan Service Co-operatives were also registered during the period. Fifty-nine Co-operative rural hospitals, 9 taxi drivers' co-operative societies, 22 autoriksha drivers' co-operative societies, 3 printing and publishing co-operative societies, 19 labour contract societies, and 28 primary consumer stores were organised during the period 1974-78 under the special employment programme. Till the end of the year 1979-80 assistance was provided for the construction of 1381 godowns with an estimated storage capacity of 1.43 lakh tonnes and for the organisation of 38 processing units under co-operative sector out of which 24 units have already been commissioned.

The total outlay on co-operation during the period 1974-78 was Rs. 739 lakhs. The actual expenditure was Rs. 543.53 lakhs.

The broad objective of the State's Sixth Five Year Plan (1980-85) under co-operative sector is to consolidate and strengthen the co-operatives as a democratic and viable structure. Co-operative movement is to be developed as a self reliant movement by augmenting the resources through mobilisation of savings in rural and urban areas and thus reducing the dependence on resources from outside agencies. In rural and urban areas a strong, viable and integrated co-operative system

shall be built up to promote integrated rural development by strengthening the links between credit, supply of agricultural inputs processing and marketing of agricultural produce and distribution of essential commodities. Co-operatives of miscellaneous types will be promoted to help the weaker sections of the community to expand their traditional business as well as to start new ventures for self employment.

The co-operatives shall be built up and promoted as efficient institutions by posting competent managerial personnel. The consumer co-operatives will be properly equipped to follow better business practices in selection of commodities, procurement, supply, management, processing, sales promotion etc. with an eye to substantial increase in the share of co-operatives in the retail sales of consumer goods in rural as well as in urban areas.

The strategy in the field of agricultural credit is to fully equip the co-operative credit societies/banks to function as the principal agency for dispensing credit for agricultural and allied purposes and for non agricultural productive purposes such as cottage and small scale industries, self employment programmes etc. The co-operatives are expected to meet at least 60 per cent of the total agricultural credit requirement of their members in the terminal year of the Plan period. Reorganisation of primary agricultural credit societies into strong and viable multi purpose units capable of undertaking multifarious activities, efficient management of the societies by professionally trained personnel, simplification of loaning procedure, liberalisation of the stipulated ratio between share capital and borrowings, reduction of overdues, strengthening of supervision, inspection and audit of the institutions etc., are the main programmes to be implemented during the plan period.

Considering the shortage of housing accommodation in the State the housing cooperatives are to be adequately strengthened in order to undertake house construction programme in a big way. This calls for reorganisation of housing co-operatives and organisation of new primary housing co-operatives in areas not covered so far.

The programme under labour contract societies for the year 1980-85 is to revitalise the existing labour contract societies and also to organise new ones wherever necessary.

Since the performance of co-operative farming societies is not encouraging, attempts will be made to revitalise collective/joint farming societies. An earnest endeavour will be made to organise better farming societies for helping the ryots who are beneficiaries of land reform measures.

The strategy of the Sixth Plan in the sphere of consumer co-operatives is to revitalise the existing primary stores wherever possible, and organise new societies wherever necessary so as to cover all the urban and semi-urban areas and gradually to dispense with the retail outlets of the wholesale stores in such areas. This will enable the wholesale stores of those areas to concentrate on wholesale trade only. Weak wholesale stores will also be revitalised.

Greater importance will be given to agricultural marketing including supply of agricultural production

requisites and processing of agricultural produce in the Sixth Plan. The objective will be to suitably strengthen and revitalise the co-operative marketing structure and also to equip the primary credit co-operatives to step up the marketing activities so that greater social control of the marketing systems will be ensured. This may bring about stability in income and a change in the distribution of income generated in the agriculture sector in favour of producers.

Reorganisation and revitalisation of harijan/girijan cooperative societies will be given high priority and pursued vigorously.

The schemes proposed during the plan period 1980-85 under co-operation are given below:

**I. Direction and administration**  
*Information and publicity:*

(Outlay Rs. 5 lakhs).

**1. Publication of co-operative Journal:**

The provision made in the plan is for meeting the capital and revenue expenses involved in the publication of periodicals, pamphlets and other department journals and also for meeting the cost of additional staff in the publication wing of the Co-operative Department.

**2. Reorganisation of the Co-operative Department:**

(Outlay Rs. 132 lakhs).

The Estimates Committee on Co-operation has recommended, among other things, a thorough reorganisation of the Department of Co-operation on a functional basis for more effective implementation of plan schemes and discharge of statutory duties such as inspection, supervision and audit of accounts of co-operatives etc. The amount provided is for meeting the expenditure in connection with the reorganisation of the Department.

**II. Credit Co-operatives**

**A. Long term Cooperation Financed Schemes—Share capital Contribution to Credit Co-operatives**

(Outlay Rs. 400 lakhs).

The loaning programmes proposed to be achieved by the end of the Sixth Plan period is Rs. 170 crores under short term credit, Rs. 50 crores under medium term credit and Rs. 36 crores under long term credit. In order to sustain the loaning programme, the share capital base of the co-operative banks has to be strengthened so as to enable them command adequate borrowing capacity. The provision is for the payment of share capital contribution to the District Co-operative Banks, primary agricultural credit societies, Kerala Co-operative Central Land Mortgage Bank, Primary Land Mortgage Banks and Urban Co-operative Bank under Long Term Operation Fund of the Reserve Bank of India.

**B. Other Schemes relating to Co-operative Credit Societies**

**(1) Managerial Assistance and Other Support Programmes**

(Outlay Rs. 100 lakhs).

The outlay proposed is for the payment of managerial assistance and also to meet the cost of promotional activities and extension support for the rehabilitation of

weak co-operative credit institutions at the base level. The provision will also be utilised for the diversification of activities especially in the field of marketing and processing taken by the primary credit institutions.

**(2) Interest subsidy on Loans**

(Outlay Rs. 310 lakhs)

The schemes for payment of interest subsidy at the rate of 3 per cent on the loans given for agricultural and self employment purposes will be continued during the Sixth Plan period. It is also proposed to waive the interest on loans to small and marginal farmers for agricultural purposes prior to 1-4-1976 and outstanding as on 31-3-1980. Similarly interest on loans given to Harijans/Girijans will be subsidised in full by the State Government. The provision is to meet the expenditure for implementing the above schemes. As the entire expenditure on interest subsidy cannot be met from the present plan funds, the scheme has either to be treated as a non plan scheme or special funds are to be provided in the Plan for its implementation.

**(3) Outright Grant for Special Bad Debt Reserve Fund/ Risk Fund**

(Outlay Rs. 100 lakhs).

The provision is to create a Special Bad Debt Reserve Fund/Risk Fund at the District level to meet any unforeseen contingency that may arise in the ordinary course of transactions of credit co-operatives at the base level. The idea is to modify the existing scheme to cover more institutions and purposes.

**(4) Incentive Grant for Deposit Mobilisation and Deposit Guarantee Scheme**

(Outlay Rs. 120.45 lakhs)

The provision is for giving grant as incentives to Primary Credit Societies to augment their resources by deposit mobilisation. It is also proposed to formulate a credit guarantee scheme to protect the interests of depositors of primary agricultural credit societies which do not come under the purview of Banking Regulation Act.

**(5) Agricultural Credit Stabilisation Fund**

(Outlay Rs. 0.50 lakhs)

The provision is for meeting 50 per cent State contribution to the centrally sponsored scheme for agricultural credit stabilisation for the year 1980-81. As it has now become a fully Centrally assisted scheme, no provision is made for the remaining period of the plan.

**(6) Urban Co-operative Banks—Subsidy for the Construction of Building**

(Outlay Rs. 20 lakhs).

The provision is for payment of subsidy to urban co-operative Banks for construction of buildings.

**III. Housing Co-operatives—Managerial Subsidy**

(Outlay Rs. 30 lakhs.)

The Kerala State Co-operative Housing Federation's programme for 1980-85 is to assist the construction of 38350 houses. The total cost of programme is of the orders of Rs. 69 crores. The borrowing capacity of the Federation is 20 times the paid up share capital. The Federation has a borrowing capacity of Rs. 2590 lakhs as on 31-3-1980. As such the share capital of the Federation has to be strengthened by Rs. 217 lakhs for

implementing the loaning programme under housing envisaged in the Plan period. The outlay proposed is for payment of managerial assistance to Primary Housing Co-operatives and subsidy for technical staff of the Housing Federation.

#### IV. Labour Contract Co-operatives

- (1) *Managerial Subsidy* (Outlay Rs. 5.50 lakhs)

The provision is for giving managerial assistance to 50 Labour Contract Co-operative Societies during the Plan period.

- (2) *Share Capital Contribution* (Outlay Rs. 2 lakhs)

The outlay is for payment of share capital contribution to 50 Labour Contract Co-operative Societies.

#### V. Farming Co-operatives (Outlay Rs. 29.20 lakhs)

The outlay is for giving the following kinds of assistance to the Joint Farming and Collective Farming Societies during the plan period:

- (1) Share Capital Contribution.
- (2) Loan-cum-Subsidy for the Construction of Office-cum-godown.
- (3) Managerial Subsidy
- (4) Subsidy for the Purchase of Farm Implements/Inputs.

#### VI. Storage, Warehousing, Marketing Co-operatives:

- (1) *Subsidy for Construction of Godowns* (Outlay Rs. 70 lakhs)

It is programmed to construct 345 rural godowns for primary Agricultural Credit Societies, 28 marketing godowns for Marketing Co-operatives and 40 godowns for tribal co-operatives during the plan period with N.C.D.C. assistance. The outlay proposed is for meeting the subsidy portion of the cost of construction of godowns by the State Government.

- (2) *Share Capital Contribution to Marketing/Processing Co-operatives* (Outlay Rs. 205 lakhs)

As lack of linkage between credit and marketing is a serious problem in the development of agriculture, efforts will be made to strengthen the existing marketing and processing co-operatives at different levels and also to organise new co-operatives wherever necessary. Weak units will be rehabilitated. Agricultural credit societies will be encouraged to take up marketing activities also. The provision is for the payment of share capital contribution to the marketing and processing societies for expansion of marketing activities and also to the primary agricultural credit societies which take up marketing activities.

- (3) *Price Fluctuation Fund* (Outlay Rs. 10 lakhs)

The outlay proposed is for giving Government contribution towards the special price fluctuation fund of marketing and processing co-operatives.

- (4) *Managerial Subsidy to Primary Marketing/Processing Co-operatives* (Outlay Rs. 35 lakhs)

The amount provided is to meet the cost of promotional and extension activities proposed to be taken up during the plan period for the development of marketing Co-operatives. The provision includes managerial subsidy to primary marketing/processing societies and primary agricultural credit societies undertaking marketing/processing activities.

#### VII. Processing Co-operatives

- Share Capital Contribution* (Outlay Rs. 60 lakhs)

For the establishment of new processing units or rehabilitation of existing ones NCDC provides 65 per cent of the block cost by way of loan. The rest of the cost is to be met by the State Government and the concerned society. The outlay is for giving the State Government's share of assistance towards the establishment of 16 new processing units and for spill over schemes. Outlay also includes basic share capital contribution to marketing co-operatives for undertaking processing activities.

#### VIII. Consumer Co-operatives

- (1) *Reorganisation of Co-operative Consumer Activities* (Outlay Rs. 140 lakhs)

It is necessary to strengthen the co-operative consumer activities at all levels to expand the coverage of population by consumer co-operatives and increase their command over the wholesale and retail trade in consumer items so as to realise the object of stabilisation of prices of essential goods. With this aim, a comprehensive scheme for the reorganisation of consumer activities by co-operatives in the urban and rural areas in the State will be implemented during the Plan period. The outlay is intended for payment of share capital contribution, managerial assistance, assistance for quality testing laboratory, storage, vehicles, furniture and fixtures and salary of project officers appointed for formulation and implementation of this scheme.

- (2) *Student Stores* (Outlay Rs. 15 lakhs)

The Plan outlay is for giving working capital grant and managerial subsidy to school and college co-operatives and share capital contribution to Central College Co-operative stores, which undertake the centralised purchase and distribution of essential consumer articles needed by student community at reasonable prices.

- (3) *Loan-cum-subsidy to Lead Societies under Rural Consumer Scheme for Construction of Office-cum-Godown* (Outlay Rs. 24 lakhs)

Under the rural consumer scheme primary societies with retail consumer outlets are grouped together and attached to a lead society to facilitate purchase and distribution of essential articles in bulk. Door delivery of articles will also be undertaken by the lead societies. The provision is for giving assistance to the lead societies by way of loan and subsidy for the construction of office-cum-godown.

### IX. Audit of Co-operatives

(Outlay Rs. 5 lakhs)

The outlay proposed is for meeting the contingent expenditure towards the publication of Audit Manual and also for meeting the expenditure towards the revision of audit forms, audit certificates etc. A committee of experts consisting of officials and non-officials will be constituted for this purpose.

### X. Co-operative Education

#### (1) Expansion of Co-operative Training College

(Outlay Rs. 10 lakhs)

The provision is for giving grant to Co-operative Training College, Trivandrum, for expansion of its facilities including construction of building so as to organise new inservice course for Co-operative Department and institutional personnel.

#### (2) Grant to Circle Co-operative Union

(Outlay Rs. 8 lakhs).

The outlay is for meeting a portion of the cost of departmental officers working as full time secretaries in Circle Co-operative Unions.

#### (3) Non-official Education/Seminars/Study tours/Award of Prizes

(Outlay Rs. 19 lakhs)

The outlay is for payment of grant to State Co-operative Union for meeting the expenses towards the members' education programme. This includes expenditure towards conducting Seminars on co-operative education, conference of department and institutional personnel study tours, award of prizes etc.

### XI. Research and Training in Co-operation

(Outlay Rs. 23 lakhs)

The outlay is for the payment of grant to State Co-operative Union for meeting the expenses towards the Junior Personnel Training Centres, grant to State Co-operative Union for the construction of buildings for co-operative training centres, and for meeting the T.A. and D. A. expenses of Departmental Officers deputed for various training courses refresher courses etc.

### XII. Other Co-operatives

#### (1) Harijan/Girijan Co-operatives

(Outlay Rs. 173 lakhs)

The programmes envisaged in the Sixth Plan include reorganisation of dormant Harijan/Girijan Co-operatives into active societies Organisation of such societies in areas where Harijan/Girijans are concentrated, strengthening their management and supervision, organisation of Central Tribal Co-operatives one in each Tribal Sub Plan area, organisation of a Federation of Harijan/Girijan Co-operatives etc. Further Harijan/Girijan Co-operatives will be assisted by way of share grant for taking membership in co-operative societies. The outlay proposed is for giving the following types of assistance.

- (i) Working Capital Grants
- (ii) Managerial Subsidy
- (iii) Building Grant
- (iv) Share Capital Contribution.
- (v) Share Grant to Harijan/Girijans
- (vi) Strengthening of Supervision of Harijan/Girijan Societies.
- (vii) Tribal Area Sub Plan.

#### (2) Women's Co-operatives

(Outlay Rs. 5 lakhs)

Efforts will have to be made to associate women with the activities of the co-operative institution, as they can play an important role in the activities of consumer and marketing co-operatives and also in the activities of primary agricultural credit societies in the work of deposit mobilisation. The amount provided is to meet the expenditure in connection with setting up a women's wing attached to primary agricultural credit societies and to give financial assistance to women's co-operative societies to expand and diversify their activities.

#### (3) Co-operative Hospitals/Dispensaries

(Outlay Rs. 45 lakhs)

The outlay is for providing share capital contribution, managerial subsidy and loan for construction of building to co-operative hospitals/dispensaries.

#### (4) Employees Co-operative Societies

(Outlay Rs. 8 lakhs).

Provision is made for payment of managerial subsidy, rent reimbursement subsidy and share capital contribution to Government employees' co-operative societies and other employees' co-operative societies.

#### (5) Irrigation Co-operatives

(Outlay Rs. 20 lakhs)

This is a new scheme proposed in the supplementary Annual Plan proposals 1980-81. The scheme aims at providing water to the holdings of individual farmers from the point at which water is delivered by major/minor/lift irrigation projects, by constructing field channels. The societies will construct minor irrigation channels upto the holdings of individual member farmers. Government will provide 50 per cent of the cost as subsidy, the other 50 per cent being raised by the societies through institutional finance. The provision is for implementing the scheme during the Sixth Plan period.

#### (6) Co-operatives Organised for Promotion of Employment

(Outlay Rs. 39 lakhs)

Co-operatives for the promotion of employment opportunities will be given special importance during the plan period. Under this scheme, managerial, subsidy will be provided to autorickshaw and taxi drivers' co-operatives and co-operative printing presses. Share capital contribution by way of margin money will be provided to societies like autorickshaw drivers' co-operatives, taxi drivers' co-operatives, job workers' co-operatives, balawadi co-operatives, literary co-operatives, agro industrial co-operatives, motor transport co-operatives, co-operative printing societies and other miscellaneous types of co-operatives based on viable projects and in accordance with the approved pattern of assistance. The autorickshaw drivers' co-operatives will be provided with additional share capital contribution to organise spare parts stores and workshops. The outlay is for giving financial assistance to the above societies.

### XIII. Loans in respect of N.C.D.C. Schemes

(Outlay Rs. 10 lakhs)

The outlay provided is for giving loans in respect of N.C.D.C. schemes implemented by the Co-operative Department.

TABLE 3.13  
Co-operation—Scheme-wise Outlay

Sl. No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<b>I. Direction and Administration</b>								
1	Publication of Co-operative Journal	0.57	1.00	0.10	5.00	..	1.00	..
2	Re-organisation of the Co-operative Department	1.93	10.00	2.00	195.00	..	25.00	..
Total: Direction & Administration		2.50	11.00	2.10	200.00	..	26.00	..
<b>II. Credit Co-operatives</b>								
<b>(A) I.T.O. Financed Schemes—Share Capital Contribution to Credit Co-operatives</b>								
		85.77	145.00	145.00	330.00	330.00	40.00	40.00
<b>(B) Credit Co-operatives—Other Schemes</b>								
1	Managerial Subsidy and Other Support Programmes	0.62	2.65	1.20	100.00	..	25.00	..
2	Interest Subsidy on Loans	50.00	30.00	593.38	310.00	..	45.00	..
3	Outright Grant for 'Special Bad Debt Reserve Fund/Risk Fund'	0.77	2.00	3.00	40.00	..	15.00	..
4	Incentive Grant for Deposit Mobilisation and Deposit Guarantee Scheme	3.40	6.50	20.80	90.95	..	33.00	..
5	Agricultural Credit Stabilisation Fund	..	0.50	..	2.00	..	..	..
6	Urban Co-operative Banks—Subsidy for Construction of Buildings	..	..	..	20.00	..	5.00	..
Total: Credit Co-operatives		146.56	186.65	763.38	892.95	330.00	163.00	40.00
<b>III. Housing Co-operatives—Managerial Subsidy</b>								
		1.93	5.30	2.82	30.00	..	5.50	..
<b>IV. Labour Contract Co-operative Societies</b>								
1	Managerial Subsidy	0.28	0.20	0.30	5.50	..	1.00	..
2	Share Capital Contribution	0.61	0.30	0.30	2.00	2.00	0.50	0.50
Total: Labour Contract Co-operative Societies		0.89	0.50	0.60	7.50	2.00	1.50	0.50
<b>V. Farming Co-operatives</b>								
1	Financial Assistance to Farming Co-operative Societies	.45	4.00	1.30	29.20	16.00	5.00	3.60
<b>VI. Storage, Warehousing and Marketing Co-operatives:</b>								
1	Subsidy for Construction of Godowns	4.23	5.00	5.00	55.00	..	10.00	..
2	Share Capital Contribution to Marketing/Processing Co-operatives	16.08	10.00	12.00	220.00	150.00	50.00	40.00
3	Price Fluctuation Fund	0.01	0.10	0.10	10.00	..	2.00	..
4	Managerial Subsidy to Primary Marketing/Processing Co-operatives	0.92	2.00	2.00	35.00	..	4.00	..
Total: Storage, Warehousing and Marketing Co-operatives		21.24	17.10	19.10	320.00	150.00	66.00	40.00
<b>VII. Processing Co-operatives—Share Capital Contribution</b>								
		4.66	5.00	3.00	60.00	60.00	15.00	15.00
<b>VIII. Consumer Co-operatives</b>								
1	Reorganisation of Co-operative Consumer Activities	33.99	14.60	42.05	206.00	140.00	35.00	21.00

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2 Student Stores		12.58	11.50	12.75	54.35	15.00	6.00	2.00
3 Loan-Cum-Subsidy to Lead Societies Under Rural Consumer Scheme for Office-cum-godowns		2.57	3.50	3.50	35.00	24.00	4.00	3.00
Total—Consumer Co-operatives		49.14	29.60	58.30	295.35	179.00	45.00	26.00
<b>IX. Audit of Co-operatives</b>		..	..	..	5.00	..	1.00	..
<b>X. Co-operative Education</b>								
1 Expansion of Co-operative Training College		3.23	5.00	5.00	10.00	..	1.00	..
2 Grant to Circle Co-operative Union		0.35	2.00	1.00	8.00	..	3.00	..
3 Non-official Education, Seminars, Study Tours and Award of Prizes		1.98	3.00	2.25	19.00	..	5.00	..
Total: Co-operative Education		5.56	10.00	8.25	37.00	..	9.00	..
<b>XI. Research and Training in Co-operation</b>		4.71	3.10	4.85	23.00	..	5.00	..
<b>XII. Other Co-operatives</b>								
1 Harijan/Girijan Co-operatives		17.22	22.70	30.70	173.00	46.00	33.50	2.00
2 Women's Co-operatives		0.30	0.65	0.65	5.00	2.00	3.00	1.00
3 Co-operative Hospitals/Dispensaries		2.61	9.70	25.71	45.00	37.00	11.00	6.25
4 Employee's Co-operatives		0.32	2.25	2.20	8.00	4.00	1.50	1.20
5 Assistance to Co-operative Undertaking Minor Irrigation Works		..	..	..	20.00	..	4.00	3.00
6 Co-operatives Organised for Promotion of Employment		10.07	12.45	72.45	39.00	25.00	10.00	6.00
Total: Other Co-operatives		30.52	47.75	131.71	290.00	114.00	63.00	19.45
<b>XIII. Loans in respect of NCDG Schemes</b>		7.22	..	..	10.00	..	..	..
Total: Co-operation		275.38	320.00	995.41	2200.00	851.00	405.00	144.55

### 3.3 IRRIGATION, FLOOD CONTROL, ANTI-SEA EROSION AND POWER

#### Irrigation

Irrigation can play a vital role in achieving the objective of increasing agricultural production, mainly through multiple cropping in the same area and raising yields. Though Kerala gets good rainfall, because of the uneven distribution during the different agricultural seasons and the heavy surface runoff due to undulating topography, it is essential to build up irrigation systems to stabilize crop production. Irrigation of food crop areas assumes high priority in planning as food production in the state is hardly 50 percent of the State's requirement.

The cultivable area in Kerala is assessed at 23 lakh ha. of which economically irrigable wet land is about 6 lakh ha. and irrigable garden land is about 10 lakh ha. Thus irrigation potential of Kerala is 16 lakh ha. (net) or 25 lakh ha. (gross). Of this the area that can be irrigated by major and medium irrigation projects is estimated to be 6 lakh ha. (net) or 14 lakh ha. (gross). As in March 1980 about 2.8 lakh ha. (gross) has been brought under irrigation with an investment of Rs. 213 crores.

The ten completed projects, viz., Malampuzha, Walayar, Cheerakuzhi, Gayathri, Pothundy, Mangalam, Vazhani, Peechi, Chalakudy and Neyyar have an ayacut area of 1.34 lakh ha. and are irrigating a gross area of 1.47 lakh ha. By March 1980, the

11 on-going projects through partial commissioning, have added another 1.33 lakh ha. (gross) to the irrigated area in the State. It is proposed to complete Panaba, Periyar Valley, Chimoni, Chitturpuzha, Kanhirapuzha, Kuttiadi and Pazhassi irrigation projects and partially commission Kallada, Muvattupuzha, Attappady and Karappuzha to add during this Plan period 2.16 lakh ha. (gross) to the irrigated area. The new schemes Idamalayar, Kuriarkutty, Karappara and Banasurasagar will be partially commissioned to develop 0.12 lakh ha. (gross) for irrigation. Thus by the end of 1980-85, the total utilisation of irrigation developed in Kerala by major and medium irrigation schemes will be 5.08 lakh ha. (gross).

The outlay proposed for major and medium irrigation schemes in the Sixth Plan is 256.05 crores. Details of schemes are given below.

#### (i) Major Schemes

##### A. On-going Schemes

##### 1. Kallada Irrigation Project

(Outlay Rs. 14000 lakhs)

The Kallada irrigation project, the biggest multi-purpose project conceived in the State, is estimated to cost Rs. 176 crores and will benefit an area of 61,600 hectares (net) or 92,800 hectares (gross) in Quilon district and in parts of Alleppey and Trivandrum districts. The project comprises a masonry

dam 335 metres long with a maximum height of 78.5 metres across Kallada river in Quilon district to form a reservoir, a pick up weir at Ottakkal 4.6 km. down stream from the dam 118 M. long and 9 M. in height, a right bank canal 82.08 km. long, a left bank canal 96 km. long both taking off from the pick up weir and a network of canals. Both wet and dry lands are to be irrigated by this project. The project was taken up for execution during the year 1961-62. The area expected to be benefited by the scheme at the end of 1980-85 plan is 63,300 hectares (gross). The scheme is expected to attract World Bank funds and will be completed by the Seventh Plan Period. The total expenditure incurred on the project till the end of March 1980 is Rs. 34.30 crores.

## 2. Pamba Irrigation Project

(Outlay Rs. 1500 lakhs)

The project comprises a barrage at Maniyar across Kakkad river, having a length of 115.22 M. and a height of 16.76 M. and a net work of canals taking off from the barrage. The project was taken up for implementation during 1961-62. The latest assessed cost of the project is Rs. 43 crores. Till March 1980, an amount of Rs. 28 crores was spent on the project to create an irrigation potential of 28,500 hectares (gross) against an ultimate potential of 41,700 hectares (gross). The outlay proposed is to complete the project by 1983-84 and add 13,200 hectares (gross) additionally.

## 3. Muvattupuzha Valley Irrigation Project

(Outlay Rs. 1320 lakhs)

The project envisages the construction of a dam across Thodupuzha river at Malankara. The canal system consists of a right bank canal 30 km. long, left bank canal 41 km. long and a water distribution system. The project estimated to cost Rs. 37.60 crores envisages the utilisation of the tailrace waters of Idukki Hydro Electric Scheme for irrigating 52,200 hectares (gross) of both wet and dry lands lying in the three districts of Idukki, Ernakulam and Kottayam. The project was started in 1975 and up to March 1980, an amount of Rs. 4.77 crores had been invested on the project. The outlay provided is to partially commission the project during this plan period and the expected irrigation potential is 8000 hectares (gross). The project is scheduled for completion during the Seventh Plan period.

## 4. Periyar Valley Irrigation Project

(Outlay Rs. 1250 lakhs)

This project envisages construction of a barrage at Boothathankettu across Periyar river and a system of canals and distributaries. This was started in 1956 for irrigating an area of 85,600 hectares (gross) of wet lands in Ernakulam district. The project is estimated to cost Rs. 39.71 crores and till the end of March 1980, an amount of Rs. 25.58 crores has been invested, and an irrigation potential of 49,200 hectares (gross) has been developed. The outlay proposed is to complete the project and add an additional irrigation potential of 33,300 hectares (gross) during the Sixth Plan period.

## 5. Chimoni Irrigation Project

(Outlay Rs. 660 lakhs)

This project envisages supply of water to 26,200 hectares (gross) of Kole lands and its peripheral

lands in Trichur district, at an estimated cost of Rs. 14.41 crores. A masonry dam with an earth dam on the right bank across Chimoni river, a tributary of Karuvannur river, forms the head works. No new canal system is contemplated. This project was started in 1975 and the expenditure till March 1980 is Rs. 2.77 crores. The outlay proposed is for completing the project during this plan period to bring 24,200 hectares (gross) of wet lands under irrigation.

## 6. Chitturpuzha—Moolathara Irrigation Project

(Outlay Rs. 340 lakhs)

The project envisages the remodelling of the existing irrigation system in Chittur taluk of Palghat district. The proposals comprise replacing the Moolathara anicut by a regulator, reconstruction of Thembramadakku weir, and remodelling and extension of canal systems. The latest estimate for the completion of the project is Rs. 16.00 crores and it is intended to benefit an area of 32,600 hectares (gross). The implementation of the project was started during the Third Five Year Plan period and an amount of Rs. 9.42 crores has been invested till the end of March 1980. The irrigation potential developed so far is 30,900 hectares (gross). The outlay is to develop irrigation facilities to 1700 hectares (gross) during the Sixth Plan period.

## 7. Kanhirapuzha Irrigation Project

(Outlay Rs. 1510 lakhs)

The project is to construct an earthen dam with a central masonry spillway across Kanhirapuzha to provide irrigation facilities for an area of 21,900 hectares (gross) in the taluks of Mannarghat, Ottapalam and Palghat at a cost of Rs. 32.00 crores. The project was started in 1961-62, and Rs. 16.32 crores has been invested till March 1980. The outlay provided is for completing the project by 1985 and adding 21,900 hectares (gross) to the irrigated area in the State.

## 8. Kuttiadi Irrigation Project

(Outlay Rs. 680 lakhs)

The project envisages the construction of a masonry dam across Kuttiadi river at Perivannamuzhi, 13 earth saddle dams for a total length of 1844 M and a canal system. This project is estimated to cost Rs. 39.70 crores, and will provide irrigation facilities to 31,200 hectares (gross) of paddy lands in Kozhikode, Badagara and Quilandy Taluks. It was taken up for execution in 1962. An amount of Rs. 32.92 crores was spent on the project till the end of March 1980 to create an irrigation potential of 20,700 hectares (gross). The proposed outlay is to complete the project by 1981-82. This will develop an additional irrigation potential of 10,500 hectares (gross) in the northern part of Kerala.

## 9. Pazhassi Irrigation Project

(Outlay Rs. 1850 lakhs)

This project is a diversion scheme across Valappattanam river in Cannanore district. The barrage is situated in Kulur. The canal system is mainly



on the left bank comprising 55 km. of main canal and 133 km. of branches. This project would cost Rs. 42 crores and is intended to irrigate 32,300 hectares (gross) of paddy lands of Kuppam, Baliapatam, Anjarakandy, Tellicherry and Mahe. The project was started in 1962 and till March 1980, an amount of Rs. 23.49 crores has been invested to develop irrigation facilities over an area of 3400 hectares (gross). The outlay proposed in the Plan is to complete the project during this Plan period and add 28,900 hectares (gross) to the irrigated area.

#### B. New Schemes

##### 1. Idamalar Irrigation Project

(Outlay Rs. 600 lakhs)

This project envisages the utilisation of the tail-race waters of Idamalar Hydro-electric Project by diverting the water through the barrage of Periyar Valley Irrigation Project at Planchode into a new canal in the right bank of Periyar. The project would irrigate 52,400 hectares (gross) and the estimated cost is Rs. 22.41 crores. Till March 1980, the expenditure was Rs. 18.47 crores. The outlay is mainly to provide for the irrigation component of the hydro-electric project and to advance the completion of the project at least by the Seventh Plan period. By the end of the Sixth Plan period 8,000 hectares (gross) will be brought under irrigation.

##### 2. Kuriarkutty-Karappara Irrigation Project

(Outlay Rs. 140 lakhs)

This project envisages the utilisation of the tail-race waters of Kuriarkutty-Karappara Hydro-electric Scheme. The estimated cost of the project is Rs. 26.85 crores. It will provide irrigation facilities to 11,740 hectares (gross) of wet lands, (paddy lands and sugarcane lands) in Palghat district adjacent to Tamil Nadu. The outlay made in the Plan is mainly to provide for the irrigation component of the hydro-electric project and to develop irrigation facilities in 2,000 hectares (gross).

##### 3. Beyporepuzha Irrigation Project

(Outlay Rs. 75 lakhs)

The proposal is to construct a masonry barrage across Beyporepuzha at Azhiyakode and to direct the flow to irrigate an area of 11,620 hectares (gross) in Kozhikode and Malappuram districts. The estimated cost of the project is Rs. 10.61 crores. The proposed outlay is to further the progress of implementation of the project and advance it for completion during the Seventh Plan period.

##### 4. Kakkadavu Irrigation Project

(Outlay Rs. 200 lakhs)

This project consists of a reservoir at Kakkadavu across Karingotta river to irrigate an area of 41,760 hectares (gross) in Cannanore district. The estimated cost of the project is Rs. 26 crores. Till March 1980, the investment on the project has been Rs. 29 lakhs. The outlay proposed in the plan is to expedite the implementation of the project.

#### (ii) Medium Schemes

##### A. On-going Schemes

##### 1. Attappadi Irrigation Project

(Outlay Rs. 375 lakhs)

This project consists of a masonry dam at Chittar across Siruvani river in Attappadi, and a canal system to irrigate 8050 hectares (gross) in the tribal area of Attappadi in Palghat district. The project is estimated to cost Rs. 16 crores and was started in 1974. Till March 1980, Rs. 2.49 crores has been invested. The outlay proposed is to bring 4000 hectares (gross) under irrigation by the end of the plan period.

##### 2. Karapuzha Irrigation Project

(Outlay Rs. 375 lakhs)

The project consists of a masonry dam across Karapuzha at Vazhavatta with earth flanking dams on either side, main canals, and a network of distributaries. The ultimate irrigation potential that can be developed by this project is 9,300 hectares (gross) in South Wynad taluk of Kozhikode district at a cost of Rs. 12 crores. The project was started in 1971 and till the end of March 1980, an amount of Rs. 2.35 crores has been invested. The outlay proposed is to develop 7000 hectares (gross) under irrigation by the end of the Plan period.

#### B. New Schemes

##### 1. Vamanapuram Irrigation Project (1st Stage)

(Outlay Rs. 55 lakhs)

The first stage of the project envisages the construction of a dam at Valayanki across Kallar, the tributary of Vamanapuram river, and a network of canal system to irrigate 24,250 hectares (gross) of agricultural land in Trivandrum District. The total estimated cost of the project is Rs. 37.12 crores. Till March 1980, the expenditure on the project was Rs. 12 lakhs. The proposed outlay is to carry out the preliminary works on the project.

##### 2. Meenachil Irrigation Project

(Outlay Rs. 45 lakhs)

So far no irrigation project has been taken up in the Meenachil River basin. The irrigation needs of the basin are met by lift and minor irrigation schemes which serve a portion of the area for two cropping seasons. A storage reservoir can be constructed in the basin at Cherripad and an irrigation potential of 10,000 hectares (gross) can be developed at a cost of Rs. 35 crores. The outlay is for preliminary work on the project.

##### 3. Banasarasagar Irrigation Scheme

(Outlay Rs. 75 lakhs)

The project will irrigate an area of about 4,800 hectares (gross) in Wynad. The project area is predominantly inhabited by Harijans and Adivasis. A dam is to be constructed across Karamanathodu which is a tributary of Panamaram River, which is a major tributary of Kabani river. The project is estimated to cost Rs. 11.37 crores. The expenditure

till March 1980, is Rs. 42 lakhs. The outlay made in Sixth Plan is to bring 2,000 hectares (gross) under irrigation by the end of the Plan period.

*Modernisation of Old Projects*

(Outlay Rs. 200 lakhs)

It is proposed to rectify the canal system in the old projects and achieve better utilisation of the water storage by reducing losses to the minimum. The Plan outlay is for the purpose.

*Survey Research and Investigation*

(Outlay Rs. 355 lakhs)

To formulate integrated river valley projects in future, it is necessary to carry out hydrological and meteorological studies and other surveys and collect data about the river basins. The outlay made in the Plan is for these purposes.

TABLE 3.14

**Irrigation—Scheme-wise outlay**

(Rs. in lakhs)

Sl. No.	Name of the Scheme/Project	1979-80	1980-81		1980-85		1981-82	
		Actuals	Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed outlay	Capital Content
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>III. Irrigation, Flood Control and Power:</b>								
<i>Major and Medium Irrigation</i>								
<b>(i) Major Schemes</b>								
<i>A. On-going Schemes</i>								
1	Kallada	850.72	1420	827.00	14000	14000	2000	2000
2	Pamba	404.52	400	400.00	1500	1500	400	400
3	Muvattupuzha	219.57	305	300.00	1320	1320	290	290
4	Periyar Valley	403.24	200	350.00	1250	1250	220	220
5	Chimoni	113.68	200	150.00	660	660	140	140
6	Chitturpuzha and Moolathara	141.41	94	83.00	340	340	100	100
7	Kanhirapuzha	366.15	350	350.00	1510	1510	350	350
8	Kuttiadi	372.40	200	400.00	680	680	160	160
9	Pazhassi	454.34	400	450.00	1850	1850	450	450
<i>B. New Schemes</i>								
1	Idamalayar	2.47	130	90.00	600	600	110	110
2	Kuriarkutty-Karappara	3.48	50	40.00	140	140	30	30
3	Beyyporepuzha	1.28	70	20.00	75	75	10	10
4	Kakkadavu	20.15	50	30.00	200	200	30	30
Total—Major Schemes		3353.41	3869	3490.00	24125	24125	4290	4290
<b>(ii) Medium Schemes</b>								
<i>A. On-going Schemes</i>								
1	Attappady	110.12	65	100.00	375	375	55	55
2	Karapuzha	110.75	110	110.00	375	375	50	50
<i>B. New Schemes</i>								
1	Vamanapuram	11.69	36	28.00	55	55	10	10
2	Meenachil	0.55	10	10.00	45	45	10	10
3	Banasurasagar	30.01	50	5.00	75	75	5	5
Total—Medium Schemes		263.12	271	253.00	925	925	130	130
(iii)	Modernisation	73.22	50	49.00	200	200	40	40
(iv)	Survey and Investigation	37.46	40	42.00	355	355	40	40
Total Major and Medium Schemes		3722.21	4230	3834.00	25605	25605	4500	4500

## Flood Control and Anti-sea Erosion

### Flood Control

Due to the high incidence of rainfall concentrated in a few months of the year the State has been experiencing floods almost every year. Generally floods occur simultaneously in all regions of the State accompanied by land slides in the hills, flooding in the plains and erosion and tidal overflow along the sea coast. The victims of such floods are the poor people living in the hill slopes, and along the river banks. The damages caused by floods to agricultural lands, public property, roads, canals, etc., are very significant. Due to deforestation and silting of river beds, the problems of floods will only increase in future unless necessary flood control measures are planned and implemented as a time-bound programme. The outlay provided in this plan is mainly to meet the short range requirements of flood control works in the State and to initiate action on a long range plan of flood control.

As at the end of March 1980, 67.278 km. of embankments and 6.80 km. of drainage channels have been constructed. The total area provided with flood protection is 15,725 hectares. The investment so far has been about Rs. 6.65 crores. During the Sixth Plan period it is proposed to additionally construct embankments, drainage channels, etc., to protect 8500 hectares more.

The long range outline plan for flood control consists of storage reservoirs, embankments, improvements to river channels and inland drainage system, groynes and other protection works, diversions and cut-off etc. This would require an investment of over Rs. 90 crores. The short range plan therefore lays emphasis on the completion of ongoing works and protection of river basins which are subjected to serious and frequent floods. The scheme for deepening the leading channel to Thottappally Spillway to relieve the flood problems in Kuttanad area has been given high priority in the Sixth Plan. It is also proposed to complete the work of improving Amayizhanchanthodu to avoid flood in Trivandrum City. Schemes for effecting better flood drainage facilities to low lying areas of Cochin and Calicut are also included in the Plan. Works on a new cut connecting Keeranallur and Kooraparamba rivers, Onampalam cut etc., are to be taken up during the Plan period. Provision for the purchase of a few dredgers for deepening the river mouths of certain rivers and backwaters for quick discharge of flood waters is made. The schemes included in this plan are listed below:

(iii) Periyar, Chalakudy and Muvattupuzha	0.10
(iv) Karuvannoor and Keecheri Basins	0.10
(v) Bharathapuzha, Tirur Poorapuzha, Kadalundy, Chaliyar, Beypore and Kallai	0.15
(vi) Northern Rivers—Valapatanam, Kuttiadi, Mahe, Tellicherry, Ancharakandy, Payangode, Chandragiri etc.	0.25

### 3. New Schemes:

(i) Deepening and widening the Leading Channel to Thottappally Spillway and Allied Protection Works	3.00
(ii) Improvements to River Channels, Inland Water Ways, Controlling the Opening of Bars and purchase of Dredgers	1.75
(iii) Measures to Relieve Floods in Low Lying Areas of Cities	1.25

4. Other Schemes such as providing Cut-offs, Inter-connecting Rivers, Raising Embankments, etc. 0.50

5. Preparation of a Master Plan for Flood Control Works 0.50

Total	10.00
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### Anti-sea Erosion

The State has a coast line of 560 km. a large part which is subjected to severe erosion at several places during the monsoons. Loss of valuable lands and buildings along the coast line and loss of human life have been the outcome. Sometimes the coast line is subjected to tidal overflow and adjoining low lying lands are submerged resulting in damages to paddy lands and dwelling units and pollution of inland fresh water lakes.

It is estimated that a coastline of nearly 320 km. is subjected to erosion. Of this, 250 km. of coast line is subjected to severe erosion. Till March 1980, an amount of Rs. 43.25 crores has been spent to protect 227 km. of coast line. Work is in progress over a length of 40 km. Out of the 227 km. of coast line protected, about 70 km. requires reformation and repairs. There are 87 spill-over schemes.

The length of coast line requiring protection within the next decade is about 93 km. Besides, the beaches adjacent to the inlets need stabilisation and areas of head-land bay formation need protection. The outlay for anti-sea erosion made in the Plan is for

<i>Name of Scheme</i>	<i>(Outlay Rs. crores)</i>
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1. Spill-over Works	2.00
2. Identified Schemes on Zonal Basis:	
(i) Southern Rivers—Karamana, Neyyat, Vamanapuram, Ithikara and Kallada	0.25
(ii) Kuttanad Rivers—Achencoil Pamba, Manimala and Meenachil	0.15

the above mentioned works. The physical targets envisaged during this period is the protection of a length of 85 km. of coast line and reformation and repairs of about 70 km. sea-wall already constructed. The specific schemes and outlays are given below:

Scheme	Outlay (Rs. crores)		
1. Coast where Sea Walls are under construction—Spillover Schemes	11.56		
2. 45 km. of coast line requiring new rubble sea wall protection	18.54		
3. 70 km. of sea wall requiring reformation and repairs	14.00		
		Total	45.00

4. Stabilisation of inlets and protection of coast adjacent to inlets 0.50
5. Protection at Head-land Bay formation by off-shore breakwaters 0.40

Of the total investment, Rs. 15 crores is to be funded from the State Plan. The balance amount of Rs. 30 crores is to be the special assistance from the Government of India since sea-erosion has to be viewed as a national calamity.

TABLE 3.15  
Flood Control and Anti Sea Erosion Scheme-wise Outlay

Sl. No.	Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Flood Control	97.16	75.00	75.00	1000.00	1000.00	75.00	75.00
2	Anti Sea Erosion	244.50† 331.85*	175.00† 350.00*	175.00† 350.00*	1500.00† 3000.00*	1500.00† 3000.00*	175.00† 350.00*	175.00† 350.00*
	Total	341.66† 331.85*	250.00† 350.00*	250.00† 350.00*	2500.00† 3000.00*	2500.00† 3000.00*	250.00† 350.00*	250.00† 350.00*

\*Special Central assistance for anti-sea erosion works.

### Power Development

Nature has endowed Kerala with vast potential of hydro-electric power which is estimated at 3 million KW at 60 per cent load factor. Tapping of hydel power was given top priority in the State's Five Year Plans and about one-third of the potential has been harnessed so far. As of March 1980, out of the total State Plan expenditure of Rs. 1679.63 crores, the investment in the power sector stood at Rs. 422.54 crores which accounts for more than 25 per cent of the

total Plan outlay. As a result of this sizeable investment, the installed power generation capacity has recorded significant growth from 132.5 MW in 1960-6 to 1011.5 MW in 1979-80, with the result the power generation has increased from 591 Mkw to 519 Mkw during the period. Also the per capita consumption of power has risen from 30 kwh in 1960-6 to 96.8 kwh in 1979-80.

The details of investment on power generation, transmission, distribution and rural electrification during the past Plan periods are given in Table 3.

TABLE 3  
Plan Investment on Power Development

Period	(Rs. in lakhs)				
	Generation	Transmission and Distribution	Rural Electrification **	Others	Total
Upto 1-5-1957	2337.31	109.95	45.47	..	2492.73
II Plan part 1957-58 to 1960-61	883.82	798.68	258.18	..	1940.68
III Plan	4750.01	1084.47	235.00	..	6069.48
Annual Plans (1966-67 to 1968-69)	2857.07	1280.64	49.98	..	4187.69
IV Plan (1969-70 to 1973-74)	6676.33	4667.20	332.17	168.02	11843.72
V Plan (1974-75 to 1977-78)	6162.26	4757.31	1135.56	..	12055.13
1978-79	964.74	2114.78	213.45	..	3292.97
1979-80	906.00	3022.00	253.00	..	4181.00
Total till March 1980	25537.54	17835.03	2522.81	168.02	46063.40

\*\*Under this column the investment on inter state transmission lines under centrally sponsored schemes and REC works is included.

It can be seen from Table 3 that during the earlier Plans more outlays have been provided for power generation while lesser outlays only could be given to transmission and distribution system. Consequently the transmission and distribution system in the State could not be built up to the level required to meet the load demand satisfactorily. Taking into account the lopsided growth in power development in the State, more emphasis has been given to transmission and distribution in the Sixth Plan period.

#### *Objectives, Policies and Strategy*

The basic objectives of power development of the State during the Plan period 1980-85 are achievement of a ten per cent annual growth rate in power supply at the required voltage with maximum capacity utilisation and minimum losses and stabilisation of the power system in the State. The policies to achieve these objectives are:

(i) building up power generation capability for internal requirements, (ii) balancing load generation to reduce line losses in transmission, (iii) rationalising the transmission and distribution system to minimise voltage fluctuations and strains on the system and meeting the dormant demands.

The strategy proposed during the Plan period will be to (i) complete all continuing projects for load balancing, (ii) phase out the backlog in transmission and distribution works and simultaneously build up the requirements for the period and (iii) confine State investments on power generation for internal requirements alone in the near future and avail of additional Central assistance in building up additional power generation capability for meeting the long-term power needs of the State and the region as a whole.

#### *Power Generation Schemes*

There are nine completed power generation schemes in Kerala which can generate nearly 5000 mkwh of power. Of these two schemes, Sabarigiri and Idukki alone, would account for over 70 per cent of the capacity. As on March 1980, there were five ongoing schemes with an energy potential of over 1600 mkwh. Of this Idukki Stage III, Sabarigiri Augmentation, Idamalayar and Kakkad are scheduled for completion during the Sixth Plan period. The generation capability by the end of the Plan period will be 1136.5 MW.

With a 10 per cent annual increase in consumption of power in the State, the power consumption in 1984-85 would be 4150 mkwh. The plant capacity built up over the plan period, and the energy availability from this would be sufficient to meet the requirements of the State.

Considering the position of deficits in peaking capacity and energy generating capacity in the coming decade all the ongoing generation schemes viz. Idamalayar, Idukki III Stage, Sabarigiri Augmentation, Idukki Stage II and Kakkad are proposed to be commissioned during the Sixth Plan period. Also work on new schemes viz. Silent Valley, Lower Periyar and Kuriarkutty-Karappara are initiated during the Plan period for load balancing and for ensuring that the State may not face power shortage after the Plan

period. Advance action on Mananthavady, Puyankutty, Adirappally, Perinjankutty, Poringalkuthu etc., is also contemplated in the Plan in order to continue building up of the power generation capability of the system in the long run.

The various schemes proposed for inclusion in the Plan are discussed below. The outlay proposed for the generation schemes during the Plan period is Rs. 91.66 crores.

#### *(a) Continuing Schemes*

##### *1. Idamalayar Project*

(Outlay Rs. 1267 lakhs)

The Idamalayar Project in the Periyar basin envisages construction of (i) a masonry dam 90 M high above the river bed across Idamalayar, (ii) a power tunnel 5.6 M diameter and 1566 M long terminating in a surge shaft, (iii) a low pressure pipe tunnel 4.6 M diameter and 144 M long and (iv) two penstocks 3.2 M average diameter and 120 M long, leading the water to a power house with two generating units of 37.5 MW each. The firm power potential is 36.5 MW (continuous 20 million units per year). The scheme is estimated to cost nearly Rs. 50 crores. An amount of Rs. 21.3 crores has already been invested upto the end of 1979-80. An outlay of Rs. 12.67 crores is provided in the Sixth Plan to complete the project. The balance amount required for the completion of the Project is provided in the irrigation sector, as share for the irrigation component of the project. The Project is expected to be completed by 1983-84.

##### *2. Idukki Stage III Hydro-Electric Scheme*

(Outlay Rs. 303 lakhs)

The scheme envisages pooling of more water in the Idukki reservoir by diversion of water from Kallar and Erattayar, tributaries of Perinjankutty river. The project comprises (i) a masonry gravity dam 12 M high across the Kallar, (ii) an unlined tunnel 5 M diameter, and 2.75 Km. long to divert the water from Kallar to Erattayar, (iii) 19.5 M high masonry dam across Erattayar and (iv) 3.8 Km. long and 6 M diameter unlined tunnel from Erattayar to Idukki. The scheme will yield an additional energy of 376 million Kwh. annually at Idukki and is estimated to cost Rs. 10.55 crores. The investment made on the project till March 1980 is Rs. 7.52 crores. An outlay of Rs. 3.03 crores is provided in the Sixth Plan to complete the scheme by 1981-82.

##### *3. Sabarigiri Augmentation Scheme*

(Outlay Rs. 10 lakhs)

The proposals for augmenting generation under Sabarigiri Hydro-Electric Scheme consist of two parts, viz., (i) diverting into Pamba reservoir three small continuous streams Kullar, Gaviar and Meenar, which now drain away, by constructing diversion weirs, unlined diversion tunnel and channels and (ii) diverting into Kakki reservoir the yield available from the Upper Muzhiyar catchment by constructing a diversion weir and an unlined tunnel. The average annual yield available from the diversion will be 2.7

TMC which when pooled in the Sabarigiri reservoir will yield 14.5 MW corresponding to 130 million units per annum at the Sabarigiri power house. The scheme is estimated to cost Rs. 3.23 crores of which Rs. 3.13 crores has been invested till March 1980. In the Sixth Plan an outlay of Rs. 0.10 crore is provided to complete the scheme by 1981-82.

#### 4. Sabarigiri VI Unit Replacement

(Outlay Rs. 86 lakhs)

This scheme relates to the replacement of unit VI of the Sabarigiri hydro-electric scheme, which would restore the 50 MW power potential and bring the present power system capability to 1011.5 MW. The estimated cost of replacement is Rs. 4.28 crores, of which Rs. 3.42 crores has already been expended. During the Sixth Plan period an outlay of Rs. 0.86 crores is made for this scheme which was commissioned in 1979-80.

#### 5. Idukki—Stage II

(Outlay Rs. 3000 lakhs)

This scheme is estimated to cost Rs. 31.68 crores, and envisages installation of three additional units of 130 MW each in the Idukki power house. At the time of completion of the I Stage works of Idukki most of the civil works for the II stage were also completed. The works to be carried out are streamlining the pressure shift No. II and back filling with concrete and installation of the three additional machines in the space already provided. An amount of Rs. 30 crores has been provided in the Sixth Plan. The scheme is scheduled to be completed by 1984-85 if Canadian aid is forthcoming.

#### 6. Kakkad Hydro-Electric Scheme

(Outlay Rs. 1500 lakhs)

The Kakkad Project is a tailrace development of existing Sabarigiri power station in the Pamba basin. The scheme comprises construction of two dams 32 M high, an unlined inter connecting tunnel 2900 M long and a pressure tunnel 78000 M long and a pressure shaft 365 M long to lead the tail race waters of Sabarigiri power station to Kakkad power station. This would add 30 MW of firm power to the existing system. The installed capacity proposed is two generating sets of 25 MW each. The scheme would cost Rs. 20.50 crores and an investment of Rs. 1.51 crores has been made till date. An outlay of Rs. 15 crores is provided to complete the project by 1984-85.

#### (b) New Schemes

(Outlay including that for advance action Rs. 3000 lakhs)

Silent Valley, Lower Periyar and Kuriarkutty-Karappara schemes have already been taken up and an amount of Rs. 0.65 crores has been spent till 1979-80. A brief description of the new schemes already initiated are given below.

##### 1. Silent Valley Hydro-Electric Scheme

The Silent Valley scheme envisages utilisation of the yield of the Upper Kunthipuzha catchment in

Bharathapuzha for power generation. The project consists of construction of a dam of 127 M high across Kunthipuzha to impound water to a height 317 M and a water conductor system comprising a circular lined pressure tunnel of 3.3 M diameter and 4267 M long and a penstock 1.9 M diameter and 2335 M long bifurcating at the power house. The power house will have two generators of 60 MW each in the first stage. In the second stage another penstock will feed two additional generation sets of 60 MW each. The water release from the power house will be further utilised for irrigation. The scheme is estimated to cost about Rs. 58 crores. The investments made so far is Rs. 2.39 crores.

##### 2. Lower Periyar Hydro-Electric Scheme

This scheme, in Periyar basin, contemplates construction of a 30 M high dam across Periyar above the existing Periyar Valley Irrigation Barrage to intercept the tail flow of the upper station and divert the water through a 12 km. long tunnel and two penstocks 170 M long leading to a surface power station having 3 units of 60 MW each. The power potential of the scheme is 66 MW equivalent to 578 MU per annum. The scheme would cost Rs. 59.76 crores. An amount of Rs. 0.33 crores has been spent till 1979-80.

##### 3. Kuriarkutty—Karappara Hydro-Electric Scheme

This scheme consists of three dams and three power stations for the utilisation of the waters of Kuriarkutty, Pulikkal and Karappara rivers, all tributaries of Chalakudi river, for power generation and irrigation. The firm power availability to the Kerala power system will be 24 MW constituted of installed capacities of 60 MW at Kuriarkutty Power Station, 20 MW at Pulikkal Power Station and 15 MW at Karappara Power Station, adding 210 MU of energy per annum to the system. The scheme is estimated to cost Rs. 48.55 crores and an expenditure of Rs. 0.10 crores has been incurred till 1979-80.

#### (c) Advance action on New Schemes

(i) It is proposed to start advance action on the schemes indicated below:

1. Mananthavady
2. Pooyankutty
3. Kallada
4. Adirappally
5. Perinjankutty
6. Pandiyar-Punnappuzha
7. Peringalkuthu Right Bank

(ii) Advance Action Relating to Alternate Sources of Energy

The crisis prevailing in the sphere of energy and the phenomenal rise in crude oil prices have necessitated the immediate quest for alternate sources of energy based on sun, water, wind, animal and geothermal power. Unless steps are urgently taken to tap alternate sources of energy the plan targets are likely to go awry. Realising this the Government of India have earmarked adequate provision for energy development in the Sixth Plan. The solar, tidal and wind energy resources are

continuously being replaced. Direct solar radiation is by far the most abundant everlasting source. However we are yet to learn to use it properly. Tidal energy is derived from the gravitational force of celestial bodies. The potential of human and animal energy input is also quite significant. But utilisation of the various alternate sources of energy calls for a number of indepth studies before these sources emerge as commercial possibilities. Hence a number of studies relating to power from wind, ocean currents, fuel alcohol from tapioca etc., will be conducted during the Plan period. A token provision of Rs. 25 lakhs is allotted in the State Sector Plan for taking advance action relating to alternate sources of energy.

A total amount of Rs. 30 crores is provided in the Sixth Plan for the new schemes and initiating advance action on new schemes, including advance action on alternate sources of energy.

## II. Survey and Investigation

(Outlay Rs. 435 lakhs)

An amount of Rs. 4.35 crores is provided for carrying out extensive investigation work as well as generating hydrological and meteorological data for the preparation of new projects which can be considered for investments in future. Since Kerala has good hydro electric potential, the plan allocation for this scheme is essential for harnessing the potential in future.

## III. Transmission

(Outlay Rs. 8000 lakhs)

Owing to insufficient investments on transmission and distribution schemes during the early Plan periods, the network of power lines within the State could not be built to the level required to meet the load demand in the State satisfactorily. Though Kerala has at present no dearth of power, prospective consumers have to wait for long periods for getting power connections. At present many applications for new connections are pending with the Electricity Board, some of them dating as far back as 1971. The voltage levels and stability of supply in most of the areas are also far from satisfactory. The per capita consumption of electricity in the State is lower than the national average. This situation needs to be improved by strengthening and expanding the transmission and distribution system in the State. A transmission plan for the next decade will have to be based on the following additions to the system:

- (i) 220 KV sub-stations: Three numbers one at Cannanore with a capacity of 300 MVA, one at north of Trichur with a capacity of 400 MVA and one at Trivandrum with a capacity of 300 MVA.
- (ii) 220 KV lines: Idukki to Trichur, single circuit from Idukki to Lower Periyar and double circuit from Lower Periyar to Trichur; Trichur north to Kozhikode via Silent Valley; Kozhikode to Cannanore (double circuit); Lower Periyar to Kalamassery (single circuit); Sabarigiri to Edamon (double circuit) and Idukki to Pallom (single circuit). Further a

line from Perinjankutty to Kumili connecting the Sabarigiri-Madurai line at Kumili to improve supply to the southern region.

- (iii) 110/66 KV sub-stations: At Kasargod, Tirur, Kunnankulam, Muvattupuzha, Aroor, Alleppey (south), Palai, Trivandrum (Balaramapuram) and Alathur.
- (iv) 110 KV feeder lines: double circuit lines from Kuttiyadi to Cannanore, Pandiyar-Punnappuzha to Malappuram, Idamalayar to Chalakudy and Alwaye, Peringalkuthu Right Bank to Chalakudy via Adirappally and Kakkad to Edappon.
- (v) 110 KV grid lines: Malappuram to Tirur (SC/DC), Trichur (North) to Kozhikode via Kunnankulam and Tirur (SC/DC), Pallom to Alleppey south (DC), Alleppey south to Aroor via Mararikulam (DC), Edamon to Edappon (DC) Kundara to Edamon (DC, second circuit), Cannanore to Mangal, Trivandrum to Balaramapuram (DC), Edappon to Alleppey South (DC), Vaikom to Palai (DC) and Trichur to Palghat via Alathur (DC). A few more links will be required to connect prospective EHT consumers.
- (vi) 66 KV lines: the redundant elements of the old 66 KV network will be reutilised to the fullest extent. New links to new substations and EHT consumers are also required.
- (vii) 400 KV Transmission: since the Central Power Authority is planning for a large network of 400 KV transmission lines for the Southern region, and since the power system is hydro-based, a high security link at 400 KV from the Super Thermal Station at Neyveli (Tamil Nadu) to Trichur (north Station), and connecting up the Trichur Station to the major hydro stations of Idukki, Lower Periyar and Silent Valley have to be conceived in advance during the Sixth Plan period and work started on the same. The future stations of Perinjankutty and Puyankutty, Peringalkuthu Right Bank and Adirappally will also get connected to this Station.

Because of the backlog of work on transmission and the need for bringing in better stability and better voltage condition in the grid, schemes have been contemplated for an amount of Rs. 80 crores during the 1980-85 Plan. It is programmed to complete the construction of three 220 K. V. lines, seventeen 110 K. V. Sub-stations, fifty-two 66 K. V. Sub-stations and 277 Ct. Kms. of 220 K. V. lines and other connected 110 K. V. and 66 K. V. lines during the 1980-85 plan period. Provision has also been made to carry out preliminary works on major lines and sub-stations planned for completion during the Seventh Plan also.

## IV. Distribution and Rural Electrification

(Outlay Rs. 13672 lakhs)

The deficiencies in the power distribution system in Kerala are inadequate transformer capacity and line capacity, frequent interruptions, poor voltage conditions long waiting period for power connection, high percentage of power losses etc. The 1980-85 Plan therefore aims at strengthening the distribution system by speedy elimination of the backlog in the distribution work within a period of two to three years and to keep pace with the new demand of the period. The outlay for distribution and rural electrification during 1980-85 is Rs. 136.72 crores.

During 1980-85, it is proposed to extend the 11 K. V. lines through 3800 km., the L. T. lines three phase through 5000 km. and single phase through 13,000 km. The number of distribution transformers will be

4000 of 11 K. V. /400 V. About twelve lakhs service connection will be provided and two lakhs street lights would be raised. The number of pumpsets energised will be 69,000. Necessary outlay is also made in the Plan for improvement schemes for distribution of electricity in cities and towns.

Though all the revenue villages of the State have been provided with atleast one electrical line passing through the village, it is necessary to extend lines to all the inhabited desoms/karas in view of the size of the villages in terms of area and population and the disperse settlement pattern in the State. Rural electrification is a necessary adjunct to the planned development of the rural sector. Rural electrification should be complementary to schemes for installation of pumpsets, rural electricity distribution etc. An outlay of Rs. 8 crores has been provided in the Plan for the normal schemes of line extension in rural areas and Rs. 8.72 crores to be mobilised through the Rural Electrification Corporation for rural electrification.

TABLE 3.16  
Power—Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals (Unaudited)	1981-82		1980-85		1981-82		Remarks	
			Approved Outlay	Anticipated expenditure	Approved Outlay	Capital Content	Approved Outlay	Capital Content		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
<b>I. GENERATION</b>										
(a) <i>Approved and On-going Schemes</i>										
1.	Idamalayar	390	500	500	1267	1267	400	400	The figures under Col. 3 to 9 do not include irrigation share	
2.	Idukki III Stage	167	140	140	303	303	133	133		
3.	Sabarigiri Augmentation	58	50	50	10	10	(—) 40	(—) 40		
4.	Sabarigiri VI Unit Replacement	54	86	86	86	86	..	..		
5.	Idukki Stage II	..	250	250	3000	3000	250	250		
6.	Kakkad	100	250	250	1500	1500	440	440		
(b) <i>New Schemes:</i>										
1.	Silent Valley	35	250	250	3000	3000	Nil	Nil	The figures against Item d (b) 3 under col. 3 to 9 do not include irrigation share	
2.	Lower Periyar	20	60	60						
3.	Kuriarkutty-Karappara	10	40	40						
(c) <i>Advance Action on New Schemes:</i> (Mananthavady, Pooyankutty, Kallada, Adirappally, Perinjankutty, Pandiyar Punnapuzha, Poringalkuthu, H. E. etc.) and Advance Action Relating to Alternate Sources of Energy										
..	..	..	..	..	..	..	70	70		
<b>GENERATION—TOTAL</b>		<b>834</b>	<b>1626</b>	<b>1626</b>	<b>9166</b>	<b>9166</b>	<b>1253</b>	<b>1253</b>		
<b>II. SURVEY &amp; INVESTIGATION</b>		<b>72</b>	<b>100</b>	<b>100</b>	<b>435</b>	<b>435</b>	<b>75</b>	<b>75</b>		
<b>III. TRANSMISSION</b>										
1.	220 K. V. lines	..	131	131	8000	8000	1500	1500		
2.	110 K. V. and 66 K. V. lines	..	427	427						
3.	220 K. V. Substations	..	193	193						
4.	110 K. V. & 66 K. V. Substations	..	709	709						
<b>TRANSMISSION—TOTAL</b>		<b>1381</b>	<b>1460</b>	<b>1460</b>	<b>8000</b>	<b>8000</b>	<b>1500</b>	<b>1500</b>		



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>IV. DISTRIBUTION &amp; RURAL ELECTRIFICATION</b>									
1. Distribution	..	1378	1378	}	13672	13672	2172	2172	
2. Reduction of losses	..	200	200						
3. Rural Electrification— Normal	..	100	100						
4. R. E. C.	..	113	..						
Distribution—Total		1844	1821	1821	13672	13672	2172	2172	
GRAND TOTAL—I+II+III+IV		4131	5007	5007	31273	31273	5000	5000	

### 3.4 INDUSTRY AND MINERALS

#### Village and Small Industries

##### Small Scale Industries

In a State like Kerala which is characterised by chronic unemployment, the small scale industry sector has a significant role to play. About 16,000 small scale units are registered with the State Directorate of Industries. Even though agro-based, marine based and clay based industries have shown progress, the engineering and chemical group of industries have not made much headway in the State. Non-availability of raw materials at the right time and in right quantities has seriously hampered the growth of small scale industries. Many small units face a serious marketing problem as well. Their meagre resources prevent them from undertaking elaborate publicity and they find it difficult to sell their products due to lack of market promotion activities. During the Sixth Plan period serious effort will be made to remove the various difficulties facing the small scale sector. The Sixth Plan will enable the State to set up about 17,000 new units in the State. The State has built up most of the infrastructure facilities required for industrial development. A number of incentives have also been offered to private sector for setting up new units in the State. All these measures, it is hoped, will help to achieve the target laid down in the Plan.

A short description of various schemes proposed in the Sixth Plan under small scale industries is given below:

##### I. Departmental Administration

(Outlay Rs. 95 lakhs.)

The task of developing small scale industries in the State is vested with the State Department of Industries and Commerce. For the efficient supervision of the various schemes relating to small scale sector the Departmental Organisation needs considerable strengthening. The District Industries Centres, render a number of services required by small entrepreneurs and artisans as a package deal. At the taluk level, the set up of the Department needs strengthening and reorganisation for the speedy development of the programmes like Rural Industries Programme and Rural

Artisans Programme. The Officers responsible for the implementation of the Small industries development programme may have to be sent for training in order to make them aware of the latest advancement in the field of small scale industries. The monitoring cell in the Department will have to be further strengthened so as to equip it to monitor the schemes implemented by the District Industries Centres. As suggested by the State Government a project cell is to be set up in the Directorate. This cell would initially collect project profiles from all possible sources, codify and distribute feasible project reports to entrepreneurs.

##### II. District Industries Centres.

(Outlay Rs. 425 lakhs)

District Industries Centres have been set up in all the districts in the State. These centres constitute the main promotional agencies for the development of small scale industries and they will have to play a crucial role in the coming years. The provision in the Plan is to meet the expenditure on salary and other allowances of the officers, wages, travel expenses, office expenses, rent, taxes and other charges. Under the new set up in the district, financial assistance to co-operative societies working in the Rural Industries Project areas, grant assistance, loans for the hire purchase of machinery, factory construction and such other programmes relating to the rural industries projects will also have to be implemented through the District Industries Centres. The outlay includes provision for implementing these schemes also.

##### III. Industrial Co-operatives.

###### 1. Share participation in District Mini Industrial Estate Co-operative Societies.

(Outlay Rs. 7 lakhs)

The State Government's participation in the form of share capital assistance is necessary for the District Mini Industrial Estate Co-operative Societies to enable them to assist the entrepreneur members to construct buildings in the estates, to make available margin money for construction of buildings, machinery etc., and in case of urgency, to issue bridge loan.

2. *Share participation in District Industrial Co-operative Banks.*

(Outlay Rs. 30 lakhs)

Though about 2000 small scale and cottage industrial Co-operative Societies were organised in the past, adequate funds could not be made available to them for their proper working, at the right time. The system of institutional financing has not worked properly in the case of smallscale industries. Hence a separate financing bank for industries will be of much help to the entrepreneurs.

3. *Managerial, Technical and Other Assistance to Industrial Co-operatives*

(Outlay Rs.10 lakhs)

In order to make the small scale industrial co-operatives stand on their own, assistance by way of managerial grant for a period of four years, grant to the extent of 50 per cent of the cost of machinery and equipments, 50 percent of the rent for the first two years, allowance towards wastage of raw materials and towards purchase of furniture are proposed to be given. The plan provision is for meeting these expenses.

4. *Grant towards Contribution to Reserve Fund*

(Outlay Rs. 2 lakhs)

As part of the revitalisation programme of industrial co-operative societies, it is proposed to issue grant to augment the reserve fund of the industrial co-operative societies so that they may become eligible to avail of institutional finance towards working capital.

5. *Survey for Identification of Viable and Potentially Viable Co-operative Societies*

(Outlay Rs. 10 lakhs)

A survey of small scale industry and handicrafts societies has been completed by the Department of Industries and Commerce. The provision is for the follow up action on this survey to revitalise potentially viable societies, strengthen the viable societies and liquidate the non-viable ones.

6. *Subsidy towards Loss of Interest on Reserve Bank of India Credit to Industrial Co-operative Societies*

(Outlay Rs. 10 lakhs)

The scheme of financing the small scale industrial co-operative societies under the Reserve Bank of India scheme of finance has been in force since 1977-78. The co-operative banks are making available term loan as well as working capital and other loans from their own funds to the small scale industrial co-operative societies. The Kerala State Co-operative Bank is also making available term loan to the district mini-industrial societies for construction of buildings. The plan provision is to give interest subsidy in respect of such loans so that the societies may be in a position to avail the loans at subsidised rate of interest.

7. *Share Participation in Small Scale Industries Co-operative Societies .*

(Outlay Rs. 20 lakhs)

In order to strengthen the equity base of the small scale industrial Co-operative societies, Government participates in their share capital structure. The share contribution between the Government and members is in the ratio 1:4. The plan envisages provision of assistance to societies in the ratio fixed by the Government from time to time.

IV. *Women's Industrial Programmes*

1. *Scheme for Women's Industries*

(Outlay Rs. 50 lakhs)

The objective of this scheme is to give special incentives to women entrepreneurs to enable them partake in industrial ventures. Industrial units for women entrepreneurs are selected on the basis of the norms and guidelines prepared by the Directorate of Industries and Commerce. These units will be given grant assistance towards expenses incurred on salary rent, machinery, training etc., according to the rules framed for this purpose.

2. *Share Participation in Women's Industrial Societies*

(Outlay Rs. 10 lakhs)

Under this scheme the primary and central Vanitha Societies will be helped to raise additional funds. For this purpose the Government will extend share capital proportionate to the collected share capital.

3. *Aid to Women's Industrial Units for participation in Exhibitions*

(Outlay Rs. 0.02 lakhs)

Under this scheme financial assistance is given to industrial units run by women for participating in exhibitions.

4. *Starting of Production-Cum-Training Centre*

(Outlay Rs. 1.50 lakhs)

It is proposed to give training facilities to women for enabling them to start new small scale industries. The outlay is set apart for starting production cum-training centres for women.

V. *Economic Investigation—Industrial Extension*

1. *Industrial Information Centre*

(Outlay Rs. 10 lakhs)

It is intended to equip the information centres established in the Industries Directorate and eleven District Industries Centres with libraries. Reference books of technical nature will be purchased for these libraries. Publication of the Industries Guide is also included in this scheme.

2. *Aid to Small Industries Association.*

(Outlay Rs. 5 lakhs).

The objective of the scheme is to give financial assistance by way of grant against recurring and non-recurring expenses incurred by the District level and State level Small Industries Associations including Womens Industries Associations Subject to the existing rules.

3. *Setting up of Documentation Centre.*

(Outlay Rs. 15 lakhs)

A scientific system of documentation will be of much help to the Department to cater to the needs of large number of people approaching for information. The plan provision is for setting up of a Documentation Centre in the Department.

4. *Subsidy for Publication of Periodicals, Pamphlets, etc., for Entrepreneurial Guidance.*

(Outlay Rs. 7 lakhs)

The provision made in the plan is for giving financial assistance in the form of subsidy to the Small Industries Development and Employment Corporation (SIDECO) for publication of the monthly magazine 'Vyavasaya Keralam'. It is also proposed to publish a fortnightly news and tender bulletin and an annual number. The work will be entrusted with the Public Relations Wing of SIDECO.

5. *Study on the Requirement and availability of Raw Materials for Small Scale Industry Units.*

(Outlay Rs. 10 lakhs)

It is proposed to conduct a thorough study on the requirement and availability of raw materials for the small scale industries. The provision in the plan is for conducting the study.

6. *Study on Linkage of District Industry Centres with other Agencies.*

(Outlay Rs. 0.50 lakh)

The scheme envisages a study on the linkage of District Industries Centres with other Departments and promotional agencies.

VI. *Marketing Assistance and Publicity*

1. *Trade Fairs and Exhibitions.*

(Outlay Rs. 20 lakhs)

The plan provision is for participation by the Industries Department in various exhibitions in and outside Kerala State. The main objective of the scheme is to give wide publicity and propagandā to the industrial products of the State and thereby promote their sales.

2. *Quality Marking.*

(Outlay Rs. 2 lakhs)

It is proposed to reorganise the present system of quality marking which is confined only to eight industrial products and to set up quality marking

depots to test sixteen industrial products during the Sixth Plan period. The plan provision is for meeting the expenditure on chemicals, equipments, salary of staff, reference books, furniture and training of personnel.

3. *Measures for Export Promotion*

(Outlay Rs. 10 lakhs)

Small scale industrial units in the State are manufacturing a variety of products. Though some of these products have good demand in the foreign markets they experience difficulty in exporting them. Market intelligence on these items will have to be gathered for sales promotion and management through trade delegations. Incentive awards are to be instituted for the best export performance in the small scale sector. Seminars and discussions with the assistance of Export Promotion Councils are also envisaged under this scheme.

4. *Organisation for District Level Marketing Depots*

(Outlay Rs. 1 lakh)

During 1978-79 a sales emporium was opened at Ernakulam by SIDECO. The provision in the Plan is to reimburse the expenditure incurred by SIDECO.

5. *Subsidy for Publicity and Advertisement and other Market Support for Small Scale Industries Products*

(Outlay Rs. 5 lakhs)

The plan provision is to give subsidy to the small scale industry units for the cost of participation in exhibitions, trade fairs and other publicity measures undertaken in the State.

6. *Subsidy for Registration with Export Promotion Council and with the Indian Standards Institution*

(Outlay Rs. 5 lakhs)

The Scheme is to subsidise the fees for registration with Export Promotion Councils and Commodity Boards, licence fees for specific products etc.

7. *Marketing Organisation for Small Scale Industries*

(Outlay Rs. 120 lakhs)

One of the major problems in the small scale sector is marketing of the products. Small Industries Development and Employment Corporation has a marketing division for assisting the small scale units. But its functions are limited and as the number of small units is increasing every year, it has become quite necessary to set up a full-fledged marketing organisation in the State. Hence it is proposed to set up during the plan period a Marketing Corporation exclusively for marketing small scale industry products within and outside the State. The outlay provided in the Plan is for the implementation of this scheme.

8. *Publicity-cum-Display Van*

(Outlay Rs. 1 lakh)

The plan provision is for meeting the fuel charges etc. of the mobile Van which is used for exhibiting ancillary items required by major industrial units.

## VII. Technical Assistance and Training Programme

### 1. Subsidy for Project Reports and Technical Know-how (Outlay Rs. 30 lakhs)

For the development and application of technology appropriate to Kerala's economic and social conditions special arrangements will be made to make available project reports and technical know-how. In many cases the small scale industrial units are unable to meet the cost involved. Hence provision is made in the Plan to subsidise the cost involved. Assistance will also be given for adoption of foreign technology suitable to Kerala conditions.

### 2. Development of Prototypes in Small scale Industry Units (Outlay Rs. 5 lakhs)

The scheme is intended for providing assistance to industrial units for the development of prototypes of fabrication of models or for setting up Pilot Plants with a view to promoting local talents and inventive intelligence.

### 3. Entrepreneurial Development and Training Programme (Outlay Rs. 15 lakhs)

Only a well trained set of entrepreneurs can develop stable and healthy industrial units. It is proposed to give stipendary inplant training/job oriented training to entrepreneurs and selected workers under an entrepreneur development scheme. The organisation and conduct of such training as per the syllabus approved by the Department will be given suitable emphasis during the plan period.

### 4. Modernisation Subsidy (Outlay Rs 5 lakhs)

Modernisation of obsolete plant and machinery in the existing industrial units is very essential to establish a firm position for these units in the market. But in many cases the cost of replacement of existing machinery and the temporary closing down of the unit may create much financial strain to the unit owners and hence it is proposed to subsidise the cost of such modernisation. The plan provision is for this purpose.

### 5. Kasaragod Development (Outlay Rs 10 lakhs)

This scheme aims at giving financial assistance to entrepreneurs to start industrial units in Kasaragod area as a part of Kasaragod Development Scheme.

### 6. Industrial Complexes in Municipal Areas and District Headquarters (Outlay Rs 3 lakhs)

Separate areas are set apart as development plots in Municipal Areas for establishing industries. Plots will be allotted on hire purchase basis to prospective entrepreneurs. Provision of necessary infrastructure facilities including development of plots will be made by the Department. The plan provision is for meeting these expenses.

### 7. Training and Interest Free Loan to Young Entrepreneurs (Outlay Rs. 150 lakhs)

This scheme envisages provision of stipendary training and interest free loans to young entrepreneurs. It is proposed to give grants to such agencies/organisations/institutions who come forward to conduct such training camps on the basis of the syllabus and rules approved by the Department. The participants will be given stipend. Interest free loan up to Rs. 5000 will also be provided to the entrepreneurs for setting up industries on successful completion of training.

### 8. Industrial Academy (Outlay Rs. 25 lakhs)

The plan provision is for the establishment of an Industrial Academy which will undertake to train up a line of young managers capable of analysing and solving the problems faced by small scale industries in the State. The academy will provide managerial expertise and technical know-how to young entrepreneurs.

## VIII. Assistance to SIDECO and KFC

### 1. Expansion of Ceramic Service Centre (Outlay Rs. 10 lakhs)

The Government Ceramic Service Centre, Mangattuparamba, is managed by SIDECO on an agency basis. The Plan provision is for re-imbursing the expenditure incurred by SIDECO for running the Centre and for paying the managing agency commission and also for meeting the expenditure required on maintenance, purchase of balancing machinery and equipment.

### 2. Interest Subsidy to Kerala Financial Corporation (Outlay Rs. 40 lakhs)

The Scheme is to give subsidy to the Kerala Financial Corporation for the difference in the rate of interest charged for loans issued to small scale industries and the normal lending rate of the Corporation. The interest subsidy agreement between the State Government and the Kerala Financial Corporation was terminated on 14-10-1977. The State Government has to make arrear payment to the Kerala Financial Corporation.

### 3. Share Participation in Small Industries Development and Employment Corporation (Outlay Rs. 30 lakhs)

\* SIDECO is the major organisation in the field of small scale industries which give financial and other promotional assistance to the small scale units. The Plan outlay is the share capital contribution of the State Government to SIDECO.

### 4. Industrial Complexes (Outlay Rs. 9 lakhs)

This plan provision is for establishing a number of Industrial Complexes—functional and otherwise—in the State. Each Complex will have a number of

member units and will be complementary to each other having considerable inter-dependence. Acquisition and development of land, construction of buildings and other package of assistance will be provided to selected entrepreneurs. SIDECO will be the implementing agency for the scheme.

#### IX. Promotional Programmes

##### 1. Seed Capital to Entrepreneurs to Start Industries

(Outlay Rs. 300 lakhs)

The main objective of the scheme is to assist the industrial units set up by the entrepreneurs who are unable to raise margin money from their own resources. The financing institutions have come forward to help them by giving 70 to 80 per cent of their capital requirements. These entrepreneurs will be helped by the Government by advancing a portion of the margin money as soft loan. Even-though loan towards the margin money is limited to 50 per cent of the margin insisted by the financing institutions, in exceptional cases, when the margin exceeds 20 per cent and the entrepreneur is incapable of raising the margin above 10 per cent, Government will consider the advance of the balance margin above 10 per cent but up to a maximum margin of 20 per cent of the capital required. The plan provision is for implementing this scheme.

##### 2. State Investment Subsidy

(Outlay Rs. 385 lakhs)

A State investment subsidy of 10 per cent of capital investment subject to a maximum of Rs. 10 lakhs will be given to industrial units in all the districts of the State except the three districts of Cannanore, Malappuram and Alleppey where the Central investment subsidy of 15 per cent will be available. The subsidy will be available to industries for diversification/expansion or fresh investment after 1-4-1979.

##### 3. Revitalisation of Sick Small Scale Industrial Units

(Outlay Rs. 100 lakhs)

The objective of this scheme is to provide assistance for the revival of sick small scale units. This scheme will be implemented with the help of SIDECO.

#### X. Employment Promotion Programme

##### 1. Margin Money for Revitalisation of Engineering Co-operative Societies

(Outlay Rs. 0.02 lakh)

The object of the scheme is to provide margin money required by engineering industrial co-operative societies to avail of financial assistance from banks or financial institutions with a view to revitalise or rehabilitate their working on the basis of revised project report. Since the requirements vary from case to case only a token provision is proposed.

##### 2. Refund of Share Value in Engineering Co-operative Societies of Unemployed Engineers

(Outlay Rs. 5 lakhs)

The provision is to refund the shares of the surplus members of the engineering co-operative societies of unemployed engineers.

##### 3. Soft Loan to Engineering Co-operative Societies of Unemployed Engineers

(Outlay Rs. 1 lakh)

In order to get accommodation from financing institutions 50 per cent of the amount of margin money required for term loan will be given to the members of these societies. The provision made in the Plan is for this purpose.

##### 4. Loan to Engineering Co-operative Societies

(Outlay Rs. 2 lakhs)

In cases when the engineering industrial co-operatives are unable to avail of institutional finance due to heavy loss, lack of net disposable resources, margin and cover etc., it may be necessary to issue working capital loans. The Plan provision is for this purpose.

#### XI. Other Schemes

##### 1. Subsidy for the Construction of Mini Industrial Estates

(Outlay Rs. 25 lakhs)

As part of the massive industrialisation programmes of the State, 110 Mini Industrial Estates have been constructed. Subsidy at Rs. 50,000 per estate is given at present towards construction of estates so as to bring down the rent/hire purchase value payable by the entrepreneur industrialists. The Plan provision is for payment of subsidy to new estates.

##### 2. Interest Subsidy to Small Scale Industry Units

(Outlay Rs. 5 lakhs)

The objective of the scheme is to provide incentive in the form of financial assistance to the industrial units started by the entrepreneurs in mini industrial estates. The State Government will subsidise the difference in the rates of interest between actual lending rate of bank/financial institutions and the subsidised rate at which they have availed of term loans.

##### 3. Educational Grant to Children of Workers in Traditional Industries

(Outlay Rs. 3 lakhs)

The Plan provision is to give monthly grant towards educational expenses of deserving children of the workers in traditional industries.

TABLE 3.17

## Small Scale Industries—Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated Expenditure	Proposed outlay	Capital Content	Approved outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>I.</i>	<i>Departmental Administration</i>	8.40	16.00	12.00	95.00	..	16.00	..
<i>II.</i>	<i>District Industries Centres—State's Share</i>	58.74	75.00	56.00	425.00	113.75	50.00	7.83
<i>III.</i>	<i>Industrial Co-operatives</i>							
1.	Share Participation in District Mini Industrial Estate Co-operative Society	..	5.00	..	7.00	7.00	0.001	0.001
2.	Share Participation in District Industrial Co-operative Bank	..	0.01	..	30.00	..	..	..
3.	Managerial, Technical and other assistance to Industrial Co-operatives	0.99	4.00	4.00	10.00	..	4.00	..
4.	Grant towards Contribution to Reserve Fund	0.04	0.50	0.50	2.00	..	0.50	..
5.	Survey for Identification of Viable and Potentially Viable Co-operative Societies	2.22	1.50	1.50	10.00	..	1.50	..
6.	Subsidy towards R.B.I Credit to Industrial Co-operative Society	..	2.00	2.00	10.00	..	2.00	..
7.	Share Participation in Small Industrial Co-operative Societies	..	5.00	..	20.00	..	..	..
<i>IV.</i>	<i>Women's Industrial Programmes</i>							
1.	Scheme for Women's Industries	19.58	3.00	3.00	50.00	..	3.00	..
2.	Share Participation in Women's Industrial Societies	..	1.00	1.00	10.00	10.00	1.00	..
3.	Aid to Women Industrial Units for Participation in Exhibition	..	0.50	..	0.02	..	..	..
4.	Starting of Production-cum-Training Centre	..	1.50	..	1.50	..	..	..
<i>V.</i>	<i>Economic Investigation Industrial Extension</i>							
1.	Industrial Information Centre	2.26	2.00	1.00	10.00	..	3.00	..
2.	Aid to Small Industries Association	0.73	1.00	1.00	5.00	..	2.00	..
3.	Setting up of a Documentation Centre	0.01	2.00	2.00	15.00	..	3.00	..
4.	Subsidy for Publication of Periodicals, Pamphlets etc. for Entrepreneurial Guidance	1.01	1.40	1.40	7.00	..	1.50	..
5.	Study on Requirements and Availability of Raw Materials for SSI Units	0.03	1.00	1.00	10.00	..	2.50	..
6.	Study on Linkage of DIC's with Other Agencies	0.15	0.50	..	0.50	..	..	..
<i>VI.</i>	<i>Marketing Assistance and Publicity</i>							
1.	Trade Fairs and Exhibitions	6.65	3.50	3.50	20.00	..	5.90	..
2.	Quality Marking	..	2.00	..	2.00	..	..	..
3.	Measures for Export Promotion	..	4.00	4.00	10.00	..	5.00	..
4.	Organisation for District Level Marketing Depots	0.16	2.00	..	1.00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	Subsidy for Publicity and Advertisement and Other Market Support for SSI Products	..	1.00	1.00	5.00	..	1.00	..
6.	Subsidy for Registration with Export Promotion Council and Indian Standard Institution	0.64	1.00	1.00	5.00	..	1.00	..
7.	Marketing Organisation for Small Industries	..	..	50.00	120.00	..	20.00	..
8.	Publicity-Cum-Display Van	..	1.00	..	1.00	..	..	..
<b>VII. Technical Assistance and Training Programme</b>								
1.	Subsidy for Project Reports and Technical Know-how	5.53	1.00	1.00	30.00	..	1.00	..
2.	Development of Prototypes in SSI Units	0.48	0.50	0.50	5.00	..	1.00	..
3.	Entrepreneurial Development and Training programme	2.02	2.50	2.00	15.00	..	3.00	..
4.	Modernisation Subsidy	0.50	1.00	1.00	5.00	..	1.00	..
5.	Kasaragod Development	5.48	1.50	1.50	10.00	..	1.50	..
6.	Industrial Complex in Municipal Areas and District Headquarters	..	1.00	..	3.00	3.00	0.001	0.001
7.	Training and Interest Free Loan to Young Entrepreneurs	..	..	50.00	150.00	..	50.00	..
8.	Industrial Academy	..	..	5.00	25.00	25.00	1.00	1.00
<b>VIII. Assistance to SIDECO and KFC</b>								
1.	Expansion of Ceramic Service Centre	4.06	1.50	1.50	10.00	..	1.50	..
2.	Interest Subsidy to KFC	20.10	0.10	..	40.00	..	..	..
3.	Share Participation in SIDECO	2.07	10.00	10.00	30.00	30.00	14.00	14.00
4.	Industrial Complexes	..	1.00	1.00	9.00	9.00	2.00	2.00
<b>IX. Promotional Programmes</b>								
1.	Seed Capital to Entrepreneurs to Start Industries	9.83	20.00	20.00	300.00	300.00	20.00	20.00
2.	State Investment Subsidy	32.41	30.00	30.00	385.00	..	30.00	..
3.	Revitalisation of Sick Small Scale Units	..	15.00	15.00	100.00	..	15.00	..
<b>X. Employment Promotion Programmes</b>								
1.	Margin Money for Revitalisation of Engineering Co-operative Societies	..	0.02	..	0.02	..	..	..
2.	Refund of Share Value in Engg. Co-operative Societies of Unemployed Engineers	..	0.50	..	5.00	5.00	0.50	0.50
3.	Soft Loan to Engineering Co-operative Societies of Unemployed Engineers	..	0.02	..	1.00	..	..	..
4.	Loan to Engineering Co-operative Societies	1.00	1.00	..	2.00	..	..	..
<b>XI. Other Schemes</b>								
1.	Subsidy for the Construction of Mini Industrial Estates	2.00	6.00	6.00	25.00	..	6.00	..
2.	Interest Subsidy to SSI Units	1.39	3.00	3.00	5.00	..	3.00	..
3.	Educational Grant to Children of Workers in Traditional Industries	..	3.00	..	3.00	..	..	..
	New Schemes	..	..	..	12.96	..	..	..
<b>Total—Small Scale Industries</b>		<b>216.22*</b>	<b>243.05*</b>	<b>293.40</b>	<b>2053.00</b>	<b>502.75</b>	<b>273.402</b>	<b>45.332</b>

\*Includes outlays for Schemes which have been discontinued.

### Industrial Estates

In Kerala, the industrial estate programme was designed to provide employment opportunities for the educated unemployed youth of the State. With the help of the well developed infrastructure facilities of the State it was expected that rapid development in the Small scale sector could be achieved through this programme. Exploitation of local raw material resources, mobilisation of maximum finance from financial institutions and utilisation of the abundant manpower available in the State are the main points of emphasis of this programme.

A brief description of the schemes to be implemented under Industrial Estates during the Sixth Plan period is given below:

#### 1. Common Facility Service Centre, Changanacherry

(Outlay Rs. 5 lakhs)

The provision for the centre is intended for capital investment, purchase of raw materials and stores, payment of wages to workers etc.

#### 2. Functional Industrial Estate for Leather

(Outlay Rs. 5 lakhs)

A functional industrial Estate exclusively for leather will be established at Kasaragod where there is a concentration of leather tanning units. The outlay provided is to meet the expenditure for this State.

#### 3. Rent Subsidy on Industrial Estates

(Outlay Rs. 2 lakhs)

Sheds in the industrial estates are allotted to deserving entrepreneurs for running industrial units on rent-free basis for a period of five years. Rent concessions are also allowed to the units in the industrial estate, Kasaragod. The provision in the Plan is to be utilised for reimbursement of rent to the SIDECO which is running the industrial estates.

#### 4. Providing Additional Facilities in the Existing Development Plots

(Outlay Rs. 50 lakhs)

The provision is intended for carrying out development works such as construction of new roads, improvements to existing roads, providing water supply and electricity facilities, constructing administrative buildings, providing telephones, banking facilities etc. in the existing development plots in the State.

#### 5. Harijan Development and Tribal Programmes

##### (a) Industrial Estate for Harijans

(Outlay Rs. 20 lakhs)

The Harijan Welfare Department has made available land for an industrial estate at Thonnakkal. The industrial estate will consist of a number of small scale units with common amenities. Sheds will

be allotted to selected harijan entrepreneurs on rent-free basis for a period of ten years. Machinery required by each of the industrial units will be supplied on hire purchase basis under the existing rules. The Department will also give interest free working capital loan to entrepreneurs upto Rs. 10,000.

##### (b) Organisation for Collection and Distribution of Raw Materials

(Outlay Rs. 10 lakhs)

This is a scheme exclusively for the benefit of Scheduled Castes/Scheduled Tribes families engaged in the manufacture and sale of rattan and bamboo items. The object of the scheme is to start a central official organisation to collect raw materials from forests and other sources and distribute them to the houses of workers and to take back and sell the finished products. Provision is also made for vehicles for transportation and godowns for storage. The scheme will be implemented through the Kerala State Bamboo Corporation.

##### (c) Stipendary Training for Scheduled Castes and Scheduled Tribes

(Outlay Rs. 5 lakhs)

People belonging to Scheduled Castes/Scheduled Tribes are unwilling to enter the field of industry due to lack of entrepreneurial talent. Considering this they will be given stipendary training in industrial management. The various expenses associated with the training are to be met from the plan provision.

##### (d) Tribal Area Sub Plan

(Outlay Rs. 5 lakhs)

The plan provision is to promote industries benefiting the tribals in Punalur, Idukki, Nilambur, Manantody and Attappadi Sub Plan areas.

##### (e) Loans to Harijan Entrepreneurs

(Outlay Rs. 100 lakhs)

The main objective of the scheme is to give loan assistance to harijan entrepreneurs engaged in small scale or traditional industries and who are unable to raise the required capital. No interest will be charged on loans upto Rs. 10,000 which is the maximum eligible amount under this scheme for fixed assets or working capital. This scheme is being implemented through the District Industries Centres.

#### 6. Rural Industries Centre, Kadanad

(Outlay Rs. 5 lakhs)

The scheme envisages the establishment of a rural industries centre at the suburbs of Palai Municipality in close collaboration with Hindustan Machine Tools and the Kerala Agro Industries Corporation with a view to promote rural skills through intensive practical training. The Agro Industries Corporation is the implementing agency for this scheme.



7. *New Development Plots including those in Backward Areas*

(Outlay Rs. 175 lakhs)

Provision made in the Plan is for acquisition of land for industrial purposes both in the forward and backward areas. The expenses for providing infrastructure facilities are also to be met from this amount.

*New Schemes*

8. *Functional Industrial Estate for Rubber*

(Outlay Rs. 10 lakhs)

The provision in the Plan is to set up an Industrial Estate for Rubber and Common Facility Centre

in Malappuram District. Necessary land will have to be acquired and developed and building constructed. Land site for industrial units will be allotted to selected entrepreneurs on hire-purchase basis.

9. *Industrial Estate for Ceramics at Mangattuparamba*

(Outlay Rs. 8 lakhs)

Land is available at the Ceramic Centre, Mangattuparamba, where new industrial units for production of ceramic items are to be set up. The units are to be allotted to selected entrepreneurs on hire purchase basis.

TABLE 3.18

**Industrial Estates—Schemewise Outlay**

(Rs. in lakhs)

Sl. No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Approved outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Common Facility Service Centre, Changanacherry	0.78	1.00	1.00	5.00	..	1.00	..
2.	Functional Industrial Estate for Leather	0.37	1.00	1.00	5.00	5.00	1.00	1.00
3.	Rent subsidy for Industrial Estate	0.14	0.50	0.50	2.00	..	0.50	..
4.	Providing Additional Facilities in the existing Development Plots	39.11	1.50	1.50	50.00	50.00	9.00	9.00
5.	Harijan Development and Tribal Programmes							
(a)	Industrial Estate for Harijans				20.00	20.00	5.00	5.00
(b)	Organisation for Collection and distribution of Raw Materials	15.44	18.50	18.50	10.00	..	2.00	..
(c)	Stipendary Training for S.C./S.T.				5.00	..	0.50	..
(d)	Tribal Area Sub-Plan				5.00	..	1.00	..
(e)	Loan to Harijan Entrepreneurs				100.00	..	15.00	..
6.	Rural Industries Centre, Kadanad	..	1.00	..	5.00	5.00	0.001	0.001
7.	New Development Plots including those in the backward areas	0.01	5.00	5.00	175.00	175.00	5.00	5.00
8.	Functional Industrial Estate for Rubber				10.00	8.00	..	..
9.	Industrial Estate for Ceramics, Mangattuparamba, Cannanore				8.00	6.00	..	..
	Total Industrial Estates	55.85	28.50	27.50	400.00	269.00	40.001	20.001

### *Handloom Industry*

The handloom industry in Kerala, which provides direct employment to about two lakhs of people is one of the major traditional industries of the State. The problems confronted by the industry are the soaring prices of raw materials, accumulation of unsold stocks, stiff competition from organised mill sector etc. The development programmes in the past under this sector laid emphasis on bringing more weavers into the co-operative fold in order to ensure better wages, improved productivity and easy marketing of products. The annual production of handloom cloth is proposed to be stepped up from the present 89 million metres to 155 million metres by the end of the Sixth Plan Period. The plan programmes in this sector also aims at improving the quality of handloom goods by diversification of production and promotion of sales of handloom goods both in domestic and foreign markets.

A total provision of Rs. 800 lakhs is earmarked for handloom development in the Sixth Plan. The details of the schemes are given below.

#### 1. *Expansion and Organisation of Weavers' Industrial (Factory Type) Co-operative Societies*

(Outlay Rs. 50 lakhs)

The scheme aims at bringing more loomless weavers into the co-operative fold. The factory type societies have several advantages like continuous employment to workers, increased productivity and better quality control over the cottage type primary handloom societies. It is therefore, proposed to start a few new factory type Industrial Co-operative Societies and also to give financial assistance for the expansion of some of the existing societies. The outlay is for implementing these programmes.

#### 2. *Services of Departmental Personnel*

(Outlay Rs. 2.50 lakhs)

An amount of Rs. 2.50 lakhs is provided for continuing the scheme of meeting the expenses towards salary of Departmental officers posted as paid Secretaries and other administrative charges of the weavers co-operative societies which do not have adequate resources to meet the cost from their own funds.

#### 3. *Modernisation of Looms*

(Outlay Rs. 10 lakhs)

This scheme will cover programmes such as assistance to handloom weavers' societies to modernise the looms of their members, provision of additional fittings, purchase of accessories, conversion of pitlooms into frame looms etc. Twenty-five per cent of the cost of modernisation will be borne by the beneficiaries.

#### 4. *Warehouse Loans to Primary Weavers' Co-operative Societies*

(Outlay Rs. 12 lakhs)

The Scheme is for issue of loans to primary weavers' co-operative societies for the construction of warehouse and godowns for stocking raw materials and finished products.

#### 5. *Quality Control*

(Outlay Rs. 1 lakh)

A provision of Rs. 1 lakh is allotted for meeting the expenditure towards equipments, chemicals etc., required for the depots for controlling the quality of production in the weavers' societies.

#### 6. *Share Capital Loans to Primary Weavers' Societies (State share)*

(Outlay Rs. 5 lakhs)

The scheme is intended to give financial assistance to weavers to fully contribute the value of their shares and thereby increase the borrowing capacity of primary weavers' co-operative societies. The Central Government will provide 50 per cent matching contribution for this scheme.

#### 7. *Construction of Worksheds/Godowns for Apex/Regional and Primary Weavers' Societies*

(Outlay Rs. 40 lakhs)

National Co-operative Development Corporation (NCDC) provides assistance for construction of godowns and showrooms for the Apex Society and also for construction of worksheds and supply of looms and accessories to the primary weavers' co-operative societies. The outlay provided is for meeting states share of expenditure.

#### 8. *Expansion of Dye Houses and Establishment of New Ones*

(Outlay Rs. 3 lakhs)

The outlay of Rs. 3 lakhs will be utilised for the expansion of existing dye houses and for the establishment of new ones.

#### 9. *Training of Weavers*

(Outlay Rs. 4 lakhs)

Diversification of production in the handloom sector is an urgent necessity in the context of stiff competition from the mill sector. It is, therefore, proposed to give training to weavers in advanced techniques of weaving using improved appliances. The outlay is to meet the expenditure on training including stipend to trainees.

#### 10. *Training of Employees of Weavers' Co-operative Societies*

(Outlay Rs. 1.50 lakhs)

Efficient and trained staff are essential for the proper functioning of the societies. The outlay is for imparting training to the employees of co-operative societies in subjects like co-operation salesmanship etc.

#### 11. *Marketing Depots*

(Outlay Rs. 0.50 lakh)

The plan outlay aims at providing financial assistance as tapering grant to primary weavers' co-operative societies for opening marketing depots.

12. *Handloom Houses*

(Outlay Rs. 3 lakhs)

The outlay is for giving financial assistance to the State Handloom Apex Society for opening new Handloom Houses within and outside the State.

13. *Subsidy for Payment of Rebate on Sale of Handloom Cloth—State Share*

(Outlay Rs. 200 lakhs)

Accumulation of large quantities of unsold stock of handloom is the major problem facing the industry. The scheme of giving rebate on sale of handloom cloth has helped to clear most of the unsold stocks. The amount is for reimbursement of rebate allowed by the handloom societies and the Handloom Development Corporation on sale of handloom cloth.

14. *Publicity and Propaganda*

(Outlay Rs. 30 lakhs)

The outlay is for meeting the expenditure on advertisement through mass media and subsidy for participation of the Primary Weavers' societies, Apex Society and the Handloom Development Corporation in exhibitions. Provision has also been made for taking part in the exhibition arranged by the Development Commissioner's Organisation, Trade Fair Authority etc., both inside and outside the country.

15. *Subsidy to Co-operative Banks against Loss of Interest*

(Outlay Rs. 25 lakhs)

The scheme is for providing subsidy to co-operative banks to recoup the loss of interest incurred by them as a result of making available RBI credit to Apex Society and Primary Societies.

16. *Pilot Centre for Reserve Bank of India Scheme*

(Outlay Rs. 2 lakhs)

The provision is to meet the expenditure on staff in the Pilot Centres at Trivandrum and Cannanore for the implementation of the Reserve Bank of India Scheme for handloom finance.

17. *Grant to State Handloom Weavers' Apex Co-operative Society*

(Outlay Rs. 1 lakh)

The amount allotted under this scheme is for giving managerial grant to the State Handloom Weavers' Apex Society.

18. *Training of Departmental Personnel*

(Outlay Rs. 0.50 lakhs)

The provision proposed is for meeting the expenditure on training to Departmental Officers in supervisory, co-operative and technical aspects of handloom industry and business managements.

19. *Subsidy for the cost of Bank Inspectors*

(Outlay Rs. 3 lakhs)

This scheme is intended for giving subsidy to the Co-operative Banks for appointing Bank Inspectors for the implementation of Reserve Bank of India Scheme of handloom finance.

20. *Weavers' Common Facility Centre*

(Outlay Rs. 4 lakhs)

The plan provision is for meeting the expenditure for continuing the common facility service centre at Balaramapuram run by the State Handloom Apex Society and also to set up additional common facility service centres.

21. *Share Contribution to Handloom Apex Society—State Share*

(Outlay Rs. 40 lakhs)

The outlay is for giving share capital contribution to the Handloom Apex Society in order to raise its share capital base. Fifty per cent matching contribution by Government of India is available for this scheme.

22. *Intensive Development Project for Handloom*

(Outlay Rs. 153.50 lakhs)

An outlay of Rs. 153.50 lakhs has been provided to meet the expenditure required for the completion of various schemes started under the Intensive Development Projects for Handloom established at Cannanore and Trivandrum. This scheme, started as centrally sponsored, now stands transferred to the state sector. Under these two projects, schemes like organising factory type weavers' co-operative societies, modernisation of looms, setting up of Common Facility Service Centres etc., are in progress.

23. *Revitalisation of Languishing Weavers' Co-operative Societies*

(Outlay Rs. 2.50 lakhs)

The Plan outlay aims at providing working capital loans to handloom weavers' co-operative societies for revitalisation.

24. *Government Participation in the Share Capital of Primary Weavers' Co-operative Societies*

(Outlay Rs. 45 lakhs)

The scheme aims at participation by Government in the share capital of primary weavers' co-operative societies in order to strengthen the share capital base of these societies so that more looms are brought into the co-operative fold. Matching assistance from Government of India is available for this scheme.

25. *Mobile Van and Trucks*

(Outlay Rs. 8 lakhs)

The outlay is for giving grant to the Handloom Development Corporation, State Apex Society and Primary Societies for acquiring mobile van and trucks for transportation and sales of handloom cloth.

26. *Kerala Handloom Development Corporation*

(Outlay Rs. 30 lakhs)

The outlay is meant for share capital contribution of the State Government to the State Handloom Development Corporation. Matching contribution from Government of India is anticipated.

27. *Renovation of Weavers' Houses*

(Outlay Rs. 8 lakhs)

A Plan outlay of Rs. 8 lakhs is made for giving financial assistance for the renovation of Weavers' houses.

28. *Managerial Assistance to Primary Handloom Societies—  
(State Share)*

(Outlay Rs. 25 lakhs)

The scheme is to provide financial assistance towards administrative support to Weavers' Societies. Government of India will make matching contribution under this scheme.

29. *Contributory Thrift Fund*

(Outlay Rs. 4 lakhs)

The outlay proposed is for giving contribution by the Government to the Weavers through the Weavers' Co-operative Societies towards thrift savings scheme formed by deducting a small percentage of the wages of the weavers.

30. *Strengthening of Staff in the Directorate and Sub-Offices*

(Outlay Rs. 7 lakhs)

The Plan outlay is to meet the expenditure for appointment of additional staff in the Directorate and District Offices to cope with the additional work load in implementing schemes aimed at Co-operativisation of 60 per cent of the looms in the State.

31. *Training of Scheduled Castes and Scheduled Tribes in Handloom Weaving (Special Component Plan)*

(Outlay Rs. 12 lakhs)

The Scheme is to meet the cost of intensive training of Scheduled Caste/Scheduled Tribe members in handloom weaving. This is part of the special component plan for Scheduled Castes and Scheduled Tribes.

32. *Organisation of Handloom Weavers' Co-operative Societies for Scheduled Castes and Scheduled Tribes (Special Component Plan)*

(Outlay Rs. 30 lakhs)

This Scheme is a part of the Special Component Plan to organise Weavers' Industrial Co-operative Societies exclusively for Scheduled Castes/Scheduled Tribes.

33. *Award of Scholarships to Children of Weavers*

(Outlay Rs. 1 lakh)

The outlay provided is to issue stipend to the children of weavers to undergo the Diploma Course in Indian Institute of Handloom Technology at Salem.

34. *Establishment of Market Research Planning and Monitoring Wing.*

(Outlay Rs. 6 lakhs)

The amount is allotted to continue the existing Market Research Wing in the Handloom Directorate. This Wing is proposed to be strengthened to take up the work of planning and monitoring of schemes for handloom development.

35. *Grant to write off Bad debt/Loss of Weak Primary Weavers' Co-operative Societies/Central Co-operatives.*

(Outlay Rs. 3 lakhs)

The plan outlay is provided to meet the losses incurred by Central Banks due to irrecoverable arrears resulting from lending to Weavers' Co-operative Societies. The loss is to be shared by Government of India, the State Co-operative Bank and the Central Bank. The provision proposed is the States' share for the scheme.

36. *Assistance to the Kerala State Handloom Weavers' Co-operative Society and Handloom Development Corporation to create Yarn Price Fluctuation Fund*

(Outlay Rs. 3 lakhs)

Shortage of yarn and other raw materials is the main problem in handloom industry. The plan outlay envisages to create a fund to subsidise the Apex Society and Handloom Development Corporation to meet losses due to fluctuations in the prices of yarn. This would enable these institutions to collect and stock adequate quantities of yarn to ensure continuous flow of raw materials to the Weavers in the Co-operative and private sectors even at the time of scarcity.

37. *Creation of Welfare Fund to Weavers*

(Outlay Rs. 2 lakhs)

The outlay is to institute a Welfare Fund for the general uplift of the weavers in the State.

38. *Purchase and Distribution of Looms to loomless Weavers*

(Outlay Rs. 15 lakhs)

The Plan outlay is for the purchase and distribution of looms to the loomless weavers and for replacement of existing worn-out looms. Matching contribution from Government of India is expected.

39. *Award of Prizes to Handloom Fabrics*

(Outlay Rs. 0.50 lakh)

The scheme envisages award of prizes to Weavers' Co-operative Societies to encourage the production of new varieties of handloom fabrics.

40. *Interest Subsidy to the Kerala State Handloom Development Corporation*

(Outlay Rs. 2 lakhs)

The Plan outlay is intended to assist the Handloom Development Corporation by subsidising the high rate of interest the commercial banks charge for the working capital loan availed by the Corporation.

41. *Establishment of an Institute of Textile Technology*

(Outlay Rs. 2 lakhs)

The outlay is for establishing an Institute of Handloom Textile Technology in the State to impart advanced training in the field of handloom textile technology.

42. *State Outlay for Institutionally Sponsored Schemes*  
(Outlay Rs. 2.50 lakhs)

There is a proposal for implementing certain schemes like opening of show rooms and emporia, setting up of mobile exhibitions and sales units by

Handloom Apex Society with I.D.B.I. Assistance, setting up of readymade garment factories, processing units etc., with World Bank Assistance and certain new schemes for development of handloom co-operatives with N.C.D.C. assistance. The outlay proposed is the States' share for implementing these schemes.

TABLE 3.19  
*Handloom Industry—Scheme-wise Outlay*

(Rs. in lakhs)

Sl. No.	Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Approved Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Expansion and Organisation of Industrial (factory type) Co-operatives	7.72	6.00	6.00	50.00	45.00	16.00	15.00
2.	Services of Departmental Personnel	0.05	0.50	0.50	2.50	..	0.50	..
3.	Establishment of Collective Weaving Centres	0.80	0.02	..	..	..	0.002	..
4.	Modernisation of Looms—State Share	..	4.00	4.00	10.00	10.00	4.00	4.00
5.	Warehouse Loan to Primary Weavers' Co-operative Society	4.08	2.50	2.50	12.00	12.00	2.50	2.50
6.	Quality Control	..	0.20	..	1.00	..	0.20	..
7.	Loan to Weavers (Handloom)—State share	0.43	0.50	0.50	5.00	..	0.50	..
8.	Construction of Workshops/Godowns by Apex/Regional and Primary Weavers' Societies	..	10.00	10.00	40.00	40.00	10.00	10.00
9.	Expansion of Dyehouse and Establishment of New Ones	1.04	1.00	1.00	3.00	3.00	1.00	1.00
10.	Training of Weavers	0.61	1.00	1.00	4.00	..	1.00	..
11.	Training of Employees of Weavers' Co-operative Societies	0.01	0.05	..	1.50	..	0.05	..
12.	Marketing Depots	..	0.01	..	0.50	..	0.01	..
13.	Handloom Houses	..	0.50	0.50	3.00	3.00	0.50	0.50
14.	Subsidy for payment of Rebate on Sale of Handloom Cloth—State Share	55.34	40.00	40.00	200.00	..	90.00	..
15.	Publicity and Propaganda	1.68	4.00	4.90	30.00	..	8.00	..
16.	Subsidy to Co-operative Bank Against Loss of Interest	12.78	6.00	6.00	25.00	..	6.00	..
17.	Pilot Centre for Reserve Bank of India Scheme	0.01	0.30	..	2.00	..	0.30	..
18.	Grant to State Handloom Weavers' Apex Co-operative Societies	..	0.30	0.10	1.00	..	0.30	..
19.	Training of Departmental Personnel	0.05	0.15	..	0.50	..	0.15	..
20.	Subsidy for the Cost of Bank Inspectors	1.48	1.50	..	3.00	..	1.50	..
21.	Weavers Common Facility Centre	0.44	1.00	1.00	4.00	..	1.00	..
22.	Share Contribution to Handloom Apex Society—State Share	12.67	7.00	7.00	40.00	25.00	7.00	5.00
23.	Intensive Development Project for Handloom	107.11	32.00	32.00	153.50	125.00	40.00	30.00
24.	Revitalisation of Languishing Weavers' Co-operative Societies	0.10	0.50	..	2.50	..	0.50	..
25.	Government Participation in the Share capital of Primary Weavers' Co-operative Societies	4.35	5.00	5.00	45.00	..	5.00	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
26.	Mobile Van and Trucks	..	2.00	2.00	8.00	8.00	5.001	5.00
27.	Kerala Handloom Development Corporation— State Share	15.00	7.00	7.00	30.00	25.00	7.00	5.00
28.	Renovation of Weavers Houses	1.81	1.17	1.17	8.00	:	2.17	..
29.	Managerial Assistance to Primary Handloom Societies —State Share	..	3.00	1.00	25.00	..	5.00	..
30.	Contributory Thrift Fund	0.54	1.00	1.00	4.00	..	1.00	..
31.	Strengthening of Staff in the Directorate and Sub Offices	1.62	2.00	1.50	7.00	..	2.00	..
32.	Training of Scheduled Castes/Scheduled Tribes in Handloom Weaving	0.26	0.50	0.50	12.00	..	5.00	..
33.	Organisation of Handloom Weavers' Co-operative Societies for SC/ST—Special Component Plan	0.55	2.00	3.00	30.00	25.00	7.00	5.00
34.	Award of Scholarship to Children of Weavers	0.06	0.25	0.25	1.00	..	0.25	..
35.	Establishment of Market Research, Planning and Monitoring Wing	0.45	1.55	1.55	6.00	..	1.57	..
36.	Grant to Write off Bad Debts/loss of Weak Primary Weavers' Co-operative Societies/Central Co-operatives	..	1.00	..	3.00	..	1.00	..
37.	Assistance to Kerala State Handloom Weavers Co- operative Societies and Handloom Development Corporation to Create Yarn Price Fluctuation fund	..	1.00	..	3.00	..	0.001	..
38.	Creation of Welfare Fund to Weavers	..	0.50	..	2.00	..	0.001	..
39.	Purchase and Distribution of Looms to Loomless Weavers—State Share	..	2.00	2.00	15.00	15.00	2.00	2.00
40.	Award of Prize for the Handloom Fabrics	..	0.001	..	0.50	..	0.001	..
41.	Interest Subsidy to Kerala State Handloom Develop- ment Corporation	..	..	..	2.00	..	..	..
42.	Establishment of an Institute of Textile Technology	..	..	..	2.00	..	..	..
43.	State Outlay for Institutionally sponsored Scheme	..	1.00	..	2.50	..	..	..
	Total—Handloom Industry	231.09*	149.993*	142.97	800.00	336.00	235.006	85.00

\*Includes outlays for Schemes which have been discontinued.

### Powerloom Industry

#### 1. Training to Unemployed Youth in Powerloom Weaving

(Outlay Rs. 6 lakhs)

Powerloom complexes are being established with a view to providing employment to the educated unemployed youth. These persons have to be given proper training in powerloom weaving before being employed in the complexes. The provision proposed is for giving assistance to open training centres attached to the complexes to meet the recurring and non-recurring expenditure and also to give stipend to the trainees.

#### 2. Managerial Grant to Powerloom Weavers' Co-operative Societies

(Outlay Rs. 7 lakhs)

The outlay is for giving managerial grant to the newly organised as well as existing powerloom weavers'

co-operative societies which are not financially sound to meet the expenditure on cost of staff.

#### 3. Share Participation in the Powerloom Weavers' Co-operative Societies

(Outlay Rs. 7 lakhs)

The amount is allotted to participate in the equity capital of powerloom weavers' societies in order to help them build up their fixed assets and avail of greater credit facilities.

#### 4. Organisation of Powerloom Weavers' Co-operative Societies

(Outlay Rs. 4 lakhs)

The provision is for giving assistance to the newly organised powerloom weavers' co-operative societies for the purchase of land, looms and accessories and also for construction of buildings.

5. *Revival of Dormant Powerloom Weavers' Co-operative Societies*

(Outlay Rs. 5 lakhs)

A detailed study is being conducted by an expert team to find out the difficulties faced by the dormant powerloom weavers' co-operative societies and to suggest measures to improve the working of these institutions. The outlay is for giving assistance to the societies for revival and efficient functioning.

6. *Expansion of Warping and Sizing Industrial Co-operative Society*

(Outlay Rs. 1 lakh)

The plan provision is for giving assistance to the existing warping and sizing industrial co-operative society for modernisation of machinery and expansion of production capacity.

TABLE 3.20

**Powerloom Industry—Scheme-wise outlay**

(Rs. in lakhs)

Sl.No.	Name of Scheme	1979-80	1980-81		1980-85		1981-82	
		Actuals	Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Approved outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Training to Unemployed youth in Powerloom Weaving	0.08	0.50	0.03	6.00	..	0.50	..
2.	Managerial Grant to Powerloom Weavers' Co-operative Societies	0.30	0.50	0.50	7.00	..	0.50	..
3.	Share Participation in the Powerloom Weavers' Co-operative Societies	1.00	1.00	1.00	7.00	..	1.50	..
4.	Organisation of Powerloom Weavers' Co-operative Societies	2.92	0.01	..	4.00	..	0.50	..
5.	Revival of Dormant Powerloom Weavers' Co-operative Societies	..	2.00	2.00	5.00	4.00	2.00	..
6.	Expansion of Warping and Sizing Industrial Co-operative Societies	..	1.00	1.00	1.00	1.00	1.00	..
Total—Powerloom Industry		4.30	5.01	4.53	30.00	5.00	6.00	..

*Khadi and Village Industries*

The Kerala Khadi and Village Industries Board was constituted under the Kerala Khadi and Village Industries Board Act of 1957. The Board has been implementing schemes relating to Khadi and eighteen other village industries with the financial aid it receives from the Khadi and Village Industries Commission. The State Government meets the expenditure on pay and allowances etc., of the establishment of the Board. The Board organises co-operative societies for the development of Khadi and Village Industries and sanctions loans and grants and provides other assistance to the co-operative societies, registered institutions and individual artisans for the development of Khadi and Village industries. At present there are about 500 societies and institutions and 3,000 village artisans working in this sector. The total number of full-time workers engaged in khadi and village industries in the State in 1979-80 stood at 75,070. Also, part-time employment was provided to 23,220 persons during the year.

The State Board has formulated schemes for providing additional employment to one lakh persons

through khadi and eight selected village industries. The selected village industries for the programme are village pottery, village oil, lime manufacture, blacksmithy, carpentry, cottage match, cane and bamboo and bee-keeping. This special development programme which has been initiated in several parts of the State has the approval of Khadi and Village Industries Commission and the State Government. The Government has directed the State Board to implement the scheme within a period of three years commencing 1978-79. The total outlay for this plan is Rs. 26.74 crores. The entire expenditure on the establishment of staff under Plan scheme and the cost of construction of workshops, godowns, dyehouses Khadi Bhavans, etc., are to be met by the State Government. The funds required for the organisation of Village Industries will be provided by the Khadi and Village Industries Commission. The assistance will be in addition to the working capital loan for production and sale of Khadi. The funds required for the charkas and looms are to be obtained through the nationalised banks. An amount of Rs. 500 lakhs is earmarked in the Plan for 1980-85 for Khadi and Village Industries under the State sector.

TABLE 3.21

## Khadi and Village Industries—Schemewise outlay

(Rs. in lakhs)

Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved Outlay	Anticipated Expenditure	Approved Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Khadi and Village Industries	25.00	30.00	30.00	500.00	..	50.00	..

*Handicrafts*

The handicrafts of Kerala provide employment to over 40,000 persons in the State. A major problem confronting the industry is scarcity of raw materials like wood, ivory and horn, etc. Special efforts will be made to develop the handicrafts of Kerala during the Sixth Plan period. The scheme-wise details and outlays under Handicraft development in the Sixth Plan are as follows:

1. *Assistance to Co-operatives*

(Outlay Rs. 45 lakhs)

This scheme aims at revitalisation of existing handicraft co-operatives in an effective manner. Grant assistance will be given to the Handicrafts Apex Co-operative Society and the primary handicraft co-operative societies during the plan period. Societies will also get lumpsum grant for the purchase of machinery, tools and equipments, training requirements, etc. The Sixth Plan also aims at strengthening of the existing handicraft co-operatives where there is concentration of craftsmen.

2. *Kerala State Handicrafts Development Corporation*

(Outlay Rs. 75 lakhs)

This Corporation buys handicraft products directly from craftsmen offering fair price and sells them through its emporia. The amount allotted in the Plan is for increasing the working capital of the Corporation. This will help to increase the sales through the Corporation's emporia. Also more handicraft items can be brought under the purview of the Corporation.

3. *Artisans Development Corporation*

(Outlay Rs. 5 lakhs)

The outlay is for meeting the initial expenditure required to set up an Artisans Development Corporation for village artisans in the State.

4. *Raw Material Depot for Ivory and Rosewood*

(Outlay Rs. 10 lakhs)

Inadequate supply of raw-material is still a major problem in handicraft industry. Government have sanctioned the opening of raw-material depots at Trivandrum and Trichur under the Kerala State Handicraft Apex Society to meet the needs of the craftsmen in the co-operative sector. The Handicrafts Development Corporation and the Apex Society are the agencies entrusted with the running of the depots and the entire benefit goes to the craftsmen.

5. *Training in Handicrafts*

(Outlay Rs. 10 lakhs)

This provision is to meet the expenditure for advance training to craftsmen and also specialised training in papier mache, lacquer, etc. The scheme is being successfully implemented in almost all the handicraft societies in the State. The plan outlay is also to be utilised to give advanced training to craftsmen in the co-operative sector to enable them produce new items.

6. *Mechanisation and Introduction of Modern Tools and Equipments to Craftsmen on Subsidised Basis*

(Outlay Rs. 5 lakhs)

The plan outlay is to be utilised for the development of skill and technology in handicraft industry and also to increase the productivity by using mechanised tools and equipments. Under this scheme, 50 per cent of the cost of machinery will be given as subsidy to craftsmen.

7. *Old Age Pension and Incentive to Individual Craftsmen*

(Outlay Rs. 5 lakhs)

(a) *Old age pension*:—Old age pension to master craftsmen is to be continued during the Sixth Plan period. Many craftsmen have been awarded pension under this scheme.

(b) *Incentives to individual craftsmen*:—The plan outlay is to be utilised for the craftsmen to give 50 per cent subsidy for the cost of tools and equipments.

8. *Share Participation in the Primary Handicraft Society*

(Outlay Rs. 30 lakhs)

Assistance is being provided in the nature of government share participation in primary societies upto four times the paid up share capital from members. During the Sixth Plan period also the assistance is continued to selected handicraft co-operative societies. An amount of Rs. 30 lakhs is set apart for this purpose.

9. *Kerala State Handicrafts Apex Society*

(Outlay Rs. 10 lakhs)

The main objective of the society is marketing of handicraft products. The amount allotted in the Plan is for increasing the paid-up share capital of the society and also for increasing the sales turnover.



10. *Incentives to Artisans of Scheduled Castes/Scheduled Tribes for Purchase of Tools and Equipments*  
(Outlay Rs. 5 lakhs)

The plan outlay is to give 100 per cent subsidy to Scheduled Castes/Scheduled Tribes craftsmen for purchase of tools and equipments.

11. *Subsidy for Raw Materials Sold Through Raw Materials Depots of Handicrafts Corporation and Apex Co-operative Society*  
(Outlay Rs. 50 lakhs)

The main function of these two institutions is distribution of required raw materials at reasonable prices. The plan outlay is for giving 25 per cent subsidy for raw materials sold to craftsmen. A sum of Rs. 50 lakhs is allotted for the scheme in the Plan to reimburse the subsidy to the Corporation and the Apex Society.

12. *Craft Museum*  
(Outlay Rs. 15 lakhs)

It is proposed to establish a craft museum at Trivandrum. Valuable handicraft items of Kerala and those of other States will be collected and exhibited in this museum. A specially designed building with necessary facilities for displaying the items is also proposed under this plan scheme.

13. *Interest Subsidy*  
(Outlay Rs. 5 lakhs)

Loans are made available to handicraft societies at 6 1/2 per cent interest through the District Co-operative Banks. The loss of the Co-operative Banks which provide loans at lower rate of interest will be made up through a subsidy provided by the Government. This scheme is sponsored by the Reserve Bank of India.

14. *Revitalisation and Organisation of Handicrafts Co-operatives Exclusively for Scheduled Castes/Scheduled Tribes (Special Component Plan)*  
(Outlay Rs. 12 lakhs).

Share capital assistance will be provided to handicraft co-operatives organised exclusively for scheduled castes/scheduled tribes.

15. *Survey of Handicrafts*  
(Outlay Rs. 3 lakhs)

This provision is meant for the conduct of market surveys and spot studies on important handicrafts in the State.

16. *Propaganda and Publicity*  
(Outlay Rs. 10 lakhs)

This provision is to meet the expenditure on special rebates on the sale of handicraft goods once in a year and also to meet the expenditure on exhibitions, newspaper, publicity etc.

17. *Setting up of Common Facility Centres*  
(Outlay Rs. 10 lakhs)

The outlay is to increase the facilities available in the common facility centre at Trivandrum and also to start such centres at Trichur and Kasargode.

18. *Documentation and Reproduction of Temple carving, Folk Crafts, etc.*  
(Outlay Rs. 5 lakhs)

The temple carvings and folk arts when reproduced have considerable commercial value. The proposal is to document selected temple carvings and also to reproduce folk arts of Kerala like Theyyam, Pavakoothu, Koodiyattam, etc. in wood, papier mache, etc.

19. *Market Research*  
(Outlay Rs. 3 lakhs)

It is proposed to open a Market Research Cell to study the market demand for handicraft products. The outlay is for meeting the expenses of the Research Cell.

20. *Craftsmen Welfare Scheme*  
(Outlay Rs. 2 lakhs)

The provision is for meeting the expenses in connection with the formation of guilds of craftsmen and for creating a Craftsmen Welfare Fund to be used for the welfare of handicraft workers.

TABLE 3.22

**Handicrafts—Schemewise Outlay**

(Rs. in lakhs.)

Sl.No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Approved Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Assistance to Co-operatives	6.70	3.00	3.00	45.00	..	3.001	..
2.	Kerala State Handicrafts Development Corporation	4.00	4.001	4.00	75.00	75.00	10.001	10.00
3.	Artisans Development Corporation	0.04	..	..	5.00	..	0.501	..
4.	Raw Materials Depot for Ivory and Rosewood	1.00	1.00	1.00	10.00	..	1.00	..
5.	Training in Handicrafts	1.42	1.00	2.00	10.00	..	1.00	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6.	Mechanisation and Introduction of Modern tools and Equipments to craftsmen on subsidised basis	0.73	0.50	0.50	5.00	..	0.50	..
7.	Old Age Pension and Incentive to Craftsmen	1.52	0.70	0.66	5.00	..	0.70	..
8.	Share Participation in the Primary Handicraft Society	3.82	2.00	2.00	30.00	30.00	2.00	2.00
9.	Kerala State Handicrafts Apex Society	3.00	1.00	1.00	10.00	10.00	1.001	1.00
10.	Incentives to Artisans of Scheduled Castes/Scheduled Tribes for Purchase of Tools and Equipments	1.02	0.50	0.50	5.00	..	0.50	..
11.	Subsidy for Raw Materials Sold Through Raw Materials Depots of Handicrafts Corporation and Apex Co-operative Society	1.90	4.00	5.00	50.00	..	4.00	..
12.	Craft Museum	..	1.00	..	15.00	15.00	1.00	1.00
13.	Interest Subsidy	..	1.00	0.50	5.00	..	1.00	..
14.	Revitalisation and Organisation of Handicrafts Co-operative Exclusively for Scheduled Castes/Scheduled Tribes	..	1.00	1.00	12.00	12.00	1.00	1.00
15.	Survey of Handicrafts	0.05	0.29	0.29	3.00	..	0.30	..
16.	Propaganda and Publicity	0.72	1.00	1.00	10.00	..	1.00	..
17.	Setting up of Common Facility Centres	..	..	..	10.00	6.00	..	..
18.	Documentation and Reproduction of Temple Carving, Folk Crafts, etc.	..	..	..	5.00	..	..	..
19.	Market Research	..	..	..	3.00	..	..	..
20.	Craftsmen Welfare Fund	..	..	..	2.00	..	..	..
Total—Handicrafts		25.92*	24.001*	22.45	315.00	148.00	28.504	15.00

\*Includes outlay for schemes which have been discontinued

### Coir Industry

Since the inception of the plan era, the State Government has been laying emphasis on bringing more and more coir workers into the co-operative fold. But till now only about a third of the total number of coir workers has been brought under the co-operative net work. Today coir industry is facing several bottle necks, the most important of which are slackness of the foreign markets, competition from synthetic fibres, the entry of a large number of middlemen in the co-operatives, exploitation by husk retters and general scarcity of raw husks. A number of committees have studied the working of the coir industry and plans have been drawn up for the re-organisation of the industry. As the industry provides sustenance to nearly 4 lakh workers and as it brings in a substantial share of foreign exchange earnings, it is only natural to expect central assistance for the re-organisation of the industry. Owing to the inadequacy of Central assistance the State Government itself is making financial investments from its limited resources for the various schemes under the Coir Development Programme.

In the Sixth Plan an amount of Rs. 8 crores is allotted for schemes under coir development. The details of the schemes are given below:—

#### 1. Development of Coir Industry and Husk Control

(Outlay Rs. 50 lakhs)

A provision of Rs. 50 lakhs is made for meeting the expenses towards salary, wages, purchase of vehicles, furniture, rent, travel expenses and other admini-

stration charges expected to be incurred in connection with the implementation of the various Plan programmes under coir industry.

#### 2. Interest Subsidy to Primary Co-operative Societies

(Outlay Rs. 80 lakhs)

The viable and potentially viable coir co-operative societies which have switched over to institutional finance have to be provided working capital loans at subsidised rate of interest from financing institutions. The Plan provision of Rs. 80 lakhs is intended for subsidising the financing banks to make good the loss on interest in extending the financial assistance to coir co-operatives at a concessional rate.

#### 3. Opening of Sales Depots:

(Outlay Rs. 15 lakhs)

A provision of Rs. 15 lakhs is made as financial assistance to manufacturing societies and Coir Marketing Federation for opening sales depots in and outside the State for marketing the products of coir co-operative societies. The assistance in the first year will be for non-recurring expenditure. In respect of recurring expenditure, the assistance will be provided for a maximum period of four years.

#### 4. *Publicity and Propaganda Including Trade Fairs*

(Outlay Rs. 8 lakhs)

The Plan provision of Rs. 8 lakhs is for assisting the coir co-operatives and the Kerala State Co-operative Coir Marketing Federation in their efforts to promote sales of coir and coir products in and outside the country. This organisation will be subsidised to meet part of the expenditure in participating trade fairs and undertaking publicity and sales promotion measures.

#### 5. *Price Fluctuation Fund*

(Outlay Rs. 50 lakhs)

A provision of Rs. 50 lakhs is made in the Plan as contribution to the Kerala State Co-operative Coir Marketing Federation to augment the Price Fluctuation Fund. The Federation will make outright purchase of coir and coir goods from the member societies. The fund will be utilised to meet the possible loss on account of sales made at the time of fluctuations in market price.

#### 6. *Formation of Coir Projects*

(Outlay Rs. 20 lakhs)

A provision of Rs. 20 lakhs is made for this scheme. This outlay is for meeting the expenditure on additional furniture, vehicles etc. for the coir projects through which the coir development schemes are implemented.

#### 7. *Welfare Measures*

(Outlay Rs. 40 lakhs)

It is proposed to set up nurseries/creches for the benefit of coir workers attached to coir co-operatives. The cost of construction of buildings and equipments has to be met and other expenses will have to be subsidised. The Plan provision of Rs. 40 lakhs is for the establishment of few such welfare centres during the Plan period.

#### 8. *Kerala State Coir Corporation—Share Capital Investment*

(Outlay Rs. 25 lakhs)

The major functions of the Kerala State Coir Corporation, a fully owned Government undertaking are the production and marketing of Coir and Coir products. Other development programmes of the Corporation are setting up of Coir factories, opening of sales rooms and emporia in metropolitan cities in India, setting up of a matting project, expansion of Beypore Coir Factory and Organisation of a Research and Development Wing. A Plan provision of Rs. 25 lakhs is made for enhancing the share capital of Corporation during the plan period.

#### 9. *Loans to Kerala State Coir Corporation*

(Outlay Rs. 20 lakhs)

A plan allotment of Rs. 20 lakhs is made for provision of working capital loans to Kerala State Coir Corporation.

#### 10. *Expansion of Coir Co-operatives—Grant in Aid*

(Outlay Rs. 15 lakhs).

Coir co-operatives are being revitalised as part of the Coir Development Programme of the State.

New co-operatives are also being registered. This scheme envisages extension of financial assistance to the managerial staff of the Coir co-operatives for a period of three years on a tapering basis, ie. 100 per cent for the first year, 66 2/3 per cent for the second year and 33 1/3 for the third year. A provision of Rs. 15 lakhs is earmarked in the Plan for extending managerial assistance to coir co-operatives during the plan period.

#### 11. *Godowns for Marketing and Primary Societies*

(Outlay Rs. 50 lakhs)

The Plan provision of Rs. 50 lakhs under this scheme is for extending assistance by way of grant to marketing and primary coir co-operative Societies, for the construction of godowns at the rate of 25 per cent of the total expenditure.

#### 12. *Coir Co-operative Societies—Share Capital contribution*

(Outlay Rs. 175 lakhs)

Government share participation is extended to coir co-operatives for raising the margin money which will in turn help to enhance their borrowing power. The existing societies as also the societies to be newly registered during the Plan period are eligible for participation by Government in their share capital structure. A strong equity base is an essential pre-requisite for availing required institutional finance from financial institutions. An outlay of Rs. 175 lakhs will be incurred for this scheme during the Sixth Plan period.

#### 13. *Working Capital Loans to Co-operative Societies*

(Outlay Rs. 202 lakhs)

A plan provision of Rs. 202 lakhs is made for giving loans to societies by way of need based working capital. The needs of the potentially viable societies which are not ripe for availing of institutional finance are assessed before the provision of working capital loans.

#### 14. *Godown Loans*

(Outlay Rs. 50 lakhs)

The primary coir co-operatives (including the manufacturing societies and the Kerala State Coir Marketing Federation) are eligible for financial assistance by way of loan and subsidy for the construction of godowns. The primary societies and the Marketing Federation are eligible for the loan at 75 per cent of the total assistance for each ie Rs. 20,000 in the case of primaries and Rs. 5 lakhs in the case of Coir Marketing Federation. The outlay is for giving loan to these societies for the construction of godowns.

TABLE 3.23  
Coir Industry—Schemewise Outlay

(Rs. in lakhs)

Sl.No.	Name of Scheme	1979-80	1980-81		1980-85		1981-82	
		Actuals	Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Approved Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Development of Coir Industry and Husk Control		7.50		50.00	..	22.00	..
2.	Interest Subsidy to Primary Co-operative Societies		11.00		80.00	..	25.00	..
3.	Opening of Sales Depots		4.10		15.00	..	4.00	..
4.	Publicity and Propaganda including Trade Fairs		3.50		88.00	..	3.50	..
5.	Price Fluctuation Fund		12.00		50.00	..	15.00	..
6.	Formation of Coir Projects		2.00		20.00	..	2.00	..
7.	Welfare Measures		3.00		40.00	..	5.00	..
8.	Kerala State Coir Corporation—Share Capital Investment	138.36	8.00	134.50	25.00	25.00	5.00	5.00
9.	Loans to Kerala State Coir Corporation		2.40		20.00	..	2.00	..
10.	Expansion of Coir—Co-operatives—Grant in Aid		3.00		15.00	..	3.00	..
11.	Godowns for Marketing and Primary Societies		2.50		50.00	..	2.50	..
12.	Coir Co-operative Societies—Share Capital Contribution		15.00		175.00	175.00	40.00	40.00
13.	Working Capital Loans to Co-operative Societies		40.00		202.00	..	60.00	..
14.	Godown Loans		11.00		50.00	..	16.00	..
Total—Coir Industry		138.36	125.00	134.50	800.00	200.00	205.00	45.00

**Cashew Industry****The Kerala State Cashew Development Corporation—Share Participation**

(Outlay Rs. 31 lakhs)

Inadequacy of rawnuts for processing and the consequent chronic underemployment to the one lakh and odd workers engaged in the industry is the major problem facing cashew industry in Kerala. The Kerala State Cashew Development Corporation was formed with the objective of giving continuous employment

to the workers in this industry. The Corporation at present manages 34 factories having about 34,000 workers. The general problem of raw material shortage affects the working of the factories managed by the Corporation also. Consequently the workers in the factories managed by the Corporation get employment only for three months in a year on an average. In these circumstances the Corporation is reluctant to acquire new cashew factories. In the Sixth Plan an amount of Rs. 31 lakhs is provided for share capital participation by the Government in the Corporation. ]

TABLE 3.24

**Cashew Industry—Scheme-wise Outlay**

(Rs. in lakhs.)

Name of Scheme/Project	1979-80	1980-81		1980-85		1981-82	
	Actuals	Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Approved Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Cashew Development Corporation—Share participation	1155.45*	30.00	30.00	31.00	31.00	0.002	0.002

\*1979-80 Actuals include Rs. 1125.45 lakhs given to the Cashew Development Corporation towards special assistance for running private cashew factories.

**Bamboo Industry****Kerala State Bamboo Industries Corporation**

(Outlay Rs. 35 lakhs).

Over two lakh workers are engaged in bamboo and reeds industry, which is one of the oldest traditional industries in the State. The Kerala State Bamboo Corporation with its headquarters at Angamali is engaged in the collection of bamboo and reeds

from the forest areas, their distribution to workers and collection and marketing of finished goods. At present the activities of the Corporation are localised mostly in and around Angamaly. It is proposed to expand the activities of the Corporation to other parts of the State. The Corporation intends to construct its own administrative block, drying and bundling yards, treatment yards and godowns and to acquire transportation facilities to other parts of the State. The outlay of Rs. 35 lakhs provided under the scheme is for implementing these items of works of the Corporation.

TABLE 3.25

**Bamboo Industries—Scheme-wise Outlay**

(Rs. in lakhs)

Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Approved Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Bamboo Industries Corporation	19.17	1.001	1.00	35.00	35.00	5.001	5.00

**Bricks and Tiles Industry****Establishment of Process-cum-Product Development Centre**

(Outlay Rs. 2 lakhs)

There are about 800 hand moulded brick units and 300 tile units in the State, employing nearly 50,000 persons. The industry, today, is beset with numerous problems such as decline in the export market, scarcity and increasing price of raw materials and fuels,

disparity in wage rates among tile producing states and high transportation costs. The existing technology in Kerala State is more than a century old.

It is proposed to set up a Process-cum-Product Development Centre under the Small Industries Service Institute, Trichur for providing testing facilities, analysis of available raw-materials, conduct of research to develop new processes etc. The outlay of Rs. 2 lakhs provided in the Sixth Plan is for setting up the Centre.

TABLE 3.26

**Bricks and Tiles Industry—Scheme-wise Outlay**

(Rs. in lakhs)

Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Approved Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Establishment of Process-Cum-Product Development Centre	..	..	..	2.00	..	0.10	..
Total—Bricks & Tiles	..	2.20*	..	2.00	..	0.10	..

\*Includes outlay on schemes which have been discontinued.

**Beedi Industry**

A number of beedi co-operatives have been organised in the State. The primary societies have been brought under the Central Co-operative Society at Cannanore. During the Sixth Plan period the Central

Beedi Society (Dinesh Beedi Co-operative Society) will be assisted by Government through participation in its share capital. The State will also provide managerial grant and loan to the primaries.

The following schemes are proposed for the industry under the Sixth Plan.

1. *Share participation in Central and Primary Beedi Co-operative Societies*

(Outlay Rs. 5 lakhs)

This amount is allotted for the Kerala Dinesh Beedi Workers' Central Co-operative Society, Cannanore and primary societies by way of Government share participation to enable them acquire more fixed assets and also working funds.

2. *Managerial Grant to Primary Beedi Co-operative Societies*

(Outlay Rs. 2 lakhs)

This grant is to meet the salary and allowances of departmental staff working in the Primary Beedi Societies.

3. *Financial Assistance for Constructions of Work Sheds Co-operative Societies*

(Outlay Rs. 5 lakhs)

The assistance is to be provided in the nature of loans to societies which are having land of their own for the constructions of factory/work sheds.

4. *Setting up of New Beedi workers Industrial Co-operatives*

(Outlay Rs. 2 lakhs)

The plan allotment is for setting up one Central Society for ten primary beedi workers industrial Co-operatives in four districts. The amount is for extending financial assistance to these societies and for meeting spill over and committed expenses towards share contribution, loan, grant etc.

TABLE 3.27

**Beedi Industry—Scheme-wise Outlay**

(Rs. in lakhs)

Sl.No.	Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Approved Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Share Participation in Central and Primary Beedi Societies	1.00	1.00	1.00	5.00	5.00	1.00	1.00
2.	Managerial Grant to Primary Beedi Co-operative Societies	1.23	2.25	2.00	2.00	..	2.00	..
3.	Financial Assistance for Construction of Work Sheds to Beedi Co-operative Societies	1.00	1.00	1.00	5.00	..	2.00	..
4.	Setting up of New Beedi Workers Industrial, Primary and Central Co-operative Society	..	2.00	2.00	2.00	2.00	2.00	2.00
Total—Beedi Industry		3.23	6.25	6.00	14.00	7.00	7.00	3.00

**Medium and Large Industries**

*State Financial Corporation*

*Kerala Financial Corporation Limited*

(Outlay Rs. 200 lakhs)

The Kerala Financial Corporation is engaged in the promotion of small scale as well as medium scale industrial units in the State by rendering financial assistance. Though the accent of the Corporation is mainly on the development of small scale units, it extends assistance also for ventures like construction of tourist hotels, acquisition of X-Ray plants for medical practitioners, transport vehicles and fishing boats, running of service workshops etc. The Corporation is giving special attention to the development of industrial units in the backward areas of the State. Hence it is appropriate to strengthen the capital base of the Corporation in order to enable it to avail itself of more institutional finance from all India institutions like the Industrial Development Bank of India. The Industrial Development Bank of India will give a matching contribution to the Corporation equal to the amount invested by

the State Government in the share capital of the Corporation. During the Sixth Plan period the State will invest an amount of Rs. 200 lakhs in the share capital of the Corporation.

*State Industrial Development Corporation*

*Kerala State Industrial Development Corporation Limited.*

(Outlay Rs. 1100 lakhs)

The Kerala State Industrial Development Corporation is one of the pioneer organisations set up by the Government of Kerala for promoting industrial activities in the State. The Corporation concentrates mainly on the development of medium and large scale industrial units by providing financial as well as technical assistance. The financial activities of the Corporation consists of direct participation in the share capital, granting term loans, furnishing guarantees etc. Technical activities of the Corporation, comprises identification of projects, preparation of feasibility/project reports, conduct of survey on natural resources, obtaining letters of intent/industrial licences, arranging technical collaboration, negotiating with other financial/technical institutions for securing assistance etc.

As on March, 1980, the Corporation has promoted/assisted 73 units in the joint/private sectors. The Corporation was instrumental in formulating procedures and other measures for operating the incentive schemes announced by the State Government in 1979, in respect of State investment subsidy, developed land, interest-free sales tax loan and 50 per cent contribution to cost of preparation of project reports etc., for medium and large scale industrial units.

The Sixth Plan proposal of the Corporation encompasses promoting about 83 industrial projects in the State. Of these, 26 are existing/on-going units which are at different phases of implementation. The number of new projects proposed to be set up in the joint/private sector with financial or technical assistance of the Corporation will be 57. The share and loan investments of the Corporation in all these 83 projects are estimated at Rs. 21.75 crores. The net requirement of finance to be met by the Corporation during the Plan period will be Rs. 1100 lakhs. The excess financial commitment, if any, is expected to be met from Corporation's own likely resources and in the case of loan, through Industrial Development Bank of India's refinance facilities. An amount of Rs. 1100 lakhs has, therefore, been earmarked in the Plan towards share capital contribution to the Corporation.

Details relating to the schemes proposed by the Corporation are as follows:—

#### *I. Existing and on-going New Schemes.*

##### *1. Travancore Electro-Chemical Industries Ltd.*

The Company's proposal is to expand capacity for manufacture of calcium carbide from 25,000 tonnes to 40,000 tonnes per annum. The scheme costing about Rs. 135 lakhs is being financed by KSIDC. The Corporation's assistance by way of share capital and loan to the Company during the Plan period will be Rs. 8.92 lakhs.

##### *2. South India Wire Ropes Ltd.*

With a view to augmenting its capacity, the company is undertaking schemes for installing a galvanizing plant and for manufacture of cable armouring strips. KSIDC has to give a balance loan of Rs. 1.76 lakhs during the first year of the Plan period, for the above purpose.

##### *3. Trichur Cotton Mills Ltd.*

The Company is implementing an expansion programme of spindleage (upto 21,000 Nos.) at an estimated cost of Rs. 95 lakhs. KSIDC has sanctioned a loan of Rs. 27 lakhs to the Company and this amount is proposed to be disbursed during 1981-82.

##### *4. Chalakudy Refractories Ltd.*

Out of a loan assistance of Rs. 25 lakhs sanctioned to the Company for implementing their Rs. 82 lakh expansion-cum-diversification programme, Rs. 22.50 lakhs was disbursed earlier. The balance amount of Rs. 2.50 lakhs has to be given in 1980-81.

##### *5. British Physical Laboratories (India) Private Ltd.*

This Company is implementing a diversification scheme for the manufacture of photo-copier, a new product, at an estimated cost of Rs. 60 lakhs. KSIDC has already sanctioned a loan of Rs. 42 lakhs towards the cost of the scheme. The loan amount will be completely disbursed by 1981-82.

##### *6. Vanjinad Leathers Ltd.*

This joint sector company promoted by KSIDC could not improve its operations on account of a general glut for finished leathers in the international market. The Corporation is working out ways and means in order to tone up its operations and put it on sound economic footing. In this process the Corporation is expected to invest a further amount of Rs. 9.18 lakhs in the Company during the Sixth Plan period.

##### *7. Kerala Spinners Ltd.*

This Company which manufactures staple fibre yarn has a proposal to expand its spindleage. The project would cost about Rs. 253 lakhs. The Corporation proposes to invest Rs. 6.34 lakhs in this venture.

##### *8. Premier Cable Company Ltd.*

The Company's proposal is to manufacture special ONGC cables, with the financial support of KSIDC. The project is estimated to cost Rs. 7.50 crores. The Corporation will give a loan assistance of Rs. 45 lakhs to the Company in 1980-81.

##### *9. Kerala Industrial and Technical Consultancy Organisation Limited (KITCO)*

KSIDC is a shareholder in the Company. The Corporation proposes to enhance its paid up capital. Hence the KSIDC has to contribute an additional share capital of Rs. 22,000 in 1980-81.

##### *10. Trivandrum Rubber Works Ltd.*

In order to enable this Government-owned Company to tide over its financial difficulties and to implement a scheme of revival, the Corporation advanced a loan of Rs. 20 lakhs to the Company in 1980-81.

##### *11. Kerala Acids and Chemicals Ltd.*

KSIDC has invested Rs. 9.35 lakhs in the share capital of the Company for establishing a formic acid plant at Edayar in technical collaboration with a West German firm. The Corporation is also required to give a loan assistance of Rs. 10 lakhs in the Sixth Plan period.

##### *12. Midas Rubber (P) Ltd.*

The Company proposed to set up facilities in its factory at Ettumanoor for manufacture of rubber compound. The cost of the scheme is Rs. 30 lakhs. KSIDC gave a loan of Rs. 15 lakhs to the Company to be disbursed in 1980-81.

##### *13. Carbon and Chemicals India Ltd.*

This Company, in the joint sector, is setting up a carbon black plant at Ambalamedu near Cochin.

KSIDC's total investment in the share capital of the Company will be Rs. 120.44 lakhs of which a major portion has already been given. An amount of Rs. 42.70 lakhs has to be given during the Plan period.

#### 14. *Formalin Products Ltd.*

This joint sector project in which KSIDC has made share investment was delayed on account of IDBI's reluctance to extend refinance. The State Government has issued approval to KSIDC to give guarantee to the State Bank of Travancore and the Kerala Financial Corporation to provide loan assistance. KSIDC has worked out ways and means of implementing the project expeditiously. The first phase of the project costing about Rs. 140 lakhs, for manufacture of Urea formaldehyde and other resins is expected to be completed by December 1981. The Corporation will have to provide additional share capital and loan assistance aggregating Rs. 8.40 lakhs to the Company before expiry of the financial year 1981-82.

#### 15. *Balmer Lawrie and Co. Ltd.*

KSIDC has been giving loan assistance to this Government of India undertaking with its registered office at Calcutta, to set up a marine freight container manufacturing division at Aroor, at an estimated cost of Rs. 138 lakhs. A balance loan of Rs. 27 lakhs against a total sanction of Rs. 47 lakhs has to be given during the Sixth Plan period.

#### 16. *Wood Systems (India) Private Limited*

K.S.I.D.C. has sanctioned a loan assistance of Rs. 22.50 lakhs to this Company for establishing a wood veneer project at Kunnathanam near Thiruvalla. Of the total sanction, an amount of Rs. 15 lakhs has to be given during the Plan period.

#### 17. *United Veneers (P) Ltd.*

This new Company in the private sector has been sanctioned loan assistance of Rs. 18.50 lakhs for establishing a wood veneer factory at Kaviyoor near Thiruvalla. Disbursement of Rs. 15 lakhs will be made during the Plan period.

#### 18. *Hyatkum Exports Ltd.*

K.S.I.D.C. is rendering promotional and financial assistance to this new Company, in the joint sector, for setting up a plant near Ponmudi for processing and exporting mineral (ground) water. The Corporation will have a share investment of Rs. 8 lakhs in the Company and it will be made during the first two years of the Plan period.

#### 19. *Venad Pharmaceuticals and Chemicals Ltd.*

This new Company in the joint sector, is setting up a transfusion fluids manufacturing plant near Mavelikara with the financial and promotional assistance of K.S.I.D.C. The Corporation will provide share capital and loan amounting to Rs. 8 lakhs to the Company during the Plan period.

#### 20. *Velton Prefab Elements Ltd.*

This new Company, promoted in the joint sector, is setting up a wood wool cement board manufacturing

plant near Kalamassery. The cost of the project is Rs. 107 lakhs. K.S.I.D.C.'s share and loan investments in the Company will be to the extent of Rs. 23.93 lakhs.

#### 21. *Castols (India) Ltd.*

The proposal of this new Company promoted by KSIDC in the joint sector is to set up a castor oil-based polyol plant of a capacity of 1000 tpa, employing ISRO technology, in Alleppey district. The Corporation's share investment in the Company will be Rs. 10 lakhs, and this has to be provided during the plan period.

#### 22. *Alampally Bros. Ltd.*

This new Company promoted in the joint sector is setting up an LPG. (Liquid Petroleum Gas) plant at Edathala with the financial and promotional support of KSIDC. The capacity of the project will be 96000 Nos. p. a. KSIDC's financial contribution to the project would be about Rs. 14 lakhs.

#### 23. *Zodiac Oils and Chemicals Ltd.*

This Company, in the private sector, proposes to set up a rice bran oil extraction plant at an estimated cost of Rs. 91 lakhs. KSIDC proposes to provide term loans amounting to Rs. 25 lakhs to the Company.

#### 24. *Kerala Solvent Extractions Ltd.*

This Company which has developed sufficient expertise for manufacturing cattle feed, proposes to put up a separate unit for cattle feed in their existing premises. The cost of the project is Rs. 84 lakhs. KSIDC will have to give a loan assistance of Rs. 25 lakhs.

#### 25. *O/E/N Connectors Ltd.*

O/E/N/ India Ltd., Mulanthuruthy, proposes to take up the manufacture of printed circuit connectors under this subsidiary Company, viz. O/E/N/ Connectors Ltd. The cost of the project is Rs. 315 lakhs. KSIDC will have to invest Rs. 31.20 lakhs in the share capital of the subsidiary Company.

#### 26. *GTN Textiles Ltd.*

This Company at Alwaye proposes to expand its spindleage marginally and to implement a modernisation programme, costing about Rs.50 lakhs, with the financial support of KSIDC. The Corporation will have to extend loan assistance upto Rs. 50 lakhs towards the above composite scheme.

## II. *New Projects*

### 1. *Mini Paper Plant (1)*

The proposal is to set up a 15 tpd plant for manufacturing printing and writing paper, in the joint sector. The plant will be established by Shri Sai Maharaj Pulp and Paper Mills (a Company which has been in existence in Palghat for some time). The original proposal was to use imported second hand machinery. Since Government of India does not allow import of such machinery it is now proposed to use indigenous machinery. The cost of the project, estimated at Rs. 105 lakhs, will be financed by KSIDC to the extent of Rs. 18 lakhs by way of share capital.



## 2. *Mini Paper Plant (2)*

The proposal originating from a private party in Cannanore is to manufacture printing and writing papers as well as kraft paper at the rate of 15 tonnes per day. The cost of the project is estimated at Rs. 199 lakhs on the basis of imported second hand machinery. KSIDC will contribute about Rs. 55 lakhs, by way of share capital (Rs. 5 lakhs) and loans (Rs. 50 lakhs).

## 3. *Kraft Paper*

The proposal of a party in Punalur who is engaged in the manufacture of plywood is to put up a 15 tpd. plant for kraft paper manufacture with the financial and promotional assistance of KSIDC. Estimated to cost Rs. 195 lakhs, this project proposed in the joint sector is expected to have KSIDC's share participation to the extent of Rs. 13 lakhs.

## 4. *Wood Veneers*

The proposal of a private party is to set up near Koratti an export-oriented veneer unit having a capacity of 22.5 lakh Sq. metres per annum. KSIDC would render financial assistance to the extent of Rs. 14 lakhs.

## 5. *Fibre Board*

The proposal of a Bombay party is to set up a unit preferably in Kozhikode District, for manufacturing medium size fibre boards for a capacity of 20,000 tpa, in association with KSIDC. A Techno-Economic Feasibility Report (TEFR) is being prepared. KSIDC has to earmark Rs. 30 lakhs for investment in this Rs. 10 crore project.

## 6. *Explosives Accessories*

The proposal of a private party is to manufacture annually 20 million numbers of safety fuses subject to the approval of the State Government. The project is expected to cost Rs. 100 lakhs and is proposed to be located in Malappuram District. KSIDC's share of investment in the project would be about Rs. 8 lakhs.

## 7. *Pentaerythritol*

KSIDC's proposal is to set up a 1200 tonnes per annum plant in Alleppey District. Application for DGTD registration would be filed shortly. The project, estimated to cost Rs. 450 lakhs, would involve KSIDC's investment to the extent of Rs. 39 lakhs. A token provision of Rs. 8 lakhs is suggested for the Plan period.

## 8. *Chloramphenicol*

KSIDC has obtained a Letter of Intent for a 50 tpa plant. This export-oriented project costing about Rs. 95 lakhs will require share participation and loan assistance from the Corporation, totalling Rs. 18 lakhs.

## 9. *Caustic Soda*

KSIDC has obtained a Letter of Intent for a 100 tpd (33000 tpa) caustic soda plant. A competent private party has shown interest in associating with the project. A techno-economic cum feasibility report has been prepared. The cost of the project is estimated at Rs. 25 crores. KSIDC's share investment in the project is expected to be around Rs. 60 lakhs.

## 10. *PVC. (Poly Vinyl Chloride)*

KSIDC has applied for a Letter of Intent for setting up an 80 tpd plant for manufacturing this petrochemical product. The caustic soda plant proposed by the Corporation is expected to facilitate supply of chlorine to the PVC project. The cost of the project is estimated at Rs. 38 crores. The Corporation will have to invest a minimum of Rs. 120 lakhs in the project. The investment during the Plan period is expected to be about Rs. 5 lakhs.

## 11. *BOPP (Biaxially Oriented Poly Propylene)*

KSIDC has obtained a Letter of Intent for an 800 tpa plant. Estimated to cost Rs. 400 lakhs, the project would need KSIDC's investment to the extent of Rs. 13 lakhs.

## 12. *Potassium Chlorate (1)*

The proposal of a private party is to manufacture annually 750 tonnes each of potassium chlorate and sodium chlorate. The party has applied for a Letter of Intent. The application has been recommended by the Kerala Government. The project would be supported by KSIDC. The minimum investment by the Corporation would be Rs. 3 lakhs.

## 13. *Potassium Chlorate (2)*

A leading firm has applied for a Letter of Intent for setting up a Rs. 450 lakhs potassium chlorate plant in Kerala, with an annual capacity of 4000 tonnes of potassium chlorate and 2000 tonnes of sodium chlorate. KSIDC proposes to support the project. The Corporation will be required to invest about Rs. 10 lakhs in the project during the Plan period.

## 14. *Phtalic Anhydride*

KSIDC has applied for a Letter of Intent for a 600 tpa plant. The project is estimated to cost Rs. 10 crores. A provision of Rs. 10 lakhs has to be made for the project.

## 15. *Thionyl Chloride*

DGTD Registration has been obtained by a Company for setting up this project in Alleppey District. Estimated to cost Rs. 45 lakhs, the project will have a capacity of 1000 tonnes per annum. KSIDC's investment in the project would be about Rs. 3 lakhs.

## 16. *Bisphenol & Resins*

KSIDC has examined the feasibility of the Project. A 3000 tpa plant as envisaged would cost about Rs. 5 crores. A provision of Rs. 5 lakhs is made for investment in the project.

## 17. *Pesticides*

The proposal of a private party which KSIDC is working on is for manufacturing annually 1000 tonnes of malatheon and 400 tonnes of methyl paratheon. Preparation of a detailed project report will be arranged after signing a promotional agreement with the party. The project is estimated to cost Rs. 270 lakhs. Only a token provision of Rs. 3 lakhs is suggested for the project.

18. *Dicyandiamide*

The Travancore Electro-Chemical Industries Ltd., has applied for a Letter of Intent for a 1000 tpa plant, as part of its diversification programme. KSIDC may invest about Rs. 15 lakhs in the share capital of the project which is expected to cost Rs. 450 lakhs. An amount of Rs. 5 lakhs only is suggested for the Plan period.

19. *Polyester Filament Yarn*

KSIDC has applied for a Letter of Intent for a 5000 tpa plant. The project may cost about Rs. 100 crores. The Corporation proposes to take effective steps to implement the project after getting the Letter of Intent. The investment, KSIDC will have to make is expected to be Rs. 175 lakhs. A token provision of Rs. 5 lakhs is made for the Plan period.

20. *Nylon Filament Yarn*

KSIDC has applied for a letter of intent for a 15000 tpa plant. Caprolactum, the basic raw material for the plant, would be procured from the caprolactum plant proposed by FACT. The nylon project with a capacity of 15000 tpa as envisaged is estimated to cost Rs. 100 crores. A major portion of the investment by KSIDC is likely to be made during the subsequent Plan period. Only a provision of Rs. 5 lakhs is suggested for the Sixth Plan period.

21. *Phytochemicals*

The proposal of a private party is to produce few types of phytochemicals like diosgenin for a total capacity of 73740 kg. per year. A new company by the name Malabar Phytochemicals Ltd. is being registered for this purpose. The project involves KSIDC's share participation to the extent of Rs. 5 lakhs.

22. *Vitamin C.*

There is scope for setting up a 300 tpa plant. The main raw material, viz, sorbitol, is available indigenously. The possibility of having a captive plant for manufacturing the raw material from maize starch or tapioca starch could also be considered. The Project is expected to cost Rs. 410 lakhs. KSIDC may have to invest about Rs. 13 lakhs. Only a token provision of Rs. 3 lakhs is suggested for the Sixth Plan period.

23. *Drug Formulation Unit.*

The Hindustan Antibiotics Ltd. has set up Drug Formulation Plants in Goa and Karnataka, in association with the State Governments. A similar project is envisaged in the joint sector in Kerala. The cost of the project considered by KSIDC is about Rs. 240 lakhs. Out of a total investment of Rs. 17 lakhs proposed by the Corporation an amount of Rs. 2 lakhs only has been suggested for the Plan period.

24. *Drug Intermediates*

KSIDC's proposal is to set up an economic size plant for producing annually 300 tonnes each of N-valdiamine and hydroxy quinoline. The estimated cost of the project is Rs. 180 lakhs. KSIDC may have to invest about Rs. 14 lakhs. A token provision of Rs. 5 lakhs only is suggested in the Plan.

25. *Beta Ionone*

KSIDC has examined the scope of the project which is based on lemon grass oil available in the State. The capacity of an economic size plant is 400 tpa and it would cost about Rs. 80 lakhs. The Corporation proposes to invest about Rs. 5 lakhs in the project.

26. *Methyl-Amino based Products*

The proposal is to set up a 600 tpa plant in the joint sector. The details of the project are being worked out by KSIDC. KSIDC's share of investment in the project is about Rs. 17 lakhs. A token provision of Rs. 5 lakhs is made in the Plan.

27. *Epichlorohydrin*

The proposal of a Gujarat party who has already applied for a letter of intent, is to set up the project near Cochin. Polypropylene, the required raw material could be obtained from the Cochin Plant of Hindustan Organic Chemicals Ltd., which has incorporated this item in its original product mix for Phenol and acetone. The cost of the project is about Rs. 17 crores. KSIDC will have nominal participation to the extent of Rs. 25 lakhs.

28. *Fibre Glass Boats*

The proposal of a private party is to establish a new undertaking to manufacture annually 400 fishing boats with the assistance of KSIDC. The details of the project are being worked out. The project may cost about Rs. 50 lakhs, and KSIDC's contribution towards the cost would be Rs. 4 lakhs.

29. *Leather Footwear*

Since manufacture of leather products is reserved for the small scale sector, KSIDC is working on an export-oriented unit. Finished leathers could be obtained from the Kuttippuram-based Vanjinad Leathers Ltd. Foreign Collaboration is envisaged. Estimated to cost Rs. 100 lakhs, the project will involve KSIDC's share participation to the extent of Rs. 7 lakhs.

30. *Surgical Rubber Goods.*

The project envisages manufacture of sophisticated items of surgical rubber goods using foreign technology. KSIDC has negotiated with Leyland Medicals of USA for collaboration. A techno-economic feasibility study-cum-all India market survey is being made. The Corporation has fixed a private party to be the joint promoter. The cost of the project is estimated at Rs. 280 lakhs. KSIDC's investment in the Project would be about Rs. 26 lakhs.

31. *Scooter Tyres and Tubes*

The proposal of a private party is to manufacture annually three lakh numbers each of scooter tyres and tubes. KSIDC has negotiated with Premier Tyres for their collaboration. The cost of the project is estimated at Rs. 135 lakhs. KSIDC may be required to invest Rs. 18 lakhs in the projects. The provision made for the Plan is Rs. 5 lakhs only.

### 32. *Bone Processing Plant*

The project which KSIDC has been working on for sometime is proposed to be implemented by Kerala Chemicals and Proteins Ltd. (Koratti) of which Corporation is a joint promoter. A detailed raw material (animal bones) survey has been done by FACT Engineering and Design Organisation. The cost of the project will be about Rs. 100 lakhs. KSIDC needs only give loan assistance to the extent of Rs. 10 lakhs.

### 33. *Chocolates and Cocoa Products*

The proposal being worked out by KSIDC consists of setting up a cocoa processing plant (for producing cocoa liquor/powder) and a plant for producing products like chocolates and other products. An established firm has already evinced interest in the second plant, which holds the key for a processing plant. The cost of an integrated project is estimated at Rs. 300 lakhs. KSIDC proposes to invest Rs. 10 lakhs in the projects. Only a provision for Rs. 5 lakhs has been suggested for the Sixth Plan period.

### 34. *Abattoir Products*

The abattoir (slaughter house) project envisaged by KSIDC is for processing meat (rawcode meat for export) and producing high-valued products utilising the waste-materials. The Corporation has already obtained a letter of intent for a composite project for a total capacity of 12075 tonnes per annum in all. The project, estimated to cost Rs. 12 crores, would involve a minimum investment of Rs. 40 lakhs, to start with, by KSIDC. The provision made in the Plan is for Rs. 5 lakhs only.

### 35. *Tea Bags*

A private party experienced in marketing tea bags is being encouraged by KSIDC to implement a proposal for setting up a unit for producing tea bags, mainly for export. A techno-economic feasibility report has been prepared. The project estimated to cost Rs. 72 lakhs will be implemented in the joint sector. KSIDC will have to invest about Rs. 10 lakhs by way of share capital and loan.

### 36. *Alcohol from Tapioca*

There are two proposals under the consideration of KSIDC, of which at least one of them is expected to be implemented. The details of the project are being worked out by KSIDC. The cost of a plant of a capacity of 250 hecto litres per annum is expected to be around Rs. 120 lakhs. KSIDC's investment in the project will be of the order of Rs. 9 lakhs.

### 37. *Asbestos Cement Sheets*

KSIDC has signed a promotional agreement with a leading company for implementing the letter of intent received by the Corporation for a 36000 tpa plant. The project proposed to be located at Walayar in the Palghat District is estimated to cost Rs. 340 lakhs. KSIDC proposes to invest about Rs. 12 lakhs in the project.

### 38. *Sanitary Wares.*

The proposal of a private party is to set up a 1200 tpa plant for manufacturing high-quality sanitary

wares. The party has signed an agreement with KSIDC for sharing the cost of preparation of feasibility report. The report has been prepared and will be finalised soon after final agreement for land is made. The project, estimated to cost Rs. 115 lakhs, is proposed in the joint sector. KSIDC's investment in the project is expected to be Rs. 29 lakhs, of which as much as Rs. 19 lakhs is likely to be spent during the Sixth Plan period.

### 39. *Ceramic Fibre*

This project envisaged by KSIDC will be the first of its kind in India. It is proposed in the joint sector, and a private party has already been fixed as co-promoter. The capacity of the project is fixed at 500 tonnes per annum. Estimated to cost Rs. 300 lakhs, the project would be financed by KSIDC to the extent of Rs. 26 lakhs. The Sixth Plan provision is set at Rs. 6 lakhs.

### 40. *Special Refractories*

Government of India has approved foreign collaboration for the project, involving Soviet technology. KSIDC has done considerable work for setting up the project after obtaining a letter of intent in 1977 for a 12000 tpa plant. The Corporation will have to invest Rs. 130 lakhs in the share capital of the Company proposed to be incorporated for the purpose of setting up the project. Investment during the Plan period may be of the order of Rs. 90 lakhs.

### 41. *Fibre Glass*

KSIDC had obtained a letter of intent for a capacity of 4000 tonnes per annum, and was working out ways and means of setting up the project in a phased manner employing foreign technology. The Corporation has negotiated with prospective collaborators and a private party. Firm arrangements are expected to be made for implementing the project after completing a detailed market survey report which has already been taken up. The project is estimated to cost Rs. 11.50 crores. The Corporation's likely investment in the project will be Rs. 100 lakhs. A small provision of Rs. 5 lakhs only has been made for the Plan period.

### 42. *HT Insulators*

KSIDC had examined the prospects of manufacturing high tension insulators earlier, and now the prospects of the project appear to be bright. The Corporation has already applied for letter of intent for a 2500 tpa plant. The cost of the project is estimated at Rs. 6 crores. KSIDC's investment in the project is expected to be about Rs. 52 lakhs of which a provision of Rs. 7 lakhs is suggested for the Plan period.

### 43. *Glazed wall and Floor Tiles*

The Kerala State Industrial Enterprises was working on a project for quite some time and they have obtained a Letter of Intent also for setting up a unit in Cannanore district. KSIDC has discussed with the Kerala State Industrial Enterprises about the details of the project and now it is decided that KSIDC would take steps to establish it. The project envisaged by the Corporation is to manufacture annually 5000 tonnes of glazed wall and floor tiles. The cost of the project

is estimated at Rs. 400 lakhs. KSIDC's financial participation is estimated at Rs. 13 lakhs. A provision of Rs. 8 lakhs is made for this project.

#### 44. *Graphite Projects*

The proposal of KSIDC is to set up a composite plant for beneficiating the graphite ore occurring in Thodupuzha region and to manufacture products like graphite crucibles. The total capacity of the plant will be above 1875 tpa. Its cost will be around Rs. 250 lakhs. KSIDC may have to invest at least Rs. 8 lakhs.

#### 45. *Melamine Crokery Project*

The proposal being pursued by KSIDC is to set up a model unit for manufacturing 1800 Nos. of Melamine Crokery items per year. This medium size unit estimated to cost Rs. 65 lakhs would involve KSIDC's investment to the extent of Rs. 5 lakhs. The Plan provision is to set at Rs. 3 lakhs.

#### 46. *Aluminium Smelter and Rolling Mill*

It is a fact that Kerala lacks metallic ores. It is therefore necessary that whatever resources are available locally should be exploited for industrial purposes. In this context KSIDC has attached much importance to developing an economic project based on the bauxite deposits available in the Neeleshwar region in Cannanore district. Efforts were made to examine thoroughly the viability of an Aluminium Smelter and a Rolling Mill. This is of course a power-intensive unit. The Corporation has taken up the project details with the State Government. The capacity of an economic size project is 60,000 tpa and it would cost about Rs. 215 crores. An amount of Rs. 50 lakhs is required for investment in the project during the Plan period. Only a token provision of Rs. 5 lakhs has been suggested for the scheme in the Sixth Plan.

#### 47. *Precision Measuring Instruments*

KSIDC has obtained a Letter of Intent and a collaboration proposal of a GDR firm has been got approved by the Government of India. The Corporation has signed a promotional agreement with a private party to set up the project. Estimated to cost Rs. 240 lakhs, the project will have a total capacity of 70200 Nos. of various types of instruments; but the production will be taken up in a phased manner. The Corporation's investment in the project will be about Rs. 8 lakhs.

#### 48. *Watch Cases*

The proposal is to formulate a viable scheme for Astral Watches Limited, a subsidiary of KSIDC. According to the present indications a capacity of 2.5 lakh numbers of watch cases per annum would be feasible, and such a scheme would cost Rs. 45 lakhs. KSIDC will have to finance the scheme to the extent of Rs. 5 lakhs.

#### 49. *Grey Iron Foundry*

The proposal of a private party is to set up a 1800 tpa foundry plant. It would cost about Rs. 85 lakhs. KSIDC would extent promotional and financial support to the project. The Corporation may be required to invest about Rs. 7 lakhs in the project.

#### 50. *Platten Presses*

KSIDC has examined the feasibility of establishing a unit for manufacturing annually 200 number of platten presses required for small printing presses. The cost of the project is Rs. 250 lakhs. The Corporation's investment in the project would be about Rs. 8 lakhs. A provision of Rs. 3 lakhs has been made for the project during the plan period.

#### 51. *Automobile Ancillaries*

The Corporation is working on two proposals for the manufacture of automobile ancillary items—mechanical engineering items and other electrical engineering items. At least one of them is expected to materialise. An economic unit would cost Rs. 200 lakhs, according to present indications, in which case KSIDC will be required to invest about Rs. 6 lakhs. A provision of Rs. 3 lakhs has been suggested for the plan period.

#### 52. *Central Tool Room*

KSIDC has examined proposals for setting up several engineering industries in the State. One such proposal is that of a central tool room. A private party is in the field and negotiations are under way. The project as envisaged by the Corporation would cost Rs. 100 lakhs. KSIDC has to earmark Rs. 10 lakhs for loan investment in the project.

#### 53. *Consumer Electronics*

British Physical Laboratories India Pvt. Ltd., Palghat proposes to diversify production into consumer electronics like TV sets and video tape recorders. The Company has approached KSIDC for financial assistance. The proposed scheme would cost Rs. 90 lakhs. The Corporation will extend share participation of about Rs. 14 lakhs.

#### 54. *Sponge Iron Plant*

KSIDC has a proposal to set up a sponge iron plant based on Kudremukh iron ore. The technology is indigenously available. M.N.Dastur & Company (P) Ltd., Calcutta has done a pre-investment study for KSIDC. A 50,000 tpa plant would involve an investment of Rs. 21 crores. The Corporation's investment in the project will be over Rs. 50 lakhs. A provision of Rs. 10 lakhs is made for the Plan period. The project is also expected to facilitate utilisation of the Kozhikode iron ore for industrial purpose.

#### 55. *Gold Mining*

UNDP is prepared to render technical assistance and service for conducting pilot-mining studies on the gold deposits occurring in the Nilambur region in Malappuram district. At the instance of the State Government KSIDC proposes to avail of the above assistance and facility to develop a prospective venture by investing further amount, as required. The total investment the State Government/KSIDC is to make in this regard is expected to be about Rs. 45 lakhs.

### 56. Textile Processing

The experience of KSIDC which has done considerable work in bringing into precision the joint sector powerloom complex of Kunnathara Textiles Ltd., near Quilandy, has shown that there is scope of setting up a textile processing unit in the State. A feasibility report is required to be prepared in this context, and a consultancy firm is likely to be appointed for this purpose. According to the present indications the unit may cost Rs. 650 lakhs. A provision of Rs. 5 lakhs has to be made for the project.

### 57. Paints

The proposal of a private party who has set up and run few industrial units in Kerala, and which is being followed up by KSIDC, is for manufacturing paints, enamels and varnishes. The total capacity of the plant will be 3000 tonnes per annum. An established paint manufacturing company in Bombay has agreed to provide technical know-how as well as assistance in training of personnel and in marketing the products. The cost of the project is estimated at Rs. 165 lakhs. The Corporation would invest about Rs. 13 lakhs in project.

### Other Corporations

#### Kerala State Textile Corporation

(Outlay Rs. 1100 lakhs)

The Kerala State Textile Corporation was incorporated on 9-3-1972 as a subsidiary company of the Kerala State Industrial Development Corporation with the main objective of carrying on the business of textile mills in the State. In 1978 the Government of India appointed the Corporation as the authorised person under the provisions of Section 18-AA of the IDR Act, 1951 to take over the management of three closed textile mills viz. M/s Malabar Spinning and Weaving Company, Calicut, M/s Prabhuram Mills, Chengannur and Kottayam Textiles, Kottayam. The Corporation took over the management of these mills and re-commissioned operations in 1978. In the light of the assessment of the causes that led to the closure of these mills, a programme of modernisation/expansion/updating of technology was launched in all these three mills.

The Sixth Plan proposals of the Corporation include expansion and modernisation of the IDR mills for which an amount of Rs. 318 lakhs is required during the Plan period. Of this, Rs. 168 will be the share of the State Government. The Corporation has already/initiated the work for the establishment of a knitting complex in the industrially backward district of Alleppey with a view to boosting up the market for the yarn produced by the mills under its management. The Corporation will also set up a processing house or hosiery, central testing laboratory, powerloom complex under the Repatriates' Scheme, expansion of warping and sizing plant and an elastic project. The Corporation also proposes to set up five spinning mills one each in Trivandrum, Cannanore, Alleppey, Palghat and Kottayam districts. On completion of these projects the Corporation is expected to become a

major complex with roots in the development of almost all textile activities in the State. During the Plan period the State Government will invest Rs. 1100 lakhs in the share capital of the Corporation in order to enable it avail itself of more institutional finance for the speedy completion of its proposed projects. State sector outlay meant for individual schemes is as indicated below:—

	(Rs. lakhs)
1. Modernisation of IDR Mills	168
2. Knitting Complex	48
3. Processing House	8
4. Central Testing Laboratory	10
5. Elastic Project	20
6. Five New Spinning Mills	846
<b>Total:</b>	<b>1100</b>

#### Kerala Forest Development Corporation Limited

(Outlay Rs. 100 lakhs)

The Kerala Forest Development Corporation has a major role to play in the development of forests as well as forest based industries. With a view to promoting forest based industrial units in the State, the Corporation has formulated certain projects for implementation during the Sixth Plan period. The Corporation has initiated work on the projects for the manufacture of plywood and wooden fixtures like doors, windows, ward-ropes etc for the sophisticated foreign markets. The Corporation proposes also to set up a wood industry complex at Nilambur on a long term basis. The complex is programmed to be completed within a period of ten years. An amount of Rs. 100 lakhs has been earmarked in the Plan for strengthening the capital base of the Corporation so as to enable it obtain institutional finance for the completion of the proposed projects.

#### Kerala State Electronics Development Corporation

(Outlay Rs. 1650 lakhs)

The Kerala State Electronics Development Corporation started its effective operations in 1973 with the primary objective of developing an integrated and self reliant electronics industry in the State. The Corporation adopted a three pronged approach to achieve its objectives viz:

- Carrying on direct manufacturing activity by substantially increasing the production of certain items;
- assisting the subsidiary and associate concerns, either promoted or takeover by the Corporation; and
- rendering assistance to small scale and ancillary units in assembling consumer electronic items like radios and producing raw materials and components.

The Corporation's manufacturing unit, Keltron Equipment Complex is engaged in the manufacture of television receivers, electronic calculators, printers, static

inverter systems, variable speed drives, electronic cash registers, electronic card attendance systems and electronic display for weighing scales etc. Till March 1980, the Corporation has promoted seven subsidiary and five associate concerns. Commercial production has commenced in all except two concerns viz. Keltron Rectifiers and Dielectro Magnetics. The associate/subsidiary companies are manufacturing electrolytic capacitors, quartz crystals, electromagnetic components, carbon film resistors, silicon rectifiers and diodes, ceramic capacitors, counting mechanisms, cine projectors etc.

Currently the Corporation is setting up a factory for the manufacture of control instrumentation and systems at Aroor in Alleppey district, in collaboration with M/s. Control Bailey S.A. of France. Negotiations for foreign collaboration and supply of plant and machinery for the setting up of a dielectric film metallisation plant in the joint sector for the manufacture of 100 tonnes of electronic grade metallised dielectric film per annum have been completed with M/s. Torvac Holdings Limited, UK. Approval for the collaboration arrangement has been accorded by Government of India. The Corporation has received letters of intent for the manufacture of mini-micro computers and micro processor based systems, and control valves for a capacity of 3000 numbers per annum. Other new projects under the active consideration of the Corporation, to be implemented either directly or through subsidiary/associate companies are for electronic watches, etched and formed aluminium foils, monolithic, capacitors, instrumentation products, telephone instruments etc.

The total investment needed in the Sixth Plan for modernisation/diversification of the existing units and setting up new projects by the Corporation is Rs. 5740 lakhs. Of this, Rs. 1650 lakhs will be the investment of the State Government as share capital contribution. The balance amount will be met through institutional finance, promoters' contribution in joint sector projects, internal generation of funds etc.

#### *Kerala State Film Development Corporation*

(Outlay Rs. 300 lakhs).

The Kerala State Film Development Corporation came into being in July 1975. The objectives of the Corporation are overall development of the Malayalam Film industry and use of cinema for education and mass communication. To achieve these objectives the State has to establish a foothold in the field of production, distribution and exhibition of films. During the Sixth Plan period, the Corporation envisages the setting up of a self sufficient studio complex and out-door film shooting units, production of short films, setting up of research and reference sections and film archives, building up of theatres in the public sector, financing and distribution of films etc.

#### *Studio Project*

(Outlay Rs. 175 lakhs).

The Corporation has taken up two projects for implementation during the Plan period viz. the studio project and theatre project. The studio project envisages construction of a complex in which there would be recording theatre, laboratory and editing rooms, studio floor, rest house and dormitories and also a city office with a preview theatre attached to it. There will also

be well equipped outdoor film shooting units. The studio project is proposed to be implemented in two stages. The work on the first stage relates to one studio floor, one recording theatre, one laboratory, twelve editing rooms, one rest house and a dormitory, city office and outdoor film shooting units. The second stage envisages construction of an open floor for film shooting, additional recording theatre, staff quarters, shopping centre, guest house and a school of acting. An amount of Rs. 175 lakhs is provided in the Plan for the completion of the studio project.

#### *Theatre Project*

(Outlay Rs. 125 lakhs).

The second major proposal of the Corporation is construction of theatres in order to create facilities for exhibition of films. As a first step towards construction of theatres all over the State in the public sector, it is proposed to construct 12 theatres during the Plan period at an estimated cost of Rs. 250 lakhs. Three twin theatres (six numbers) will be established at Trivandrum, Ernakulam and Calicut and six single theatres at Alleppey, Trichur, Shertallai, North Parur, Chittur and Thaliparamba. Of the total cost, the Government will contribute Rs. 125 lakhs. The balance will be raised through institutional finance.

#### *Kerala State Industrial Products Trading Corporation*

(Outlay Rs. 1 lakh).

The Kerala State Industrial Products Trading Corporation was incorporated in 4-8-1976 with an authorised share capital of Rs. 50 lakhs for organising the sale of the monopoly products of Government Companies. The Government appointed the Corporation as the sole selling agents for titanium dioxide of Travancore Titanium Products. The Corporation is also engaged in the sale of white cement and cement paints produced by Travancore Cements and Kaolin, by the Kerala Ceramics. The Corporation intends to take up more products for sale. An amount of Rs. one lakh is provided in the Plan to strengthen the capital base of the Corporation.

#### *Plantation Corporation of Kerala Limited*

(Outlay Rs. 200 lakhs)

The Plantation Corporation of Kerala, the leading public sector undertaking in plantation industry in Kerala, was incorporated in 1962 with the major objectives of increasing the production of plantation crops and creating additional employment in rural areas. The Corporation has taken up cultivation of rubber and cashew on a large scale. The Sixth Plan proposals of the Corporation are given below:—

#### (i) *Rubber Plantations*

At present the Corporation is planting rubber in its seven estates located at Cannanore, Kozhikode, Trichur, Ernakulam and Quilon districts, extending about 7500 hectares. The Corporation proposes to bring out an additional area of 850 hectares under rubber cultivation during the Plan period. In the meanwhile the Corporation has to maintain the rubber trees planted during 1976-79. The scheme of rubber plantation taken up by the Corporation is estimated to cost Rs. 92 lakhs.

*(ii) Cashew Plantations*

The Corporation owns three cashew estates having a total area of 4800 hectares. With the assistance of World Bank, the Corporation has taken up cashew cultivation on a large scale under the Kerala Agricultural Development Programme (KADP). It is proposed to bring an additional area of 478 hectares under cashew plantation during the plan period. Maintenance of immature cashew plantations, already taken up by the Corporation entails additional expenditure during the Plan period. Besides the existing cashew cultivation schemes, the Corporation will take up the new cashew plantation (Multi State) scheme in a total area of 2275 hectares in Malappuram, Palghat and Cannanore districts. The total outlay, proposed during the Plan period for cashew cultivation schemes has been estimated at Rs. 310 lakhs.

The State will invest Rs. 200 lakhs in the share capital of the Corporation in order to enable it to avail itself of more external resources for the implementation of its plan schemes.

*Kerala Agro Industries Corporation Limited*

(Outlay Rs. 100 lakhs)

One of the major objectives of the Kerala Agro Industries Corporation is promotion of agro-based industries in the State. In order to supply agricultural implements to the middle class farmers, the Corporation has already promoted a subsidiary corporation, viz., the Kerala Agro Machinery Corporation, for the manufacture of power tillers and accessories, in technical collaboration with Messrs. Kubota Limited, Japan. As a diversification programme, the Corporation has taken up two projects viz. manufacture of diesel engine and mini truck. Messrs. Kubota Limited has agreed to extend technical know-how for the diesel engine project. The Meat Products of India, another wholly owned subsidiary of the Agro Industries Corporation, is now engaged in the renovation/replacement of old machinery in its refrigeration plant at Koothattukulam, construction of livestock farms including completion of the work on 100 sow units and broiler farm and expansion of large animal slaughter plant to slaughter 25 cattle per day capacity.

The fruit processing plant being established by the Corporation at Punalur is nearing completion. The project will ensure the processing and marketing of the pineapple now being grown in the State, thus generating additional employment and income in the rural areas. An amount of Rs. 26 lakhs will be required during the Plan period for the completion of the project. The Corporation has also taken active steps for the establishment of a pesticides formulation plant and a kraft paper manufacturing plant. It is proposed to take preliminary steps for the establishment of a cocoa processing unit, and a mechanical compost plant during the Plan period.

An amount of Rs. 100 lakhs is provided in the Plan for strengthening the capital base of the Corporation in order to enable it avail itself of more institutional finance required for the implementation of its industrial projects.

*State Farming Corporation of Kerala Limited*

(Outlay Rs. 75 lakhs).

The State Farming Corporation of Kerala was incorporated in 15-4-1972 with the objective of cultivating sugarcane in the clearfelled forest areas leased

out to the Corporation in Pathanapuram and Pathanamthitta taluks of Quilon district and supplying sugarcane to the Mannam Sugar Mills Co-operative Limited which was starving for sugarcane. Initially cultivation started in Shendurni and Nilakkal farms. Not long afterwards, the sugarcane cultivation was found to be uneconomical due to various reasons. The Government of Kerala, after a critical review of the financial position of the Corporation in 1979, directed it to diversify its activities through raising crops like cocoa, coconut, cashew etc., depending on the suitability of the area in order to make it a viable unit. In pursuance of this Government directive the Corporation drew up a scheme to raise perennial crops in the permanent farms available with the Corporation. The suitability of the cash crops that could be raised in the farms of the Corporation has been studied by a team of experts from Kerala Agricultural University. The scheme initiated by the Corporation envisages raising of rubber in 1610 hectares and cashew in 300 hectares. Rehabilitation of cashew plantations in 500 hectares and other crops in 252 hectares is also proposed. Besides the plantation schemes, the Corporation proposes to establish two factories, one at Chithelvetty and another at Kumarakudi, for processing the latex obtained from its different rubber plantations. The schemes envisaged by the Corporation are proposed to be financed by share capital contribution from the State Government, assistance under the Western Ghat Development Programme and loan from the Agricultural Refinance and Development Corporation. The State Government proposes to invest Rs. 75 lakhs in the share capital of the Corporation during the Plan period.

*Industrial Areas**Industrial Development Areas*

(Outlay Rs. 400 lakhs)

The concept of industrial development areas has gained considerable importance. The availability of suitable areas with necessary infrastructure facilities for the establishment of industrial units not only helps to attract more industries but also enables their dispersal. It is suggested that suitable areas are acquired and developed especially in backward districts. During the Plan period it is proposed to set up a separate agency to acquire land, develop infrastructure and allot land to medium and large industries. Since the land-man ratio in Kerala tends to be too low, it is all the more important to earmark and develop suitable land for all types of industries. The advantage of a separate agency is that it can raise institutional finance for infrastructure development. An amount of Rs. 400 lakhs has been provided in the Plan as State's share for this scheme.

*Departmental Enterprises**Kerala State Industrial Enterprises Limited*

(Outlay Rs. 1000 lakhs)

The Kerala State Industrial Enterprises was set up in 1973 and was entrusted with the management and control of six companies owned by the State Government. Later, two more companies were also brought under the control of the Company. The Kerala State Industrial Enterprises has drawn up certain expansion/diversification schemes to be implemented through its

subsidiary companies during the Sixth Plan period. The eight Government owned companies under the control of the Kerala State Industrial Enterprises, are enlisted below:—

1. Trivandrum Rubber Works Limited, Chakkai.
2. Kerala Ceramics Ltd., Kundara.
3. Travancore Plywood Industries Ltd., Punalur
4. Kerala Electrical and Allied Engineering Company Limited, Mamala.
5. Kerala Soaps and Oils Limited, West Hill.
6. Kerala State Drugs and Pharmaceuticals Ltd., Kalavoor.

7. Kerala State Detergents and Chemicals Limited, Kuttippuram, and

8. Kerala Clays and Ceramic Products Limited, Cannanore.

The total cost of the projects proposed to be implemented by the Kerala State Industrial Enterprises is estimated at Rs. 3753 lakhs. Of this, an amount of Rs. 1000 lakhs will be the share of the State Government. Details such as project cost, state's share, employment potential and capacity of the schemes can be seen from Table 3.28.

TABLE 3.28

**Kerala State Industrial Enterprises Limited  
Schemewise State Sector Outlay 1980-85**

Name of Scheme	Project Cost (Rs. in lakhs)	State Sector outlay (1980-85) (Rs. in lakhs)	Capacity per annum	Employment Potential (Nos.)
(1)	(2)	(3)	(4)	(5)
1. Trivandrum Rubber Works Ltd.:				
(a) Journal Lubricating Pad Project	27.25	10.00	2.50 lakh Nos.	22
(b) Scooter Tyre Project	50.00	20.00	75000 Nos.	..
Trivandrum Rubber Works: Total	77.25	30.00	..	22
2. Kerala Ceramics Limited				
(a) Rationalisation of Kaolin Division	80.00	32.00	3000 M.T.	..
(b) Expansion of Porcelain Division	300.00	100.00	1750 M.T.	111
Kerala Ceramics Ltd.: Total	380.00	132.00	..	111
3. Travancore Plywood Industries Limited				
(a) Decorative Veneer Project	28.00	10.00	2.5 lakh M <sup>2</sup> on 4mm basis	35
(b) Particle Board Project	440.00	137.00	12000 M <sup>3</sup>	160
Travancore Plywood Industries: Total	468.00	147.000	..	195
4. Kerala Electrical and Allied Engineering Company Ltd.				
(a) Development of Switchgear Division	20.00	10.00	..	40
(b) Alternators for General Purposes	50.00	20.00	..	..
(c) Modernisation of Foundry	100.00	40.00	1200 Tonnes	100
(d) Carbon Film Resistor Project	60.00	20.00	..	..
Kerala Electrical and Allied Engineering Company Ltd. Total	230.00	90.00	..	140
5. Kerala Soaps and Oils Limited				
(a) Expansion of Hydrogenation Capacity	146.00	32.00	4700 Tonnes	61
(b) Fatty Acid Splitting Plant	400.00	33.00	..	..
Kerala Soaps and Oils Ltd. Total:	546.00	65.00	..	61
6. Kerala State Drugs and Pharmaceuticals:				
(a) Vitamin 'A' Project	500.00	100.00	30 MMU	21
(b) Aspirin Project	650.00	205.00	350 Tonnes	300
(c) Research & Development	22.70	38.00	..	..
Kerala State Drugs and Pharmaceuticals: Total	1172.60	343.00	..	321



(1)	(2)	(3)	(4)	(45)
7. Kerala State Detergents & Chemicals Ltd.:				
Detergent Plant	449.00	63.00	10,000 Tonnes	245
Kerala State Detergents & Chemicals Ltd., Total	449.00	63.00	..	245
8. Kerala Clays and Ceramic Products Ltd.:				
(a) Glazed Tile Project	400.00	120.00	4000 Tonnes	160
(b) Stoneware Pipe Project	30.00	10.00	6000 Tonnes	100
Kerala Clays and Ceramics Products: Total	430.00	130.00	..	260
Total: Kerala State Industrial Enterprises	3752.95	1000.00	..	1355

*Trivandrum Rubber Works Limited*

(Outlay Rs. 30 lakhs)

Of the two projects proposed to be implemented by the Trivandrum Rubber Works, one is for the manufacture of journal lubricating pads for the Indian Railways. This Rs. 27 lakh project will have a capacity to manufacture 25000 numbers of foam rubber lubricators per annum on single shift basis. The foreign collaboration agreement for this project with M/s Premier Manufacturing Company, USA has been approved by the Government of India and industrial licence has been obtained. The Indian Railways has already placed an order for Rs. 72 lakhs worth of journal lubricating pads to be supplied by the Company over a period of 12 months. The project is expected to go into production by November/December 1981. The Scooter tyre project is proposed with a view to diversifying into more profitable products utilising the banbury capacity and additional balancing equipment. The project report submitted by the Polymer Consultancy Services is being studied. An amount of Rs. 30 lakhs has been provided in the Plan as State's contribution for implementing these two projects.

*Kerala Ceramics Limited*

(Outlay Rs. 132 lakhs)

Rationalisation of Kaolin division and expansion of the porcelain division are the two projects proposed by the Kerala Ceramics for implementation during the Sixth Plan period. The production of kaolin is hardly 6000 Tonnes against a licensed capacity of 18000 tonnes per annum. It is attributed mainly to the limitation of plant capacity at various stages. Work has been initiated to increase the production of kaolin from 6000 tonnes to 9000 tonnes and parallel actions have been taken for acquisition of new mines, mechanisation of mines and providing balancing equipment for processing. The Rs. 300 lakh expansion scheme in the porcelain division envisages creation of additional capacity of 1750 tonnes per annum. For preparing detailed project report and updating the machinery and production techniques M/S. Sumitomo Corporation, Tokyo, Japan has been identified as technical consultants. Total cost for the proposed schemes of the Company is estimated at Rs. 380 lakhs, of which Rs. 132 lakh is expected as State's share during the plan period.

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*Travancore Plywood Industries Limited*

(Outlay Rs. 147 lakhs)

The major scheme proposed by the Company is the manufacture of particle boards for which a letter of intent has already been obtained. The scheme costing Rs. 440 lakhs, envisages manufacture of 12000M<sup>3</sup> particle boards per annum. The work relating to the decorative veneer project of 2,50,000 M<sup>2</sup> on 4 mm basis annual capacity is nearing completion and production is expected to commence soon. A provision of Rs. 147 lakhs is made in the State sector Plan for the implementation of these projects.

*Kerala Electrical and Allied Engineering Company Limited*

(Outlay Rs. 90 lakhs)

The Kerala Electrical and Allied Engineering Company has drawn up certain expansion/diversification schemes for implementation in its Mamala, Kundara and Olavakkot divisions at an estimated cost of Rs. 250 lakhs. Action has been taken for the revival and development of switchgear division in the Mamala unit of the Company. The work on perfecting the 8 Amps, 12 Amps, 20 Amps, 40 Amps, and 80 Amps contactors and starters has been entrusted with M/s. Jyothi Consultants, Baroda. Commercial production is expected to commence by October/November 1981. The alternator division of the Kundara unit of the Company is now increasing its licensed capacity from 600 per annum to 1200 per annum. Development of alternators for commercial applications other than Railways has also been proposed by the Company. The foundry in this unit is planned to be modernised, since it has become necessary to conceive an optimum size modern foundry with electric furnace to meet increasing demand in quality and quantity. A letter of intent has been obtained by the Company for the manufacture of carbon film resistors. This scheme is being implemented in the Olavakkot Unit of the Company as one of the items proposed for the diversification of the Unit. An amount of Rs. 90 lakhs is provided in the Plan as State's share contribution to the Company.

*Kerala Soaps and Oils Limited*

(Outlay Rs. 65 lakhs)

The Kerala Soaps and Oils has proposed two projects for implementation during the Plan period

ie. (i) expansion of hydrogenation capacity and soap production and (ii) fatty acid splitting plant. A combined proposal for raising the soap production capacity from 4300 tonnes to 9000 tonnes by installation of balancing equipment and for interaction of fish oil hydrogenation plant with the existing unit has been prepared. The project is under active implementation. The C2 soap plant has already been commissioned and the erection and commissioning of the third soap line C3 plant is in progress. The proposed project for splitting of fatty acid to meet the increasing production plans for soap will enable the Company to achieve economy of scale with regard to production and sale of soaps. An amount of Rs. 65 lakhs has been provided in the Plan as State's share for Kerala Soaps and Oil Limited.

*Kerala State Drugs and Pharmaceuticals Limited*

(Outlay Rs. 343 lakhs)

The major projects proposed by the Kerala State Drugs and Pharmaceuticals for implementation during the Plan period are the Vitamin 'A' project and Aspirin project. The project for the manufacture of 30 MMU Vitamin 'A' per annum from lemon grass oil is now in an advanced stage of implementation. According to M/s Tata Consultant's revised schedule of implementation, the project will be commissioned in December 1981. The technical collaboration agreement for the 350 tonnes per annum Aspirin Plant, with M/s Tonneco Chemicals, USA has been approved by the Government of India. Approval of the project report prepared by M/s. Kinetic Technology of India is expected shortly. Besides, the Company proposed to set up a Research and Development Centre as a separate unit to do research on drugs, the main emphasis being on natural medicinal plants. The State Government has approved the proposal. The project had been submitted to the Department of Science and Technology, Government of India for Central assistance for Research and Development and improvement of processes. The projects envisaged by the Company will cost Rs. 1072 lakhs. The contribution of the State Government during the Plan period will be Rs. 343 lakhs.

*Kerala State Detergents and Chemicals Limited*

(Outlay Rs. 63 lakhs)

The Company has proposed to implement the 10,000 tonnes per annum detergent plant in two phases. The first phase is in regular production since 1979. The Company is now engaged in the implementation of the second phase of the project which is in an advanced stage. The second phase is expected to be commissioned by April 1982. The State will provide Rs. 63 lakhs for the completion of this project.

*Kerala Clays and Ceramics Products Limited*

(Outlay Rs. 130 lakhs)

Kerala State Industrial Enterprises has obtained a letter of intent in 1977 for the manufacture of 4000 tonnes of glazed wall/floor tiles annually. It is proposed to be set up in collaboration with M/s. H & R Johnson. The negotiations with regard to collaboration

are in progress. The stoneware pipe project, based on the inferior clay available in Cannanore district is proposed to be established in Madai Village in Cannanore district. An amount of Rs. 130 lakhs is earmarked as State's share for the implementation of these projects of the Company.

*Kerala Minerals and Metals Limited*

(Outlay Rs. 1000 lakhs)

The Sixth Plan proposal of the Kerala Minerals and Metals envisages establishment of a titanium dioxide pigment plant, expansion of mineral separation plant and setting up of a titanium sponge plant. The project for setting up a plant with capacity for manufacturing 22,000 tonnes of titanium dioxide is in an advanced stage of implementation. Out of the land acquired for the expansion scheme, 47.6 hectares has been set apart for this project. Site levelling, fencing and construction of roads have almost been completed. Major civil works are in progress. Construction of non plant building has also commenced and orders have been placed for almost all the equipments. The railway siding from Karumagapally station to the site is nearing completion. This project is estimated to cost Rs. 6500 lakhs. A consortium of all India financial institutions comprising the Industrial Development Bank of India, Industrial Finance Corporation of India, Life Insurance Corporation of India, State Bank of India and the State Bank of Travancore has agreed to provide term loan assistance of the order of Rs. 4500 lakhs. Equity capital expected from the State Government is Rs. 2000 lakhs. The State Government have already invested Rs. 1450 lakhs in the project by 1979-80. The balance share of Rs. 550 lakhs will be invested during the Sixth Plan period.

The proposal of the Company to expand its mineral separation capacity from the existing level of 25,000 tonnes to 2,00,000 tonnes per annum, has been approved by the Government in 1971. The project report was prepared by M/s. Australian Mineral Development Laboratories. The Company subsequently decided to take up immediately the expansion of capacity to only 1,00,000 tonnes of ilmenite per annum. An amount of Rs. 47 lakhs has already been spent for modernisation of certain equipments, consultancy charges, pre-operation expenses etc. This project is expected to cost Rs. 1200 lakhs which will be financed by equity of Rs. 350 lakhs and term loan of Rs. 850 lakhs.

The third proposal of the Company is for setting up a titanium sponge plant of 2000 tonnes per annum capacity in the titanium complex being put up at Chavara. Titanium sponge is required for the manufacture of titanium metal which is required by defence and space departments, as also chemical industries. The starting material for titanium sponge is titanium tetrachloride which is an intermediate product in the manufacture of pigment in the pigment plant. There is some spare capacity for titanium tetrachloride and therefore the Company will be able to put up the sponge plant with minimum capital cost. Mishra Dhadhu Nigam (MIDHANI), a unit under the Defence Ministry, has expressed their willingness to join the company in putting up the project. The total capital cost of the project is estimated at

Rs. 2500 lakhs, of which Government share will be of the order of Rs. 700 lakhs. Certain preliminary works like preparation of project report, finalisation of technical know how etc, only will be taken up during the Sixth Plan period. An amount of Rs. 100 lakhs is provided in the Plan as State's share. Altogether an amount of Rs. 1000 lakhs is set apart in the Plan for the different projects of Kerala Minerals and Metals.

*Sitaram Textiles Limited*

(Outlay Rs. 35 lakhs)

Sitaram Textiles was incorporated in 1975 with a view to modernising the erstwhile Sitaram Spinning and Weaving Mills. This textile unit, licensed to install 25000 spindles, started production with 12500 spindles in May 1978. The modernisation programme envisaged by the Company includes also the setting up of a new processing unit and provision of preparatory and weaving facilities. For the modernisation programme the Company expects soft loan assistance from the Industrial Development Bank of India. The Company requires a share capital assistance of Rs. 35 lakhs from State Government during the Sixth plan period.

*Steel Industrials, Kerala Limited*

(Outlay Rs. 900 lakhs)

The Steel Industrials, Kerala, set up by the State Government in 1975, is now engaged in the establishment of the following iron and steel based industrial units in Kerala.

1. Steel Fabrication Unit;
2. Ship Breaking Unit;
3. Steel Forgings Unit; and
4. Integrated Castings Unit.

A mini steel fabrication unit established by the Company with a capital cost of Rs. 23 lakhs has already started commercial production in April, 1980. The total capital investment for the proposed structural fabrication unit is Rs. 175 lakhs. This project is expected to go into full production by 1984-85. The products will include sophisticated fabrications like pressure vessels, boilers, storage tanks, railway bridges, etc.

The Ship Breaking Unit will have production facility to generate 16,500 tonnes of ferrous scrap. The import of re-rollable scrap in the form of old ships for breaking has been canalised through Metal Scrap Trade Corporation.

The Steel Forgings Unit as envisaged at present will have a total capital outlay of Rs. 530 lakhs and will constitute the first phase of a larger project with a total outlay of Rs. 750 lakhs. This unit is being implemented in technical collaboration with M/s India Forge and Drop Stampings Limited Madras. The first phase, when completed will be capable of manufacturing 3,500 tonnes of medium and heavy weight forgings for front axle beam, crown wheel, differential casings, front hub etc. for TELCO, Ashok Leyland etc.

The Market Survey and Project-cum-Feasibility Report for the Integrated Castings Unit at Shertallai has been prepared by M/s. Sethy Associates, a reputed consultant in the country for castings. The

proposal has been approved by the Government in November, 1980. The Project is expected to be completed by 1984-85. On completion it will be capable of producing annually 4000 tonnes of steel castings, 10,000 tonnes of grey iron castings, 4000 tonnes of malleable iron castings and 1000 tonnes of S.G. iron castings.

An amount of Rs. 900 lakhs has been provided in the Sixth Plan as State contribution towards the share capital of the Company.

*Malabar Cements Limited*

(Outlay Rs. 435 lakhs)

The Malabar Cements Limited was incorporated in 1978 for establishing a cement plant of 1200 tonnes per day capacity at Walayar in the district of Palghat. The detailed project report for the plant was prepared by M/s Holtec Engineers Private Limited, a reputed firm of consultants in cement industry. The Company has prepared a long term plan for the mining of the limestone deposits in the Walayar region through the Indian Bureau of Mines.

The Project envisages an outlay of Rs. 3350 lakhs to be financed as follows:—

	(Rs. lakhs)
(i) Share capital (Government of Kerala)	750
(ii) Industrial Development Bank of India	1250
(iii) Industrial Finance Corporation of India	300
(iv) Industrial Credit and Investment Corporation of India	200
(v) Life Insurance Corporation of India	100
(vi) Commercial Banks	750
Total	3350

Infrastructure facilities like power supply, railway siding, water supply, approach roads etc. are getting ready. Orders for all long lead items of machinery have already been placed and delivery of 80 per cent of the items is expected by the end of 1980-81. The Project is expected to be commissioned by the end of 1981-82. The State Government has already made some investment in the project out of its share of assistance of Rs. 750 lakhs. During the Sixth Plan period the State will invest an amount of Rs. 435 lakhs for the completion of the Project.

*Manufacture of Asbestos Cement Pressure Pipes*

(Outlay Rs. 100 lakhs)

The Kerala Premopipe Factory is promoting a factory for the manufacture of Asbestos Cement Pressure Pipes with a view to support the rural water supply schemes which are being taken up by the State Government. The Company has completed the preliminary investigations. Kerala Industrial and

Technical Consultancy Organisation has been entrusted with the preparation of Detailed Project Report. The cost of the project as indicated in the preliminary report of KITCO will be of the order of Rs. 750 lakhs. During the Plan period the State Government will invest Rs. 100 lakhs as share capital in the Project.

*Scooters Kerala Limited*

(Outlay Rs. 100 lakhs)

Manufacture of two wheeler transport vehicles is a priority item in the overall plan strategy of the country. In line with the all India objective, the Scooters Kerala, the existing two wheeler manufacturing unit in the State, has proposed to expand its productive capacity from 7500 numbers to 24000 numbers per annum. The Company is manufacturing scooters by assembling components obtaining from Scooters India Limited, on work and labour basis including cost of paint and other consumables. The Company proposes also to set up its own marketing division. The share capital contribution to the Company by the State Government will be of the order of Rs. 100 lakhs during the Plan period.

*Kerala Automobiles Limited*

(Outlay Rs. 100 lakhs)

The Kerala Automobiles was registered on 15-3-1978 with the major objective of manufacturing three wheelers (175 c.c) for which industrial licence has been obtained from Government of India. The feasibility report prepared by M/s. Automobile Products of India, Bombay has been approved by the State Government. The project will have a capacity to manufacture 10,000 numbers of three wheelers per annum consisting of Autorikshaws, delivery vans, pick up vans etc. which find a variety of end uses as passenger carrier, goods carrier, minitanker, mail carrier, mobile post office, multipurpose office vehicles, mobile shop, bottle carrier, ambulance car, garbage lifter, interplant material handling equipment etc. M/s Tata Economic Consultancy Services, Bombay was entrusted with the work of conducting a market survey for the product on an all India basis and the report has already been received. The Government of Kerala has approved the detailed Project Report in September, 1980. Preliminary work on the project has already been initiated.

The project is proposed to be implemented in two phases, the first phase covering the period from September 1982 to August 1985 and the second phase covering September 1985 to August 1988. By August 1988, the Company is expected to operate at 80 per cent installed capacity. An amount of Rs. 100 lakhs is provided in the Plan as State investment in the Project during the Plan period.

*Travancore Titanium Products Limited*

(Outlay Rs. 20 lakhs)

Production of titanium dioxide in the Company is much below the rated capacity. The Plan proposals of the Company envisage (i) optimisation of

production and (ii) setting up of a waste acid recovery plant. The optimisation of production is proposed to be achieved by installing additional balancing equipment. The Company has made some investment in this scheme, cost of which is estimated at Rs. 50 lakhs. The share of the State Government in this scheme will be of the order of Rs. 20 lakhs. The acid recovery plant is estimated to cost Rs. 705 lakhs. This project is for the profitable recovery of the sulphur content in the effluent generated during the production process. The sulphur thus recovered will be re-used in the production of sulphuric acid. The Company has engaged M/s Lurgi Chemi, Frankfurt, West Germany for preparing the feasibility study for setting up of the plant.

*Travancore Cochin Chemicals Limited*

(Outlay Rs. 40 lakhs)

The Travancore Cochin Chemicals has proposals to set up a liquid sulphur dioxide plant, as its fourth stage expansion, thionyl chloride plant of 900 tonnes per annum capacity, PVC resin plant of 33000 tonnes per annum capacity, caustic fusion plant of a capacity of 19800 tonnes per annum and a hydrogen cycliding plant, besides modernisation of its old caustic soda plants and expansion of Uhde plant during the Plan period. Most of the schemes are proposed to be financed by term loans from financial institutions and internal resources. In order to enable the Company avail itself of institutional finance for the completion of the proposed projects, the capital base of the Company has to be strengthened. For this purpose, an amount of Rs. 40 lakhs has been provided in the Plan.

*Transformers and Electricals Kerala Limited*

(Outlay Rs. 5 lakhs)

The Transformers and Electricals, Kerala is engaged in the implementation of its fourth stage expansion scheme which visualises expansion of the capacity of transformers from 3000 MVA to 6000 MVA and taking up of manufacture of SF-6 Gas Circuit Breakers. The Programme is expected to be completed by 1983. Provision of Rs. 5 lakhs is made as State share contribution towards strengthening the capital base of the Company.

*Traco Cable Company Limited*

(Outlay Rs. 250 lakhs)

The Traco Cable Company has undertaken a scheme for the manufacture of 5000 LKM of jelly filled cables which are in great demand in the Posts and Telegraphs Department. The total capital cost of the project, excluding working capital requirement has been estimated at Rs. 940 lakhs. Action for

purchase of land, its development, construction of factory buildings and other infrastructure facilities has already been initiated. Steps are being taken for the procurement and installation of indigenous machinery. The State Government's share of investment in the project will be of the order of Rs. 250 lakhs. This amount has been provided in the Plan.

*Chalaky Refractories Limited*

(Outlay Rs. 100 lakhs)

The Company has taken up an expansion programme to tone up its operations. In order to place its working on a sounder footing and to enable it to generate profits, it will be necessary to incur additional capital expenditure during the Plan period. Installation of additional kilns, friction screw press, counter current mixer etc., has been taken up as part of the expansion programme.

The total capital expenditure on the expansion project is estimated at Rs. 171 lakhs. An amount of Rs. 100 lakhs has been provided in the Plan as State investment in the project during the Plan period.

*Pallathra Bricks and Tiles Limited*

(Outlay Rs. 5 lakhs)

Ninety-eight per cent of the paid up share capital of the Company is held by the Government of Kerala. The Company is manufacturing sand lime bricks required for construction purposes, utilising silica sand and hydrated lime in the ratio of 9:1. The operation of the Company during the past few years was not encouraging due to various reasons. The main reason is attributed to the expensive use of furnace oil for firing the boiler for producing steam for baking bricks. It is estimated that 50 per cent of the fuel cost can be saved by subjecting the boiler to electrical operations. The Company has therefore proposed the scheme of conversion of boiler into electrical operation to be implemented during the Plan period. The scheme will cost Rs. 10 lakhs. The State's share will be Rs. 5 lakhs. The balance will be raised from financial institutions on Government guarantee.

*United Electrical Industries Limited*

(Outlay Rs. 50 lakhs)

The United Electrical Industries Limited, incorporated in 1950, is a full fledged meter manufacturing unit in Kerala and a leading manufacturer of motor control gears, switchgears and electronic components. In technical collaboration with a Japanese firm, Shin-Fi Electronics Company, the United Electrical Industries took up the manufacture of plastic film capacitors from 1975 with an installed capacity of ten million pieces per annum. For the production of Carbon Film Resistors, the Company is getting technical assistance from M/s Akahane Electronics Industries Corporation of Japan. The Sixth Plan proposal of the Company envisages increase in installed capacity of meter production from 1.77 lakh numbers to 2.50 lakh numbers (single phase plus poly phase) per annum and expansion of production

capacity of plastic film capacitors from 10 million pieces to 25 million pieces. The total capital requirement of these two projects has been placed at Rs. 50 lakhs. This amount is provided in the Plan, Rs. 38 lakhs as share capital and Rs. 12 lakhs as loan.

*Travancore Cements Limited*

(Outlay Rs. 5 lakhs)

The Travancore Cements Limited has a proposal for the enhancement of white cement production capacity from the present level of 35000 tonnes to 50800 tonnes per annum. This scheme would cost Rs. 200 lakhs. An amount of Rs. 5 lakhs has been provided in the Plan towards strengthening the share capital base of the Company.

*Travancore Sugars and Chemicals Limited*

(Outlay Rs. 1 lakh)

The Travancore Sugars and Chemicals has a proposal for setting up a distillery unit which is estimated to cost Rs. 20 lakhs. The provision of Rs. 1 lakh made in the Plan is for strengthening the capital base of the Company.

*Other Schemes*

*Management Development Centre*

(Outlay Rs. 24 lakhs)

The Centre for Management Development was set up in August, 1979 by the State Government for the purpose of organising short term and long term training courses in various disciplines of industrial management to the key personnel of public and private sector enterprises. The Centre, having multiple objectives is at present formulating and implementing new programmes for the attainment of its overall objectives. The activities of the Centre are proposed to be expanded considerably during the Sixth Plan period. A provision of Rs. 24 lakhs is made for this scheme in the Plan.

*ENCOS—Taking over and Revival*

(Outlay Rs. 4 lakhs)

All the undertakings of the societies under ENCOS have been transferred to and vested in the State Government according to the Engineering Technicians Co-operative Societies (Acquisition and Transfer of Undertakings) Act, 1977. Funds are required for discharging the financial liabilities and obligations, such as provident fund dues, payment of salaries etc. to the skeleton staff of ENCOS units and head office, cast on the Government under the above Act. An amount of Rs. 4 lakhs has been provided in the Plan for this purpose.

*Mannam Sugar Mills Co-operative Limited*

(Outlay Rs. 1.50 lakhs)

The Mannam Sugar Mills has a proposal to start a distillery unit for the production of rectified spirit from tapioca. The total investment of the project has been estimated at Rs. 74 lakhs. An amount of Rs. 1.50 lakh has been provided in the

Plan as State's share contribution. The balance will be obtained from financial institutions for which steps have already been taken by the Company.

*Co-operative Spinning Mills (Quilon and Malappuram)*

(Outlay Rs. 250 lakhs)

Establishment of two co-operative spinning mills having 25,000 spindles each, one at Quilon and another at Malappuram, is nearing completion. The Mill at Malappuram has already started commercial production of cotton yarn in March, 1980 and now proposes to install 5000 spindles additionally during the Plan period. The provision of Rs. 250 lakhs in the Plan is meant for strengthening the capital base of these Mills in order to enable them complete their projects.

*Cannanore Co-operative Spinning Mills Limited*

(Outlay Rs. 150 lakhs)

The Plan proposal of the Cannanore Co-operative Spinning Mills envisages modernisation of the Mill and expansion of the spindle capacity. The spindle capacity of the Mill was 28000 as on March, 1980. It is proposed to increase the number of spindles to 50,000 by installing additional 22,000 spindles in five stages. Total outlay proposed for the scheme is estimated at Rs. 450 lakhs of which Rs. 150 lakhs will be the share of the State Government.

*Co-operative Sugars, Chittur.*

(Outlay Rs. 3 lakhs)

An amount of Rs. 3 lakhs has been earmarked in the Plan in order to strengthen the capital base of the Company.

*Foam Mattings (India) Limited*

(Outlay Rs. 150 lakhs)

Foam Mattings (India) was incorporated in 1978 with a capacity to manufacture 3.6 million Sq. metres of rubber backed coir mattings of 4 metre width annually. Installation of the foam backing plant has been completed. The Company is now establishing a matting factory with 24 modern handlooms for the manufacture of 4 metre wide mattings. It has drawn up a diversification programme envisaging setting up of a brown fibre Unit, PVC backed tufted carpet Unit, and a needle felt coir carpet Unit. The diversification programme would cost Rs. 400 lakhs. The total expenditure on the project expected during the Sixth Plan period is Rs. 521 lakhs. The State Government proposes to invest Rs. 150 lakhs in the share capital of the Company. The balance amount is proposed to be raised through the financial institutions like Industrial Development Bank of India, Industrial Finance Corporation of India and Industrial Credit and Investment Corporation of India.

*Special Refractory Project*

(Outlay Rs. 80 lakhs)

It is proposed to implement a project for the manufacture of 12,000 tonnes of special refractory items per annum in the State Sector. The letter of

intent for the project has already been obtained by the Kerala State Industrial Development Corporation. The Kerala State Industrial Development Corporation has submitted an application for the approval of the technical collaboration to the Government of India. This Rs. 14 crore project is proposed to be set up in technical collaboration with a Soviet firm and with the engineering assistance of MECON. The investment of the State Government in the Project during the Plan period will be of the order of Rs. 80 lakhs.

*White Cement Project*

(Outlay Rs. 10 lakhs)

The possibility of establishing a white cement manufacturing plant utilising the large deposits of limeshell occurring in the Payyannur region of Cannanore district is being investigated. In this context, the Kerala State Industrial Development Corporation has appointed a consultancy firm to study the feasibility of mining these deposits. According to the preliminary estimates a 50 tonne per day plant will cost Rs. 350 lakhs. A provision of Rs. 10 lakhs is made in the Plan towards this project.

*Aluminium Smelter Project*

(Outlay Rs. 1 lakh)

There is a net work of units in the State consuming aluminium metal in its various forms but are often handicapped by shortage of the metal. The Kerala State Industrial Development Corporation has engaged Messrs. HINDALCO to do a techno-economic feasibility report for setting up an aluminium smelter project in the State sector utilising the Nileswar bauxite deposits which have been estimated at seven million tonnes by the Geological Survey of India. A token provision of Rs. 1 lakh has been provided in the Plan for meeting the preliminary expenses on the Project.

*Petrochemical Project*

(Outlay Rs. 3 lakhs)

The proposal is to set up an industrial complex based on the aromatic rich naphtha from Cochin Refineries to extract annually 71000 tonnes of benzene, 39500 tonnes of paraxylene and 5000 tonnes of orthoxylene. Adequate quantity of naphtha for this project will be available from the proposed fluid catalytic cracking unit of the Cochin Refineries. This Rs. 79 crore project has a special relevance to the economy of the State mainly because of its efficiency in generating a network of downstream projects. The Kerala State Industrial Development Corporation has applied for a letter of intent which is expected to be favourably considered by the Central Government. An amount of Rs. 3 lakhs is earmarked in the Plan as State share for meeting the preliminary expenses on this project.

*Abattoir Project*

(Outlay Rs. 2 lakhs)

One of the major recommendations of the study group constituted by the State Government to go into the question of improving slaughter house operations was the setting up of a few modern slaughter houses in selected centres to produce wholesome meat for human consumption. The Kerala State

Industrial Development Corporation, in this context proposes to set up in one of the three cities in Kerala a modern slaughter house (abattoir) having a capacity to process 800 large cattle and 7000-8000 small cattle daily. The Corporation has applied for a letter of intent and started negotiation with Indian as well as foreign firms for technical assistance for this Rs. 12 crore project. An amount of Rs. 2 lakhs is provided in the Plan for meeting the initial expenses.

#### State Investment Subsidy

(Outlay Rs. 500 lakhs)

Under the new package of incentives for large and medium industries announced by the State Government in 1979, a capital subsidy of 10 per cent, subject to a maximum of Rs. 10 lakhs will be given to industries in all the districts excepting Cannanore, Malappuram and Alleppey which are covered under the Central investment subsidy scheme where the subsidy will continue to be 15 per cent. The State subsidy will be provided on the same terms and conditions of the Central investment subsidy scheme, but will be limited to 10 per cent of capital investment. A large number of industrial ventures are expected to be set up during the Sixth Plan period. Hence a provision of Rs. 500 lakhs is made in the Plan for this scheme.

#### Interest-free Sales Tax Loan

(Outlay Rs. 150 lakhs)

This scheme has two parts, the first being applicable to diversification of existing units and the second

to new projects. Under the first part, an industrial unit will be eligible for interest-free sales tax loan equivalent to the sales tax paid on the additional turnover for a period of three years put together, subject to a maximum of 25 per cent of the fixed assets created for the proposed unit or Rs. 10 lakhs, whichever is less. In the second part, a new unit to be set up in any district excepting Ernakulam will get every year during the first six years of production interest-free sales tax loan equivalent to the sales tax paid by them during the previous year subject to a maximum of 10 per cent of the gross fixed assets or Rs. 5 lakhs, whichever is less. Loans under the first part will be repayable in six equal annual instalments after the expiry of 12 years from the date of the first disbursement. For loans under the second part also the amount given in each year will be repayable in six annual instalments after the expiry of 12 years. An amount of Rs. 150 lakhs has been set apart in the Sixth Plan for this scheme.

#### Preparation of Feasibility Reports

(Outlay Rs. 20 lakhs)

The State Government will contribute 50 per cent of the cost of preparation of project reports or feasibility reports to entrepreneurs proposing new industrial investments in the State. When the project is implemented, the contribution made will be converted into share capital or term loan on the date of commencement of production. A provision of Rs. 20 lakhs is made in the Plan for this scheme.

TABLE 3.29  
Medium and Large Scale Industries—Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated Expenditure	Proposed outlay	Capital Content	Approved outlay	Capital Content
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. State Financial Corporation :								
	Kerala Financial Corporation	25.00	15.00	15.00	200.00	200.00	30.00	30.00
2. State Industrial Development Corporation :								
	Kerala State Industrial Development Corporation.	110.00	135.00	135.00	1100.00	1100.00	150.00	150.00
3. Other Corporations:								
3.1	Kerala State Textile Corporation	34.00	100.00	100.00	1100.00	1100.00	200.00	200.00
3.2	Kerala Forest Development Corporation	..	10.00	10.00	100.00	100.00	10.00	10.00
3.3	Kerala State Electronics Development Corporation	396.25	450.00	450.00	1650.00	1650.00	450.00	450.00
3.4	Kerala State Film Development Corporation	80.00	80.00	80.00	300.00	300.00	75.00	75.00
3.5	Kerala State Industrial Products Trading Corporation	3.00	..	..	1.00	1.00	0.20	0.20
3.6	Plantation Corporation of Kerala	30.00	15.00	15.00	200.00	200.00	30.00	30.00
3.7	Kerala Agro Industries Corporation	10.00	10.00	10.00	100.00	100.00	10.00	10.00
3.8	State Farming Corporation of Kerala	70.00	25.00	25.00	75.00	75.00	25.00	25.00
	Sub Total (3)	623.25	690.00	690.00	3526.00	3526.00	800.20	800.20

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>4. Industrial Areas.</i>								
Industrial Development Areas :		1.62	10.00	10.00	400.00	400.00	40.00	40.00
<i>5. Departmental Enterprises :</i>								
5.1 Kerala State Industrial Enterprises Limited		241.49	225.00	225.00	1000.00	1000.00	250.00	250.00
5.2 Kerala Minerals and Metals Limited		672.96	402.00	402.00	1000.00	1000.00	350.00	350.00
5.3 Sitaram Textiles Limited		15.00	35.00	15.00	35.00	35.00	..	..
5.4 Steel Industrials Kerala Limited		65.00	225.00	225.00	900.00	900.00	250.00	250.00
5.5 Malabar Cements Limited		375.00	235.00	235.00	435.00	435.00	200.00	200.00
5.6 Manufacture of Asbestos Cement Pressure Pipes		..	..	..	100.00	100.00	10.00	10.00
5.7 Scooters Kerala Limited		..	1.00	1.00	100.00	100.00	10.00	10.00
5.8 Kerala Automobiles Limited		7.00	20.00	45.00	100.00	100.00	20.00	20.00
5.9 Travancore Titanium Products Limited		..	10.00	10.00	20.00	20.00	10.00	10.00
5.10 Travancore Cochin Cemicsals Limited :		..	40.00	40.00	40.00	40.00	..	..
5.11 Transformers and Electricals, Kerala Limited		..	5.00	5.00	5.00	5.00	..	..
5.12 Traco Cable Company Limited		..	35.00	35.00	250.00	250.00	50.00	50.00
5.13 Chalakudy Refractories Limited		5.00	5.00	5.00	100.00	100.00	16.00	16.00
5.14 Pallathra Bricks and Tiles Limited		1.00	1.00	1.00	5.00	5.00	1.00	1.00
5.15 United Electrical Industries Limited		15.00	22.00	22.00	50.00	50.00	20.00	20.00
5.16 Travancore Cements Limited		..	5.00	5.00	5.00	5.00	..	..
5.17 Travancore Sugars and Chemicals Limited		..	..	..	1.00	1.00	0.30	0.30
Sub Total (5)		1397.45	1266.00	1271.00	4146.00	4146.00	1187.30	1187.30
<i>6. Other Schemes :</i>								
6.1 Management Development Centre		1.00	5.00	1.00	24.00	24.00	5.00	5.00
6.2 ENCOS—Taking over and Revival		3.00	2.00	1.00	4.00	4.00	1.00	1.00
6.3 Mannam Sugar Mills Co-operative		..	1.00	..	1.50	1.50	..	..
6.4 New Co-operative Spinning Mills (Quilon and Malappuram)		266.10	20.00	15.00	250.00	250.00	25.00	25.00
6.5 Cannanore Co-operative Spinning Mills		..	5.00	5.00	150.00	150.00	20.00	20.00
6.6 Co-operative Sugars, Chittur		..	2.00	..	3.00	3.00	..	..
6.7 Foam Mattings (India) Limited		1.02	20.00	20.00	150.00	150.00	20.00	20.00
6.8 Special Refractory Project		..	2.00	2.00	80.00	80.00	3.00	3.00
6.9 White Cement Project		..	1.00	..	10.00	10.00	1.00	1.00
6.10 Aluminium Smelter Project		..	1.00	..	1.00	1.00	..	..
6.11 Petro Chemical Project		3.50	3.00	..	3.00	3.00	..	..
6.12 Abottir Project		..	2.00	..	2.00	2.00	..	..
6.13 State Investment Subsidy		0.20	40.00	30.00	500.00	500.00	50.00	50.00
6.14 Interest—Free Sales Tax Loan		..	20.00	20.00	150.00	150.00	22.50	22.50
6.15 Preparation of Feasibility Reports		..	..	..	20.00	20.00	5.00	5.00
6.16 Others*		48.69	20.00	10.00	100.00	100.00	..	..
Sub Total (6)		323.51	144.00	104.00	1448.50	1448.50	152.50	152.50
Total : Medium and Large Industries :		2480.83	2260.00	2225.00	10820.50	10820.50	2360.00	2360.00

\* Includes schemes for which separate allocations have not been made in the Plan but may require State sector investment during the Plan period.



*Central Sector Schemes*

The Central Sector Units functioning in the State have drawn up certain expansion/diversification schemes to be implemented during the Sixth Plan period. Besides these continuing schemes, some new schemes are also expected to be implemented during the Sixth Plan period under the Central Sector. Brief descriptions on the continuing schemes are given below:—

1. *Fertilisers and Chemicals, Travancore Limited*

(Outlay Rs. 134.07 crores)

The Company has a proposal to establish a caprolactum plant of 50,000 tonnes per annum capacity as part of their diversification programme. Caprolactum is used as the basic raw-material for the manufacture of nylon-6 which itself is required for making fishing nets, tyre cords, nylon filament yarn etc. The other programmes included in the diversification scheme involve setting up of a cryolite plant, expansion of Cochin-I and Cochin-II fertilizer plants of the Company, expansion and conversion of acid plant to DCDA, installation of cranes at Cochin Port, adoption of pollution control measures at Cochin and Udyogamandal, arranging handling facilities at Ambalamedu and Cochin Port etc. The Central Government investment in these projects during the plan period will be Rs. 134.07 crores. Of this Rs. 70 crores is earmarked for the Caprolactum Plant.

*Hindustan Machine Tools Limited.*

(Outlay Rs. 4.25 crores)

The Hindustan Machine Tools is engaged in the production of a wide range of items like electronic watches precision instruments, electric lamps, dairy machinery, printing machinery, machine tools etc. The Company proposes to implement some modernisation/expansion/diversification projects in its various units located in different parts of the country during the plan period. The Kalamassery unit of the Company manufactures machine tools and printing machinery. The Company has taken up the diversification of the printing machinery project at Kalamassery as one of their plan proposals. Total Sixth Plan outlay on various Hindustan Machine Tools projects will be of the order of Rs. 113 crores. Of this an amount of Rs. 4.25 crores will be spent on the diversification of the printing machinery project at Kalamassery.

*Indian Rare Earths Limited*

(Outlay Rs. 5.18 crores)

The Sixth Plan proposals of the Indian Rare Earths include the setting up of a uranium recovery plant, helium recovery plant and facilities for diversification in rare earths products. In addition, the Company is considering doubling the capacity of the Rare Earths Plant. The fall in the monazite content of the raw sand and shortage of raw sand itself have been the primary reasons for lower realisation in respect of the rare earths division. In order to ensure supply of adequate quantities of raw sand and to enrich the quality and grade of monozite, a preconcentration plant has

been proposed to be established at Manavalakurichi. An effluent treatment plant is being established in the Always unit of the Company. The Centre proposes to invest an amount of Rs. 5.18 crores during the Plan period for the various schemes of the Always Unit.

*Kerala Newsprint Project.*

(Outlay Rs. 36.05 crores)

The present consumption of newsprint which is of the order of 0.35 million tonnes is largely met through imports. It is estimated that the demand for newsprint would increase to 0.50 million tonnes by 1984-85. The Government has planned to enhance the newsprint production in the country to 0.18 million tonnes in 1984-85. In order to achieve this target the Hindustan Paper Corporation has already started work on certain schemes which are now at different stages of implementation. The Kerala Newsprint project is one of the units proposed by the Hindustan Paper Corporation. The work on the project is nearing completion. An amount of Rs. 110 crores has already been spent by the Central Government for this project as on 31st March 1980. During the Sixth Plan period an amount of Rs. 36.05 crores will be spent by the Government for the completion of the Project.

*Indian Telephone Industries Limited*

(Outlay Rs. 11.16 crores)

The Palghat unit of the Indian Telephone Industries was set up in 1974 for the manufacture of small electronic exchanges of capacities ranging from 25 lines to 100 lines of PAXs, PABXs and SAXs. The present capacity of the Unit is 10,000 lines per annum in single shift and 17,500 lines in two shifts. The Unit has a proposal to expand its capacity to 60,000 lines per year at an estimated cost of Rs. 96 lakhs. Phase III expansion of the Unit scheduled between 1981-85 envisages manufacture of 30,000 lines of digital trunk automatic exchanges, 50,000 lines of electronic rural automatic exchanges and 40,000 lines of small/medium electronic exchanges. This expansion project would involve an investment of about Rs. 10 crores during the 1980-85 Plan period. A total outlay of Rs. 11.16 crores is expected as Central Sector investment in these expansion schemes of the unit during the Sixth Plan period.

*Cochin Shipyard Limited*

(Outlay Rs. 40.82 crores)

The Cochin Shipyard has prepared a scheme of expansion of the dock and other facilities so as to enhance the output to the optimum level of 50,000 tonnes of steel (through put) per year from the present level of 25,000 tonnes. The schemes proposed to be implemented during the Plan period includes completion of the original project, construction of additional quay, installation of shot blasting machine, setting up of ship repair consultancy, carrying out the expansion stage I of township for employees etc., for which an amount of Rs. 40.82 crores has been earmarked in the Sixth Plan as Central Sector outlay.

## Mining

The Sixth Plan schemes under mineral development have been formulated with a view to strengthening the working of the State Department of Mining and Geology. The implementation of these schemes will enable the Department to carry out the tasks already entrusted with it in a more systematic manner. Besides the Department, the UNDP aided Kerala Mineral Exploration and Development Project is also in operation in the State. An amount of Rs. 150 lakhs has been provided in the Plan for the mineral development schemes. Scheme-wise details are given below:—

### *Strengthening the Working of the Department of Mining and Geology*

(Outlay Rs. 78 lakhs)

Steps have already been taken to intensify the detailed mineral investigation for important minerals of the State such as clays, silica sand, limeshell, bauxite, graphite, gemstones etc., and gather information relating industrial utilisation of these minerals. These involve carrying out of bench scale studies and pilot plant trials, feasibility studies, preparation of project reports etc. Creation of additional staff, technical as well as ministerial, in the Department is a pre-requisite for achieving these objectives. Moreover, drilling equipments, laboratory equipments, vehicles etc., are to be procured by the Department. An amount of Rs. 78 lakhs, required for these activities is provided in the Plan.

### *Preparation of Feasibility Reports*

(Outlay Rs. 5 lakhs)

Information relating to use of known minerals in the State for industrial purposes is highly inadequate. The Department of Mining and Geology has decided to prepare feasibility reports for the use of minerals like bauxite, graphite, clays and silica sand. Bauxite of fair grade analysis between 40 and 50 per cent has been located in Kumbala and Nileswar in Cannanore district. The Kerala State Industrial Development Corporation has held discussions with HINDALCO as a first step towards exploring the possibilities of utilising these deposits. HINDALCO has come out with certain proposals. Detailed geological explorations of some of the deposits identified in the State are being arranged through the Mineral Exploration Corporation Limited. It necessitates beneficiation and pilot plant studies.

Before preparing feasibility reports the suitability of the minerals for various industries have to be determined by carrying out physical tests, chemical analysis and furnace tests with the aid of Central Glass and Ceramic Research Institute. For the scheme of preparation of feasibility reports, an amount of Rs. 5 lakhs is provided in the Plan.

### *Mineral Development*

(Outlay Rs 10 lakhs)

In view of the very limited and fast depleting resources position coupled with growing demand, it has

become necessary to improve the situation by exercising governmental control on exploitation, conservation, marketing and proper utilisation of minerals. For this purpose setting up of separate units for gemstones, limeshell, silica sand etc., are contemplated by the Department. These units will work as nuclei for the future development of corporations. The outlay of Rs. 10 lakhs provided in the Plan for this scheme is intended for meeting the pay and allowances of the staff to be appointed on creation of these units, cost of vehicles and running contingent charges and purchase of gems etc.

### *Setting up of Field Organisations*

(Outlay Rs. 20 lakhs)

It has become necessary to implement and enforce the Provisions in the Mines and Minerals (Regulations and Development) Act and rules made thereunder more effectively in order to prevent clandestine mining of minerals which are of utmost importance to the State. This will prevent leakage of revenue by way of royalty, rent etc., on minerals. The present set up in the Department is not adequate to ensure the implementation of the Mines and Minerals Act. Hence, in order to undertake this task alongwith the routine activities of the Department, it is proposed to create a unit in each district of the State comprising a Geologist and necessary supporting administrative staff. An amount of Rs. 20 lakhs has been provided in the Plan for this scheme.

### *Kerala Mineral Exploration and Development Project — UNDP Project.*

(Outlay Rs. 37 lakhs)

The UNDP aided Kerala Mineral Exploration and Development Project is in operation in the State since April, 1977. This project was formulated for the exploration and economic evaluation of the known and partially developed iron ore, graphite, phlogopite mica and associated sulphide mineralisation and gold deposits and to undertake similar work on other mineral indications while simultaneously conducting a general exploratory survey for new deposits over the entire 14,500 sq. kms., of the project area. This technical co-operation is expected to strengthen the technical capability of the State Department of Mining and Geology which has the primary responsibility of carrying out a mineral inventory of the State. The Project is to terminate on 31-7-1981 according to the existing agreement. Proposals have however been submitted to Government for the extension of the project for a further period of 3 years from 1-8-1981. These are being examined by the Government. An amount of Rs. 37 lakhs has been earmarked in the Plan for meeting the State's financial commitment on the Project during the years 1980-81 and 1981-82.

TABLE 3.30

## Mining—Scheme-wise Outlay

(Rs. in lakhs)

Name of Scheme	1979-80		1980-81		1980-85		1981-82	
	Actuals	Approved outlay	Anticipated Expenditure	Proposed outlay	Capital Content	Proposed outlay	Capital Content	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<b>1. Department of Mining and Geology</b>								
(i) Strengthening the Department	5.12	12.00	10.20	78.00	13.50	5.00	1.00	
(ii) Preparation of Feasibility Reports	..	1.00	0.50	5.00	..	1.00	..	
(iii) Mineral Development	..	..	..	10.00	5.00	..	..	
(iv) Setting up of Field Organisations for Enforcement of Mines and Minerals Act	..	2.00	1.00	20.00	4.00	2.00	0.50	
<b>2. Kerala Mineral Exploration and Development Project—UNDP Project</b>								
	6.47	10.00	10.00	37.00	10.00	22.00	10.00	
<b>Total—Mining</b>	<b>11.59</b>	<b>25.00</b>	<b>21.70</b>	<b>150.00</b>	<b>32.50</b>	<b>30.00</b>	<b>11.50</b>	

**Transport & Communications****A. Ports & Pilotage****1. Development of Minor Ports**

As Cochin is the only major port in the State which can admit ships at all times during the year it is proposed to develop four of the existing minor and intermediate ports of Kerala during the Sixth plan period. The harbours selected for development are Vizhinjam and Neendakara in the south and Beypore and Azhikkal in the north. A total outlay of Rs. 330 lakhs is proposed for development of minor ports during the Sixth Plan period.

**(i) Vizhinjam Cargo Harbour**

(Outlay Rs. 5 lakhs)

Vizhinjam Harbour, though initially planned as a fishery harbour, is blessed with adequate natural depth and has ample potential for development as a cargo harbour. The main breakwater is almost completed and the construction of the second breakwater is expected to be completed during 1981-82. With the completion of the breakwaters an approach channel of 15m. depth and a sheltered basin become readily available. This harbour when completed can be used as an all-weather harbour. A rough estimate of the cost of development of harbour facilities in the port is placed at Rs. 250 lakhs. Detailed investigation for this scheme is to be undertaken. Hence only a provision of Rs. 5 lakhs is made for investigation, planning and preliminary works.

**(ii) Neendakara Cargo Harbour**

(Outlay Rs. 60 lakhs)

In 1959 the Central Water and Power Research Station, Poona, recommended the construction of two breakwaters at Neendakara to provide a channel of 4 m. depth. The breakwaters were constructed during the period 1964-67 and a channel with 4 m. depth is maintained in the entrance without any dredging

efforts. With this, the port operations were commenced during 1971 by constructing temporary jetties and thatched godowns. A revised project report for the development of cargo harbour has been submitted to Government in June 1978. Construction of a transit shed costing Rs. 8 lakhs has been completed. Construction of permanent wharves, godowns, harbour roads etc., is essential for meeting the increased demand for trade operations at this port. The alignment of the wharf was tested in the model for satisfactory hydraulic conditions and recommended by the model studies.

It is felt that if the depth in the approach channel is increased to 6.5 m. the coastal steamers can also use the harbour facilities. It is proposed to extend the two breakwaters with a view to obtain an entrance channel of required depth. An outlay of Rs. 60 lakh is made for completing items of work like the construction of a quay with depth 6.5 m., transit shed etc.

**(iii) Beypore Cargo Harbour**

(Outlay Rs. 250 lakhs)

A scheme costing Rs. 111.96 lakhs has been approved by the Government of India and an estimate has been sanctioned by the State Government to develop the port for the use of sailing vessels of draft upto 4.5 m. The scheme included mainly the dredging at the approach channel with 6.0 m depth in the sea and 5.5 m. depth inside the basin with a turning circle of 200 m. diameter. Further the model studies conducted at the Central Water and Power Research Station have shown that two breakwaters are to be constructed at the estuary to train the flow so that a channel with 4.5 to 5.5 m. depth can be maintained with minimum maintenance dredging. A wharf suitable for the sailing vessels and coastal steamers of 4.5 m. draft has to be provided. Two more transit sheds are also necessary. Construction of a coastal road connecting Calicut-Beypore ports is also envisaged. Various items of works have to be undertaken to improve the existing facilities for which an outlay of Rs. 250 lakhs is provided in the plan.

(iv) *Azhikkal Cargo Harbour*

(Outlay Rs. 15 lakhs)

Azhikkal is an estuarine port situated on the south bank of Valapattanam river close to its mouth. The port has only a wharf 42.67 metre long and 12 metre wide. Only one vessel can be berthed at a time. Cargo vessels can enter the harbour only at high tide since the estuary is separated from the sea by a shallow sand bar. Hence priority is given to dredging works so as to improve the depth on the approach channel at the bar area. The development programme envisages necessary harbour facilities for the lighterage operation and complete terminal facilities for lighters and small coastal steamers drawing upto 4.5 m. of water. A provision of Rs. 15 lakhs is made for taking up essential dredging and other items of work for Azhikkal port as part of the comprehensive development programme.

2. *Investigation, Planning and Engineering Studies*

(Outlay Rs- 20 lakhs)

Investigation works in respect of certain ports are already in progress. Investigation works in respect of the other selected ports will have to be taken up during the plan period 1980-85. An outlay of Rs. 20 lakhs is earmarked in the plan, for this purpose.

3. *Construction and Repairs*(i) *Purchase of Supplementary Equipments for Ports*

(Outlay Rs. 35 lakhs)

Most of the departmental tugs and barges are very old and some of them are beyond repair. The two tugs now available at Alleppey port are very old and require replacement. It is proposed to provide departmental barges for Trivandrum port for shipping operations. In addition to the above purchase of cargo barges and water barges and tugs to replace old ones are also under consideration. An outlay of Rs. 35 lakhs is provided in the plan for this purpose.

(ii) *Capital Repairs and Major Additions to Piers and Other Structures*

(Outlay Rs. 25 lakhs)

The piers at Tellicherry, Alleppey, Calicut and Trivandrum are quite old and in order to keep them in working condition regular capital repairs have to be undertaken. The renewal of super structure of the piers at Alleppey was undertaken in the Fifth Plan period. The renewal of poles and balance portion of the work will be undertaken during 1980-85. At Calicut also, the renewal of super structure has to be undertaken periodically. The godowns at all the minor ports need repairs. The wharf surfaces need restructuring. Proper repairs have to be done to maintain the approach roads to the ports and internal roads in good condition.

(iii) *Capital Repairs and Major Additions for Equipments and Floating Crafts*

(Outlay Rs. 20 lakhs)

The departmental tugs and barges are to be repaired and dry docked. Most of the Departmental crafts are very old and require extensive repairs and overhauling every year so as to put them into use for shipping operations.

4. *Dredging and Surveying*(i) *Dredging Unit*

(Outlay Rs. 40 lakhs)

The proposed outlay of Rs. 40 lakhs for the plan period is intended for the establishment charges of the two dredging Units.

(ii) *Capital Dredging at Minor Ports*

(Outlay Rs. 125 lakhs)

The old pipe lines of the dredger CSD 'Meena' has to be replaced in a phased manner for keeping the dredger fully operational. Major and minor repairs to the various machinery, pipe lines etc., of the CSD 'Meena' have to be attended to periodically. A floating workshop equipped with essential machinery is envisaged for improving the efficiency of dredging. Purchase of vehicles is also necessary to meet the requirements of transportation. Provision is also made for the fuel, oil, replacement of ordinary equipments, major and minor repairs etc., for the dredgers and tugs. An outlay of Rs. 125 lakhs is provided for this purpose.

(iii) *Tugs for Surveying and Dredging Operations*

(Outlay Rs. 88 lakhs)

Purchase of a powerful tug for CSD Meena and a survey launch is contemplated under this scheme for which an outlay of Rs. 88 lakhs is provided. Administrative sanction has already been obtained for the purchase of the tug and launch.

5. *Other Items of Expenditure*(i) *Housing for Port Staff*

(Outlay Rs 10 lakhs)

The progress under this scheme is rather very poor. There is acute shortage of housing for the staff engaged in the development activities of the ports and the port management. An outlay of Rs. 10 lakhs is proposed for the staff quarters to be provided in the various ports of the State.

(ii) *Establishment of Central Workshop and Stores Organisation*

(Outlay Rs. 15 lakhs)

At present there are no workshops worth the name attached to any of the ports capable of undertaking the repair works and maintenance of the departmental floating crafts. Hence it is proposed to set up two workshops, one at Beypore and the other at Neendakara during the Plan period for which an outlay of Rs. 15 lakhs is provided in the Sixth Plan.

(iii) *Provision of Steel Cargo Barges at Neendakara*

(Outlay Rs. 8 lakhs)

It is proposed to procure three steel cargo barges for Neendakara Port. A provision of Rs. 8 lakhs is made in the Plan for this purpose.

- (iv) *Purchase of Refrigerated barge for Neendakara Port*  
(Outlay Rs. 2 lakhs)

The construction of the refrigerated barge costing Rs. 12.44 lakhs has been completed. A provision of Rs. 2 lakhs is made in the Plan for settling the balance payments.

- (v) *Lighterage Port at Neendakara*  
(Outlay Rs. 1.50 lakhs)

A provision of Rs. 1.50 lakhs is earmarked in the Plan for making payments to the works already completed.

- (vi) *Establishment of Vizhinjam/Kovalam Port*  
(Outlay Rs. 3.50 lakhs)

Kovalam/Vizhinjam has been declared as a port under the provision of the Indian Ports Act. Skeleton staff has already been appointed at the port. Preliminary arrangements will have to be made to commence shipping operations at the port. An outlay of Rs. 3.50 lakhs has been provided in the Sixth Plan for meeting the establishment charges of the port staff.

- (vii) *Search and Rescue Organisation*  
(Outlay Rs. 60 lakhs)

Kerala has a long coastline stretching for a length of about 560 kms. With the increased fishing activities consequent on the introduction of mechanised fishing vessels, the number of accidents causing loss of life and property has also increased alarmingly. In order to attend to the distress calls of the fishermen promptly it is proposed to set up a search and rescue organisation during the Sixth Plan period. Action has already been initiated to procure one rescue tug and one speed launch as a first step for setting up the organisation. An outlay of Rs. 60 lakhs is provided for the purpose.

#### *New Schemes*

- (viii) *Survey Unit for Pre-dredging and Post-dredging Surveys*  
(Outlay Rs. 3 lakhs)

Pre-dredging and post dredging surveys have to be done for every dredging work. Since the existing

small staff cannot be split up into smaller units and sent to different points, a separate survey unit for conducting the pre-dredging and post dredging survey is envisaged.

- (ix) *Extension of office Buildings*  
(Outlay Rs. 2 lakhs)

Since adequate space and amenities are not available in the two field unit offices of the Hydrographic Survey Wing at Quilon and Beypore it is proposed to construct extension wing and carry out certain alterations to the existing buildings.

- (x) *Purchase of Electronic Equipments for Surveying and Dredging Operations*  
(Outlay Rs. 12 lakhs)

It is proposed to purchase essential electronic equipments like trans-receiver set, radio positioning equipments etc., for dredging. A provision of Rs. 12 lakhs is made in the plan for purchasing the essential electronic equipments.

#### *B. Shipping*

- (i) *Kerala Institute of Nautical Studies Vizhinjam*  
(Outlay Rs. 5 lakhs)

The idea is to develop the maritime training centre established at Vizhinjam into a full fledged one during the Plan period. The first batch of the seamen has already completed the training course at the Institute. The training envisages free boarding and lodging. It is proposed to take up the construction of a hostel building for the trainees. A provision of Rs. 5 lakhs is made for the Institute.

- (ii) *Kerala State Maritime Development Corporation*  
(Outlay Rs. 20 lakhs)

The export-import traffic through the minor ports of Kerala has been showing a declining trend over the past few years. Hence it is proposed to establish a Maritime Corporation in the State with a view to reviving the coastal trade through the minor ports of Kerala. An outlay of Rs. 20 lakhs is provided in the Sixth Plan to meet the initial expenditure required in connection with the setting up of the Corporation.

TABLE 3.31  
Ports and Shipping—Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1.	Development of Minor Ports							
(i)	Vizhinjam Cargo Harbour	..	..	..	5.00	5.00	..	..
(ii)	Neendakara Cargo Harbour	56.92*	9.50	9.50	60.00	60.00	13.00	13.00
(iii)	Beypore Cargo Harbour	28.31	24.99	24.99	250.00	250.00	25.00	25.00
(iv)	Azhikkal Cargo Harbour	..	2.00	2.00	15.00	15.00	3.00	3.00

	1	2	3	4	5	6	7	8
2. <i>Investigation, planning, Engineering studies &amp; Survey</i>		3.86	4.50	4.50	20.00	..	5.00	..
3. <i>Construction and Repairs</i>								
(i) Purchase of Supplementary Equipments for Ports		0.08	5.00	5.00	35.00	35.00	5.00	5.00
(ii) Capital Repairs and Major Additions to Piers and Other Structures		..	5.00	5.00	25.00	25.00	5.00	5.00
(iii) Capital Repairs and Major Additions for Equipments and Floating Crafts		..	5.00	5.00	20.00	20.00	3.00	3.00
4. <i>Dredging and Surveying</i>								
(i) Dredging Unit		5.53	9.50	9.50	40.00	..	8.00	..
(ii) Capital Dredging at Minor Ports		28.89	20.00	50.44	125.00	125.00	20.00	20.00
(iii) Tugs for Surveying and Dredging Operations		..	5.00	5.00	88.00	88.00	5.00	5.00
5. <i>Other Items of Expenditure</i>								
(i) Housing for Port Staff		0.95	2.00	2.00	10.00	10.00	2.00	2.00
(ii) Establishment of Central Workshop and Stores Organisation		..	2.00	..	15.00	3.00	2.00	2.00
(iii) Provision of Steel Cargo Barges at Neendakara		..	1.00	..	8.00	8.00	..	..
(iv) Purchase of a Refrigerated Barge for Neendakara Port		2.41	..	..	2.00	2.00	..	..
(v) Lighterage Port at Neendakara		..	..	..	1.50	1.50	..	..
(vi) Establishment of Vizhinjam/ Kovalam Port		..	0.50	0.50	3.50	..	..	..
(vii) Seamen's Welfare—Search and Rescue Organisation in the Port Wing		..	..	..	60.00	60.00	..	..
<i>New Schemes</i>								
(viii) Survey Unit for Predredging and Post Dredging Surveys		..	..	..	3.00	..	..	..
(ix) Extension of Office Buildings		..	..	..	2.00	2.00	..	..
(x) Purchase of Electronic Equipments for Survey and Dredging Operations		..	..	..	12.00	12.00	..	..
Sub Total—Ports		127.07	95.99	126.43	800.00	721.50	96.00	83.00
B. <i>Shipping</i>								
(i) Training and Education (Kerala Institute of Nautical Studies, Vizhinjam)		2.16	3.00	3.00	5.00	..	3.00	..
(ii) Kerala State Maritime Development Corporation		..	1.00	1.00	20.00	20.00	1.00	1.00
Sub Total—Shipping		2.16	4.00	4.00	25.00	20.00	4.00	1.00
Total —Ports and Shipping		129.23**	100.00**	130.44**	825.00	741.50	100.00	84.00

\*Includes expenditure for Azhikkal Cargo Harbour also.

\*\*Includes expenditure for Dredging at Azhikode also.

## Roads and Bridges

Kerala has a total road length of 93,080 km. which works out to about 36 km. per 10,000 population. Though the road network is fairly developed many of the roads in the State were formed before the introduction of modern fast moving and heavy vehicles and hence they suffer from small width, acute bends, steep gradients etc. Moreover the dust free surface is only about 23 per cent of the total length as compared to 39 per cent at the national level. Most of the roads maintained by the Panchayats require considerable improvement in order to bring them to proper standards. There has been appreciable increase in the number of vehicles in the State. The volume of traffic and vehicular density in the existing roads also call for much higher investment on road development during the coming years. Attempts at improving the condition of the existing road network have already been initiated in the earlier plans.

The scheme-wise details and the outlays provided for the Sixth Plan period are given below:—

### 1. State Highways

(Outlay Rs. 900 lakhs)

There are 32 State Highways having a total length of 2028 km. For the development and improvement of these roads including the construction of bridges etc., the outlay proposed in the Sixth Plan is Rs. 900 lakhs. The cost of construction of parallel service roads to National Highways, land acquisition charges and the cost of construction of bye passes which come within the municipal limits will also be met from this provision.

### 2. Major and other District Roads

(Outlay Rs. 1,660 lakhs)

The State Public Works Department is maintaining nearly 5,544 km. of major district roads and 7,049 km. of other district roads. Most of these roads need widening and improvements as they do not conform to the Public Works Department standards. The outlay provided for the period 1980-85 is Rs. 1,660 lakhs for improving and developing these roads. This is inclusive of the outlay for the construction of bridges.

### 3. Rural Roads (Minimum Needs Programme)

(Outlay Rs. 1,300 lakhs)

The total length of rural roads including Panchayat roads in the State is about 70,000 km. But the State Public Works Department is maintaining only 1948 km. of village roads and 7,049 km. of other district roads. Most of these rural roads are very poorly maintained and the concerned panchayats are not able to maintain them satisfactorily due to paucity of funds. As most of the Panchayats have expressed their inability to maintain them properly it will be necessary for the P. W. D. to take over most of these roads. Of these, in about a length of 4,000 km. of village roads, there is already bus traffic. The approximate cost for the improvements of these roads at present will be about Rs. 1.50 lakhs per km. Thus the total requirement for the improvement of village roads comes to Rs. 60 crores. Only an amount of Rs. 13 crores is provided for rural roads in the Sixth Plan. With this provision

it is proposed to take over about 700 km. of existing rural roads under panchayat/other agencies and improve them into P. W. D. standards.

### 4. Machinery and Equipments

(Outlay Rs. 80 lakhs)

Most of the existing machinery items and equipments available with the State Public Works Department are very old requiring frequent repairs and periodic maintenance. This causes considerable delay in the execution of works. During the Sixth Plan period it is proposed to purchase equipments such as road rollers, road pavers, concrete mixers, tar boilers, bitumen conveyers etc., and maintain the equipments properly.

### 5. Planning, Research, Survey and Investigation

(Outlay Rs. 100 lakhs)

In order to ensure the best use of road construction materials, adoption of modern techniques in highway Engineering is indispensable. Hence the expansion of the Kerala Highway Research Institute by way of equipping the laboratories of the Institute adequately is important. The investigation and planning of roads and bridges are also very essential. The plan provision is for strengthening the Institute adequately.

### 6. Railway Safety Works

(Outlay Rs. 50 lakhs)

The provision made in the plan is for railway safety works such as construction of approach embankments to overbridges and the works connected with railway level crossings in State Highways, Major and other District Roads and village roads.

### 7. Other Schemes

#### (i) Hill Highway

(Outlay Rs. 400 lakhs)

There exists only meagre communication facilities in the forest regions of the State. By constructing a Hill Highway along the Western Ghats, the vast potential wealth available in our forests can be fully and efficiently tapped and the hill produce can be transported and marketed easily. Such a hill highway is proposed to be constructed by improving the existing roads providing missing links, improving the existing cross roads which branch off from the proposed hill highway and constructing new link roads in order to open up inaccessible forest areas. The total length of the proposed hill highway is 912 km. About a third of this length has to be formed as new roads, while the remaining two-thirds of the length either exists as a village road or as a forest track. The approximate cost of construction of the hill highway will be Rs. 105 crores. The work is proposed to be completed in ten years for which an Investigation Cell is necessary. World Bank assistance is also being sought for this project. An outlay of Rs. 400 lakhs is proposed for the highway for 1980-85 period.

#### (ii) Improvement of the Roads in the Three Cities of Trivandrum, Cochin and Calicut

(Outlay Rs. 160 lakhs)

The roads within the city limits of Trivandrum, Cochin and Calicut need considerable improvements in order to carry the present traffic. These roads

require not only strengthening but also widening, improvements of geometrics of the junctions etc. The outlay proposed for this is Rs. 160 lakhs.

(iii) *Improvement of Town and Municipal Roads*

(Outlay Rs. 80 lakhs)

The existing roads within town limits, in most of the towns in Kerala, need urgent improvement so as to regulate the traffic and reduce the number of accidents. The Sixth Five Year Plan envisages a phased programme for the improvements of roads in some of the major towns like Quilon, Alleppey, Kottayam, Idukki, Trichur, Palghat, Malappuram, Calicut and Cannanore. A provision of Rs. 80 lakhs is made for the purpose.

(iv) *Roads of Industrial Importance*

(Outlay Rs. 20 lakhs)

A sum of Rs. 20 lakhs is provided for improvement of the roads leading to industrial belts in the State.

(v) *Roads in Harijan Settlements and Tribal Areas*

(Outlay Rs. 660 lakhs)

The approximate total area of tribal habitation in the State is about 10,000 sq.km. While the average road length in the State is about 219 km. per 100 sq.km. of area in tribal areas it is less than 10 km per 100 sq. km. of area. The deficiency in communication facility in tribal areas and Scheduled Caste settlements is proposed to be made good by providing roads connecting tribal and Scheduled Caste settlements with schools, market places, hospitals, dispensaries etc. For the improvements of roads in tribal and Scheduled Caste settlements and for opening up new roads in the tribal areas and tribal and Scheduled Caste settlements an outlay of Rs. 660 lakhs is provided for the Sixth Five Year Plan 1980-85.

(vi) *Rubberisation of roads*

(Outlay Rs. 20 lakhs)

It has been found that rubberised bituminous road surfacings have a longer life and better riding surface under normal conditions. In tough conditions such as on gradients, bus stops and roundabouts and in tropical conditions they show special advantages. It is proposed to try out, on an experimental basis, the use of rubberised bitumen for surfacing 5 to 10 km. of road length in all district headquarters.

(vii) *Providing Access to Islands*

(Outlay Rs. 50 lakhs)

There are many islands along the Kerala coast which remain undeveloped due to lack of proper communication facilities. It is highly necessary to connect all these islands by constructing bridges wherever required. The total estimated requirement is over Rs. 25 crores. This programme will be taken up in a phased manner. The outlay of Rs. 50 lakhs proposed is for investigation and commencement of preliminary works during the Sixth Plan 1980-85.

(viii) *Improving Accident Prone Spots in the Highways and other Roads in the State*

(Outlay Rs. 40 lakhs)

There are many accident prone spots in the highways and other roads of the State. To improve the geometrics of the roads on such locations and create proper environment for safe driving an amount of Rs. 200 lakhs is required. The outlay earmarked for the period 1980-85 is Rs. 40 lakhs.

(ix) *Special Repairs and Maintenance of the Roads to Rectify Flood/Cyclone Damages*

(Outlay Rs. 70 lakhs)

Natural calamities by floods and cyclones seriously affect the condition of roads and bridges. To rectify such damages to the roads and bridges a provision of Rs. 70 lakhs is made.

(x) *Roads of Economic Importance*

(Outlay Rs. 20 lakhs)

The outlay provided is for taking up roads of economic importance. Matching central assistance will become available for this scheme. The scheme will be executed by the National Highway Wing of Kerala State.

(xi) *Roads in Backward Hilly Areas*

(Outlay Rs. 1000 lakhs)

The whole length of the eastern side of the State is hilly area. This hilly region still remains backward in many respects. It is proposed to construct new roads, improve and develop the existing village roads and other hill tracks etc., so as to connect them to the hill highway and major and other district roads. A provision of Rs. 1,000 lakhs is made for the Sixth Plan period (1980-85) for improving communication facilities in the backward hilly region of the State. It is expected that 400 km. of roads can be made newly constructed under this scheme.

TABLE 3.32  
Roads and Bridges—Scheme-wise Outlay

(Rs. in lakhs)

Name of Scheme/Project	1979-80 expenditure	1980-81		1980-85		1981-82	
		Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. State Highway	97.73	200.05	200.03	900.00	900.00	205.00	205.00
2. District and other Roads	283.64	221.24	226.71	1660.00	1660.00	228.00	228.00
3. Rural Roads (Minimum Needs Programme)	553.61†	435.89*	377.41	1300.00	1300.00	373.00	373.00



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4. Machinery and Equipment	..	..	..	80.00	80.00	..	..
5. Planning, Research, Survey and Investigation	25.91	25.00	25.00	100.00	50.00	25.00	13.00
6. Railway Safety Works	3.17	5.00	5.00	50.00	50.00	5.00	5.00
7. Other Schemes							
(i) Hill Highways	..	18.79	18.80	400.00	400.00	20.00	20.00
(ii) Improvement of Roads in Cities of Trivandrum, Cochin and Calicut	19.69	30.01	25.99	160.00	160.00	29.33	29.33
(iii) Improvement of Town and Municipal Roads	2.52	10.93	10.93	80.00	80.00	12.14	12.14
(iv) Roads of Industrial Importance	4.56	1.21	4.08	20.00	20.00	4.25	4.25
(v) Roads in Harijan Settlements and Tribal Areas	108.81	130.02	130.03	660.00	660.00	130.00	130.00
(vi) Rubberisation of Roads	0.83	8.00	8.38	20.00	20.00	9.71	9.71
(vii) Providing Access to Islands	..	7.29	8.06	50.00	50.00	8.50	8.50
(viii) Improving Accident prone spots in the Highways and other Roads in the State.	3.10	5.58	5.58	40.00	40.00	6.07	6.07
(ix) Special Repairs and Maintenance to Rectify Flood/Cyclone Damages	121.42	..	..	70.00	70.00	..	..
(x) Roads of Economic Importance—State share	..	1.00	1.00	10.00	10.00	2.00	2.00
(ix) Roads in Backward Hilly Areas	..	..	300.00	1000.00	1000.00	292.00	292.00
Total—Roads and Bridges	1224.99	1100.00	1347.00	6600.00	6550.00	1350.00	1338.00

\*Includes an amount of Rs. 172.02 lakhs for Village Roads Programme executed through Blocks

†Includes an amount of Rs. 50 lakhs for Village Roads Programme executed through Blbcks.

#### Road Transport

Kerala State Road Transport Corporation which is jointly owned by the State Government and the Southern Railway on behalf of the Government of India offers passenger transport services in the public sector. It caters to about a third of the total passenger traffic by road in the State. At the time of formation of the Corporation in March 1965 the undertaking was operating 901 buses along 553 routes. At the end of March 1980, the fleet strength of the Corporation rose to 2935 buses. During 1979-80, about 7064 lakh passengers made use of the services of the Corporation. The gross kilometres operated during this period was 2842 lakh kilometres.

During the sixth Five Year Plan period (1980-85) the Corporation proposes to invest Rs. 4104 lakhs on developmental activities. Apart from this, a sum of Rs. 137.5 lakhs has also to be raised during the period for repaying the debenture loan taken by the Corporation in 1969. Thus the total outlay on developmental activities including the loan repayment programmed for the plan period comes to Rs. 4241.5 lakhs. The source-wise details of outlay to be raised are indicated below:

	(Rs. lakhs)
(i) State Government's Capital contribution	2000.00
(ii) Capital contribution by Southern Railway	1039.00
(iii) Internal resources	290.00
(iv) Loans from Banks, LIC etc.	912.50
<b>Total</b>	<b>4241.50</b>

It is proposed to put on road 1445 buses during the Sixth Plan period. Out of this, 745 buses will be used for replacement of old buses and the balance 700 for operating additional schedules in the existing routes. Five hundred and thirtysix additional schedules are proposed to be operated with this 700 buses. Additional services will be introduced in existing routes only. No further nationalisation of road transport services in the State is contemplated. At the end of the Sixth Plan period, the Corporation will be having 1053 buses aged above 10 years. For the creation of necessary infrastructure facilities an outlay of Rs. 904.4 lakhs is proposed. The total outlay envisaged for developmental activities for 1980-85 is as follows:—

	(Rs. lakhs)
(1) Vehicles	3199.6
(2) Land	114.1
(3) Buildings and Workshop	693.5
(4) Plant and machinery	80.2
(5) Other items	16.6
<b>Total</b>	<b>4104.0</b>

TABLE 3.33  
Road Transport—Scheme-wise Outlay

(Rs. in lakhs)

Name of the Scheme/Project	1979-80 Expenditure	1980-81		1980-85		1981-82	
		Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Assistance to Transport Services	300.00	250.00	250.00	2000.00	2000.00	250.00@	250.00
Training and Research							
Training Institute							
Land & Buildings							
Acquisition of Fleet							
Workshop Facilities							
State contribution to K.S.R.T.C.							
<b>Total—Road Transport</b>	<b>300.00</b>	<b>250.00</b>	<b>250.00</b>	<b>2000.00</b>	<b>2000.00</b>	<b>250.00</b>	<b>250.00</b>

@Internal resources of the Kerala State Road Transport Corporation.

### Water Transport

Four agencies namely the State Public Works (Irrigation) Department, the State Water Transport Department, the Kerala Inland Navigation Corporation and the Kerala State Road Transport Corporation are responsible for the development of water transport in the State. The State Public Works Department undertakes repairs and construction of inland canals. The other three agencies deal with the traffic operations, goods as well as passenger. The integration of these agencies is necessary for efficiency and economy. As a first step the take over of the ferry services of the Road Transport Corporation at Cochin by the newly created Kerala Inland Navigation Corporation is envisaged.

The scheme-wise details and the outlays provided for the plan period are given below:—

#### 1. Assistance to Transport Services

##### Kerala Inland Navigation Corporation

Outlay Rs. 125 lakhs

The main objective of the Corporation with its headquarters at Ernakulam is to develop and promote cargo transport by waterways. Large quantities of industrial raw materials like sulphur and rock phosphate are required by the FACT from the major portion of the cargo to be transported in the Cochin area. This cargo can be moved through navigation canals like the Champakara canal. For the development of intra district movement of bulk cargo, the Corporation programmes to acquire four 250-300 tonne power barges. Small barges are also proposed to be constructed for the movement of foodgrains, fuel oil, steel sections, etc. from Cochin to various district headquarters and vice-versa. An outlay of Rs. 42.58 lakhs is proposed for the development of cargo transport.

The Corporation has already commenced its business activities with the introduction of two services in the Cochin area for passenger transport. It is proposed to take over the ferry services now conducted by the K.S.R.T.C. at Cochin. An outlay of Rs. 41 lakhs is envisaged for payment to K.S.R.T.C. Two large sized boats will be constructed for augmentation of services in the routes now operated by the Road Transport Corporation for which a provision of Rs. 10 lakhs is made. For the development of passenger transport three medium sized boats will be acquired during the plan period. One inspection boat is also proposed to be constructed. Provision is also made for construction of jetties. A total outlay of Rs. 77.26 lakhs is envisaged for the development of passenger transport.

Welfare projects in aid of Thoni Thozhilalies are also envisaged in the plan. Five steel dump barges of 50 tonne capacity will be constructed for supplying to co-operative societies of Thoni Thozhilalies on reasonable rent for which an outlay of Rs. 20 lakhs is provided. Construction of a workshop with the required wood working machinery and a slipway is planned at Thevara. The outlay for the welfare projects comes to Rs. 33.20 lakhs.

The total cost of the schemes implemented by the Kerala Inland Navigation Corporation is estimated at Rs. 153.04 lakhs. The State sector outlay is Rs. 125 lakhs for giving assistance to the Corporation by way of share capital contribution. The balance provision of Rs. 28.04 lakhs will be met by way of loans from banks and internal resources.

#### 2. Land and Buildings—Terminal Facilities for State Water Transport Department

(Outlay Rs. 10 lakhs)

The various jetty offices now used by the State Water Transport Department are not owned by the

Department. Some of them are owned by the P.W.D. (Irrigation) Department. The transfer of these buildings to the State Water Transport Department is being considered by the Government. A provision of Rs. 10 lakhs is made in the plan for the acquisition of jetties and for providing proper terminal facilities at Alleppey, Kottayam, Vaikom, Changanacherry, Muhamma, Quilon and Cochin etc. now owned by the Public Works Department.

### 3. Acquisition of Fleet and Augmentation of Ferry Services

(Outlay Rs. 50 lakhs)

The State Water Transport Department has already initiated a scheme for processing 20 new boats for the augmentation of the ferry services of the Department. Of this, 4 boats have already been constructed. The construction of 4 boats is nearing completion and another 6 boats are under construction. The remaining 6 boats are also proposed to be constructed immediately. In addition to these boats, 20 new boats were also originally proposed to be constructed during this plan period to replace the old boats and to have one spare boat for each station. For the speedy conveyance of passengers three or four fibre glass boats are also proposed to be acquired during the plan period. A total provision of Rs. 50 lakhs is made in the plan for the augmentation of passenger services of the S.W.T. Department.

### 4. Workshop Facilities

(Outlay Rs. 5 lakhs)

The State Water Transport Department owns a workshop at Alleppey, which requires considerable improvement. Besides, mini workshops are proposed by the Department at Quilon, Kottayam, Changanacherry and Ernakulam.

### 5. Inland Canal Schemes (Public Works Department)

Inland water transport schemes executed by the Public Works Department falls under two categories, viz., Central Sector schemes and State Sector schemes. Schemes taken up under Central Sector are with central assistance in the form of loans. Till 1979-80 the mode of assistance was by 100 per cent loan. From the financial year 1980-81 onwards the pattern has been changed to 50 per cent central assistance by way of loan and the remaining from state funds. Major schemes for the improvement and construction of the main inland water transport canal systems are taken up under this sector with the prior approval of Government of India. Construction of foot-bridges across existing canals, petty improvements to the existing canals by providing side protection, desilting shallow portions to facilitate easy plying of country and motor boats, improvements to cross canals etc. are taken up under state sector with state funds.

#### (a) Central Sector Schemes—State Share

(Outlay Rs. 200 lakhs)

There are 37 approved schemes under Central Sector. Out of this, 28 schemes had been completed. Out of the remaining nine schemes, seven are spill

over schemes from Third Plan and two are Fourth Plan schemes. One of the major Third Plan schemes not yet completed is 'Construction of Badagra - Mahe Canal'. As Government of India have categorically denied central assistance for the Third Plan schemes, these 7 spill over schemes from Third Plan were transferred to State sector from 1977-78 onwards. This leaves behind only two spill over Fourth Plan schemes to be completed under central sector. They are the Champakara Canal and the Neendakara-Cheriazheekkal canal.

#### (i) Champakara Canal

The proposal is to connect up Cochin Port with the Industrial Region at Ambalamugal by an improved waterway. The total length of the waterway will be 20 km. The waterway will be 37 m. wide in the first stage and later on it will be widened to 55 m. as a second stage. The whole length will be deepened to give minimum draft of 2.5 m. below L. W. L. Wherever necessary the sides will be protected to avoid erosion and slipping of banks. Thus the improved waterway will be fit for commercial motorised heavy transport vessels throughout the year. This will not only facilitate the transport of the huge quantities of raw materials and finished products of the industrial units of Cochin Fertiliser, phase II, but will also help in the growth of new industries that are likely to come up in the region in the near future.

The original cost estimate of the scheme was only Rs. 112.50 lakhs. Subsequently due to the increase in the cost of construction of bridges and dredging work and also due to the revision of schedule of rates in 1974 and 1976 the cost of the scheme went up substantially. This was revised to Rs. 243.00 lakhs. The revised project report is being considered by the Government of India. The estimate amount will increase further due to revision of schedule in 1978 and 1980. The revised amount will be of the order of Rs. 260 lakhs. About Rs. 200 lakhs had been spent on the work proper till the end of 1979-80. Ninety-six per cent of land acquisition, and cent per cent of railway work and raising of G.R.L. pipe lines have been completed. Dredging work is in progress.

#### (ii) Neendakara-Cheriazheekkal Canal

The proposal is to improve the portion of the West Coast Canal from Neendakara Port to Cheriyazheekkal to facilitate the plying of large mechanised vessels of deeper drafts. The waterway comprises of 4 km. of artificial canals and about 10 km. of backwaters. The proposal is to widen the canal portion to minimum width of 23 km. and a minimum depth of 2.5 m. at L.W.L. The lake portion will be dredged for a width of 30 m. Side protection is also proposed either with random rubble or with pile and state to suit each reach. The original approved cost of the scheme is Rs. 41.50 lakhs while the revised estimate amounts to Rs. 48 lakhs. This is expected to further increase to Rs. 60 lakhs on account of revision of schedule of rates. Forty-four per cent of side protection in one reach and sixty-six per cent in another reach and jetty works have been completed. The expenditure on the scheme till the end of 1979-80 was about Rs. 21 lakhs.

Two more new schemes, viz (a) improvements to Cochin Udyogamandal Canal (estimated cost Rs. 42.77 lakhs) and (b) improvements to West Coast Canal Cochin to Quilon section (estimated cost Rs. 258.56 lakhs) which were included in the Fifth Plan programme, but not started yet because the project reports of these schemes have not been cleared by Government of India yet, are also proposed for 1980-81. Clearance to these schemes are expected shortly. The budget provision for these two schemes are Rs. 24 lakhs and Rs. 3.98 lakhs respectively. The estimate amount of these two schemes will have to be revised on account of the revision of schedule of rates. Their estimate would now be about Rs. 60 lakhs and Rs. 340 lakhs respectively.

The programme for 1980-85 period is to complete the first three schemes mentioned below. The last scheme will spill over to the Seventh Plan. The following workwar distribution of funds is proposed:

1. Chambakara Canal	Rs. 60.00 lakhs
2. Neendakara-Cheria-zheekal Canal	Rs. 40.00 lakhs
3. Udyogamandal Canal	Rs. 60.00 lakhs
4. Improvements to West Coast Canal Quilon-Cochin Section	Rs. 240.00 lakhs
<b>Total</b>	<b>Rs. 400.00 lakhs</b>

The State share of the Outlay for these canal schemes is Rs. 200 lakhs. The balance of Rs. 200.00 lakhs is to be provided by the Centre.

(b) State Sector Schemes

(Outlay Rs. 185 lakhs)

Under state sector, construction of foot bridges, petty improvements to the existing canals by providing side protection, desilting shallow portions to facilitate easy plying of country and motor boats etc., are taken up. From 1977-78 onwards, the programme under this sector includes completion of the Third Plan Schemes carried out initially under central sector. The major scheme under this sector is "Excavation of Badagara—Mahe Canal". This scheme could not be completed so far due to the technical difficulties and increased cost. It is estimated that an amount of Rs. 350 lakhs more will be required for completing this scheme. Apart from this scheme, 40 more schemes in progress spilled over to 1980-81. The outlay for completing these schemes alone is about Rs. 100 lakhs. Some new schemes are also to be programmed during the 1980-85 plan period for which an outlay of Rs. 85 lakhs is provided. Since the financial position of the State does not permit taking up and completion of the Badagara Mahe Canal scheme with state funds assistance to the tune of Rs. 350 lakhs for this scheme has to be requested from Government of India separately under central sector. An outlay of Rs. 185 lakhs is therefore provided for State Sector Canal schemes in the Plan 1980-85.

TABLE 3.34

Water Transport—Scheme-wise Outlay

(Rs. in lakhs)

Sl.No.	Name of Scheme/Project	1979-80 Expenditure	1980		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Assistance to Transport Services (KINCO)	..	10.00	10.00	125.00	125.00	20.00	20.00
2.	Land and Buildings and Terminal Facilities—SWTD	..	3.00	3.00	10.00	10.00	3.00	3.00
3.	Acquisition of Fleet and Augmentation of Ferry Services—SWTD	3.60	9.00	9.00	50.00	50.00	10.00	10.00
4.	Workshop Facilities—SWTD	0.88	1.00	1.00	5.00	5.00	1.00	1.00
5.	Inland Canal Scheme P.W.D.							
(a)	Central Sector—State Share	7.31	30.00	15.00	200.00	200.00	25.00	25.00
(b)	State Sector (including Training and Research)	40.52	27.00	30.00*	185.00	185.00	21.00	20.00
	<b>Total—Water Transport</b>	<b>52.31</b>	<b>80.00</b>	<b>68.00</b>	<b>575.00</b>	<b>575.00</b>	<b>80.00</b>	<b>79.00</b>

\*Includes an amount of Rs. 7 lakhs for Dredger Organisation.

**Tourism**

The strategy for tourism development in the Sixth Plan revolves round the concept of travel circuits connecting important tourist centres catering to varied tourist interests. The main object

of the Plan is to offer a package of facilities to tourists of various interests both domestic and foreign whether they are interested in beach tourism, wild life, culture or business travel. This concept envisages the flow of tourist traffic along predetermined centres of tourist interest. Thus two primary travel circuits

are proposed to be developed during the Sixth Plan period as follows:—

- (i) Trivandrum—Veli-Kovalam—Ponmudi Varkala—Quilon—Aranmula—Kottayam—Kumarakom—Thekkady—Munnar—Cochin
- (ii) Cochin—Trichur—Guruvayur—Cheruthuruthi—Malampuzha—Kottakkal—Kozhikode—Sultan Battery—Ezhimalai

Apart from primary circuits, secondary circuits are also being developed connecting important tourist centres scattered all over Kerala.

The State sector outlay proposed for Tourism Development for the Sixth Plan period is Rs. 675 lakhs. For the development of primary level circuits the Central Government's contribution for the development of tourist infrastructure has been contemplated. For the Five Star Hotel project at Trivandrum, Private sector investment would be forthcoming adequately. Institutional finance will also be necessary for implementing the tourist plan.

Scheme-wise description of various items of development under tourism in the State sector is indicated below:—

#### 1. *Direction and administration*

(Outlay Rs. 15 lakhs)

The State Department of tourism requires strengthening at various levels to enable it to properly discharge the functions connected with developmental activities for the promotion of tourism in the State. The provision of Rs. 15 lakhs is for meeting the expenditure on additional staff required for the better functioning of the tourist organisation in the State and for other administrative expenditure.

#### 2. *Tourist Transport Services*

(Outlay Rs. 25 lakhs)

The Kerala Tourism Development Corporation is already conducting transport services connecting important tourist centres like Kovalam, Thekkady, Kanyakumari, etc. The scheme is for strengthening the transport division of the Corporation by introducing luxury coaches, boats, cars, vans, etc. for better transportation of the tourists visiting the State. The State sector outlay provided for this scheme is Rs. 25 lakhs.

#### 3. *Tourist Accommodation*

(Outlay Rs. 390 lakhs)

The accommodation facilities for tourists available in the State are quite inadequate. Better accommodation facilities for both foreign and domestic tourists have to be provided. The schemes now being

implemented by the Kerala Tourism Development Corporation include a middle class hotel project at Thampanoor (Rs. 95 lakhs) and a Three Star Hotel Complex at Cochin (Rs. 170 lakhs). In addition, new projects for providing better accommodation facilities by the Corporation at Kumarakom (Rs. 50 lakhs) and Thekkady (Rs. 25 lakhs) are envisaged in the Plan. Other important projects to be taken up in the plan period are Kovalam project (Rs. 15 lakhs), Veli (Rs. 25 lakhs) and Ponmudi (Rs. 10 lakhs). A total amount of Rs. 390 lakhs is provided for these projects in the State sector for tourist accommodation.

#### 4. *Tourist Information and Publicity*

(Outlay Rs. 75 lakhs)

Adequate publicity is required for the development of tourism. In spite of the overall increase in tourist traffic in the country, Kerala's share of tourist traffic is meagre. This is mainly due to inadequate and ineffective publicity. It is therefore proposed to bring out films depicting places of tourist attraction in the State, attractive and informative tourist literature etc. Participation in important industrial fairs and exhibitions, display of advertisements in leading journals and newspapers, organising tours of travel writers, press representatives, etc. Production of tourist information booklets, folders and picture post cards are also envisaged. It is proposed to open tourist information centres at Trivandrum, Quilon, Ernakulam, Calicut and New Delhi Railway Stations and tourist reception centres. Promotion of local and cultural programmes and tourist week celebrations are also planned. A total provision of Rs. 75 lakhs is provided for this scheme.

#### 5. *Tourist Centres*

(Outlay Rs. 145 lakhs)

Development of important tourist centres is also contemplated besides the development of the proposed primary circuits. Important tourist centres such as Varkala (Rs. 20 lakhs), Trichur/Guruvayoor (Rs. 15 lakhs), Cannanore (Rs. 50 lakhs), Ezhimalai (Rs. 10 lakhs), Idukki (Rs. 20 lakhs), Alleppey (Rs. 15 lakhs), Attingal (Rs. 5 lakhs) and Kozhikode (Rs. 10 lakhs) are proposed to be developed in the plan period 1980-1985. An amount of Rs. 145 lakhs is earmarked for the development of tourist centres.

#### 6. *Other Schemes*

(Outlay Rs. 25 lakhs)

Other schemes envisaged in the plan for the development of tourism in the State include development of pilgrim centres, development of tourist spots, training of staff and guides, backwater beautification, construction of staff quarters, Master Plan and other miscellaneous items. An outlay of Rs. 25 lakhs is provided for other schemes and works to be taken up in the Sixth Plan period 1980-85.

TABLE 3.35

## Tourism—Scheme-wise Outlay

(Rs. in lakhs)

Sl.No.	Name of Scheme	1979-80 Accounts	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Direction and Administration	0.55	2.00	2.00	15.00	..	3.00	..
2.	Tourist Transport Services	..	..	..	25.00	25.00	..	..
3.	Tourist Accommodation (including K.T.D.C. Projects)	75.89	65.50	65.50	390.00	367.00	105.00	90.00
4.	Tourist Information and Publicity	2.91	4.00	14.50	75.00	..	4.00	..
5.	Tourist Centres	..	..	..	145.00	145.00	7.00	7.00
6.	Other Schemes	11.14	23.50	17.36	25.00	15.00	6.00	5.05
Total—Tourism		90.49	95.00	99.36	675.00	552.00	125.00	102.05

### 3.6 Social and Community Services

In Kerala, the educational sector has recorded, over the years, a phenomenal growth. There has been steady growth in the number of educational institutions, enrolment and teachers during the past two decades. At present, there are 1680 High Schools, 2739 Upper Primary Schools and 6970 Lower Primary Schools with the total strength of 55.8 lakhs of students and 1.76 lakhs of teachers. Kerala is ahead of other States in India in respect of educational advancement. While the percentage of literacy in India increased from 24 to 29 during 1961-71, it increased from 48 to 60 in Kerala. About 38 per cent of the State budget funds is spent on the maintenance and development of education in Kerala while the all India percentage is only 23. A short description of the various schemes proposed to be taken up under education in the Sixth Plan is given below:

#### I. Elementary Education

##### 1. Work Experience Programme in Primary Schools

(Outlay Rs. 30 lakhs)

Work experience is a regular curricular item in all primary schools. The programme is intended to develop basic attitudes towards work and basic skills in the children. Some programmes were introduced during the last plan period. The amount proposed is to meet the expenditure of salary of instructors, construction of work-sheds, purchase of furniture, equipments, raw materials etc. and for giving necessary inservice training to teachers and also for other items of expenditure connected with the implementation of the scheme.

##### 2. Improvement of Science Education in Primary Schools

(Outlay Rs. 30 lakhs)

Teaching of science in primary stage is very important because a scientific attitude among the children has to be developed in the initial stage of

schooling itself. The provision is for supplying necessary equipment in primary schools and for programmes to improve the quality of teachers through inservice programmes and other items of expenditure related to this programme.

##### 3. UNICEF Assisted Programmes

(Outlay Rs. 2.50 lakhs)

The two schemes sponsored under the UNICEF Assisted Programme are Curriculum Renewal Project and Comprehensive Access to Primary Education. Though UNICEF will be meeting the whole expenditure initial expenses are to be borne by the State. The provision is to meet the initial expenses of the Project. This may also accommodate further schemes of UNICEF Assistance.

##### 4. Introduction of Socially useful Productive Work

(Outlay Rs. 15 lakhs)

Under this scheme socially useful productive work is to be introduced in primary schools as part of the work experience programme. It is proposed to provide equipments, raw materials etc. to the Government primary schools for the introduction of the programme and also to give inservice training to the teachers involved in the programme. It is also proposed to take up new items. The provision is also for meeting the expenditure in connection with the implementation of these new programmes.

#### Tribal Welfare

##### 1. Opening of Primary Schools in Tribal Sub Plan Area

(Outlay Rs. 10 lakhs)

The amount proposed is for the payment of salary of teachers appointed in the 21 Lower Primary Schools already started in the Tribal Sub Plan area.

2. *Supply of Furniture to New Schools in Tribal Sub Plan Area*

(Outlay Rs. 10 lakhs)

The scheme is meant for the purchase of furniture to the new schools started in the Tribal Sub Plan area.

3. *Construction of School Buildings in Tribal Sub Plan Area*

(Outlay Rs. 45 lakhs)

The new primary schools started in the Tribal Sub Plan area are to be provided with adequate accommodation. The provision set apart is for meeting the expenditure towards the construction of buildings.

4. *Construction of Staff Quarters in the Tribal Sub Plan Area*

(Outlay Rs. 25 lakhs)

In the tribal pockets, there are no accommodation facilities for the teachers to stay, with the result that the teachers are reluctant to work in such places. In order to overcome this difficulty, it is proposed to construct staff quarters attached to the new primary schools started in the Tribal Sub Plan area.

*Minimum Needs Programme*

1. *Additional Enrolment—Departmental L. P. Schools—Teacher Cost*

(Outlay Rs. 100 lakhs)

The outlay proposed is to meet the expenditure towards salary of teachers to be appointed in the new Departmental L. P. Schools and new divisions in the existing Departmental L. P. Schools.

2. *Opening of New Departmental L. P. Schools—Buildings*

(Outlay Rs. 150 lakhs)

The scheme envisages construction of class rooms as a result of additional enrolment in the Departmental L. P. Schools and construction of buildings for the newly sanctioned Departmental L. P. Schools.

3. *Supply of Furniture to New Departmental L. P. Schools*

(Outlay Rs. 35 lakhs)

The provision is for the supply of furniture to new Departmental L. P. Schools and additional class divisions in the existing Departmental L. P. Schools.

4. *Additional Enrolment—Departmental U. P. Schools*

(Outlay Rs. 100 lakhs)

The provision is for meeting the salary cost of teaching and non-teaching staff (except Hindi Teachers) in the new Departmental U. P. Schools and new divisions in the existing Departmental U. P. Schools.

5. *Opening of New Departmental U. P. Schools—Buildings*

(Outlay Rs. 120 lakhs)

The provision is for the construction of class rooms as a result of additional enrolment in the Departmental U. P. Schools and for providing buildings for the newly sanctioned Departmental U. P. Schools.

6. *Supply of Furniture to New Departmental U. P. Schools*

(Outlay Rs. 35 lakhs)

The provision is for the supply of furniture to the new Departmental U. P. Schools and new divisions in the existing Departmental U. P. Schools.

7. *Supply of Furniture to existing Departmental L. P. Schools*

(Outlay Rs. 45 lakhs)

The amount proposed is to meet the expenditure towards supply of furniture to existing Departmental L. P. Schools.

8. *Supply of Furniture to Existing Departmental U. P. Schools*

(Outlay Rs. 45 lakhs)

The provision proposed is for the supply of furniture in existing Departmental U. P. Schools.

9. *Improvement of Facilities in Primary Schools*

(Outlay Rs. 35 lakhs)

The scheme is intended to improve the physical facilities in Primary Schools by providing necessary equipments, teaching aids, and other items required in Primary Schools. It is also proposed to entertain construction works which become necessary to improve the facilities in Primary Schools.

10. *Strengthening of Primary Schools—Improvement of Selected Primary Schools*

(Outlay Rs. 75 lakhs)

The duties and responsibilities of the Headmasters of primary schools have increased to a considerable extent, leaving little time for academic supervision of the school. The provision is to meet the expenditure of one additional teacher to be appointed in Government primary schools having heavy strength.

11. *Replacement and Addition of Departmental Schools—Buildings*

(Outlay Rs. 100 lakhs)

Some of the primary school buildings require immediate renovation or replacement. The provision is for this purpose.

12. *Minimum Site and Building for Primary Schools run in Rented Buildings*

(Outlay Rs. 100 lakhs)

Some of the primary schools are run in rented buildings. The outlay proposed is for providing minimum site and building for such schools.

13. *Appointment of Primary School Teachers from among Scheduled Castes/Scheduled Tribes*

(Outlay Rs. 10 lakhs)

The outlay is for meeting the salary cost of teachers belonging to Scheduled Castes/Scheduled Tribes, appointed against the additional posts of L. P. Teachers created.

14. *Additional Enrolment — Non- Government L. P. Schools—Teacher Cost*

(Outlay Rs. 165 lakhs)

The amount proposed is to meet the salary cost of teachers to be appointed in new aided L. P. Schools and new divisions of the existing aided L. P. Schools.

15. *Additional Enrolment — Non-Government U. P. Schools—Teacher Cost*

(Outlay Rs. 175 lakhs)

The outlay is for the payment of salary of teaching and non-teaching staff (except Hindi Teachers) to be appointed in new aided U. P. Schools and new divisions of the existing aided U. P. Schools.

*Other Programmes*

1. *Removal of Backwardness including Education of Girls*

(Outlay Rs. 15 lakhs)

In order to achieve universalisation of primary education and reduction of drop-outs, it is necessary to identify backward areas where enrolment ratios are poor, especially among girls. During the previous Plan period, 35 such pockets were identified and the programme for stepping up enrolment particularly for girls and also to reduce wastage at the primary level was introduced. More centres will have to be identified for extending the programme during the Sixth Plan period. The provision is to meet the salary cost of Education Extension Officers working in these pockets and other expenditure connected with the programme.

2. *Institute of Primary Education*

(Outlay Rs. 20 lakhs)

It is proposed to strengthen the academic and administrative wings of the Institute of Primary Education suitably. The amount proposed is to meet the salary cost of additional staff to be appointed and for the development programmes connected with primary education.

3. *Health Education Programme*

(Outlay Rs. 3 lakhs)

The scheme envisages the supply of first aid box to primary schools and short term training to primary school teachers in health, hygiene and first aid.

4. *Pre-Primary Education*

(Outlay Rs. 15 lakhs)

It is considered necessary to pay greater attention to the pre-primary education which is now neglected. At present voluntary agencies are running a number of pre-primary centres. But there is lack of co-ordination in this sector. There is also lack of facilities for training teachers to work in Pre-primary schools. The provision is for starting a pre-primary Teachers' Training Institute and for meeting the expenditure connected with the running of this Institute. It is also proposed to start a Model Nursery School attached to the Pre-Primary Teachers' Training Institute. The provision is also meant for implementation of the programmes for strengthening pre-primary sector and for improving the quality of pre-primary education in the State. The provision includes the cost of construction of buildings for the Pre-primary Teachers' Training Institute and the Model Nursery School.

5. *N.C.E.R.T. Assisted Programmes—State's Share*

(Outlay Rs. 8 lakhs)

It is proposed to provide inservice education and to organise programmes of general nature like symposia, panel discussions, camps etc. for professional teachers. The expenditure is to be met by the N. C. E. R. T. and State Government on a 50:50 sharing basis. The provision proposed in the Plan is to cover the scheme in the existing centres of continuing education and also to start additional units.

6. *Experimental Project for Non-formal Education*

(Outlay Rs. 50 lakhs)

Non-formal education has to be considered for children of the age-group 6-14 who have either dropped out or have never had primary education. In Kerala, the number of children never enrolled in schools in the age-group 6-11 constitutes a negligible portion. The children remaining outside schools are mostly drop-outs. Estimates have revealed that the drop-out rates may be about 10 per cent in the case of lower primary stage and 9 per cent in the case of upper primary stage. These drop-outs are working children belonging to educationally backward and culturally deprived sections who are unable to attend the formal school on a full-time basis as they have to work and earn to supplement their family income. Four hundred and twenty-five education centres for imparting non-formal education have been opened in 1979-80 attached to primary schools. These centres have been started on an experimental measure with a view to bringing the entire group of drop outs under the programme.

## II. Secondary Education

1. *Additional Enrolment—Departmental Secondary Schools—Teacher Cost*

(Outlay Rs. 180 lakhs)

The provision made in the Plan is to meet the salary cost of teaching and non-teaching staff (except Hindi teachers) to be appointed in new Departmental High Schools and new divisions of the existing Departmental High Schools as a result of additional enrolment.



2. *Building and Equipments to new Departmental High Schools including Supply of Soil Testing Equipment to Secondary Schools*

(Outlay Rs. 150 lakhs)

The outlay proposed is for the construction of class rooms and for providing equipments and furniture to new Departmental High Schools and to new class divisions in the existing Departmental High Schools and also for constructing text book depots at District Headquarters and a Central Depot at Thrikkakkara.

3. *Supply of Furniture to Existing Departmental Secondary Schools*

(Outlay Rs. 40 lakhs)

In the existing Departmental High Schools additional class divisions will become necessary due to additional enrolment of pupils. The provision under the scheme is intended to supply furniture to such High Schools.

4. *Construction of New Buildings in the place of Temporary Schools*

(Outlay Rs. 90 lakhs)

A number of High School classes are now held in temporary sheds. They are not suitable for conducting classes during heavy rains. Also they require frequent maintenance. The provision is for constructing permanent buildings replacing these temporary sheds.

5. *Introduction of Vocational Courses in Selected Secondary Schools Upgrading them as Higher Secondary Schools*

(Outlay Rs. 50 lakhs)

The ultimate objective of vocationalisation should be to strengthen the technical content of the educational system in the State in a manner that will enable matriculates/post matriculates enter employment in the different occupations and sectors of the economy. A variety of non-academic courses of technical education and training which are employment oriented and directly useful to the students should be made available. The choice of trade should be made in conformity with the availability of industries or employment opportunities in a particular area. It is proposed to introduce the scheme at the higher secondary level in a phased manner. The provision is for meeting the expenditure towards the salary of staff and supply of equipments and other items of expenditure connected with the programme.

6. *Scholarships*

(Outlay Rs. 5 lakhs)

(i) *Creation of Scholarship Unit and Enhancement of Scholarships*

The amount proposed is to create a Scholarship Unit in the Directorate and to award scholarships to students at the secondary stage.

(ii) *Award of Scholarships to Meritorious Scheduled Caste/Scheduled Tribe Students in Upper Primary/Secondary Schools*

(Outlay Rs. 18 lakhs)

The provision is for the award of scholarship for the benefit of Scheduled Caste/Scheduled Tribe students in Upper Primary/High Schools.

7. *Assistance to Non-Government Secondary Schools—Additional Enrolment—Teacher Cost*

(Outlay Rs. 235 lakhs)

The provision is to meet the salary cost of teaching and non-teaching staff (except Hindi Teachers) to be appointed in aided secondary schools and additional divisions in the existing aided secondary schools.

*Quality Improvement Programme*

1. *Improvement of Science Education in Secondary Schools*

(Outlay Rs. 25 lakhs)

The provision is for the improvement of Science education in High Schools. It is proposed to conduct training programmes for the teachers, to conduct workshops, seminars, and discussion of teachers for the preparation of instructional materials, manuals etc. Programmes are also envisaged to activate the science clubs in schools and to make the pupils interested in science through suitable programmes like visits to places of scientific importance, science fairs, quiz etc.

2. *Work-Oriented Education in Secondary Schools*

(Outlay Rs. 25 lakhs)

The programme of work-oriented education is at present undertaken in 173 secondary schools. The items of work experience introduced are garment making, home science, tailoring, printing, agriculture, spinning, electronics etc. The provision is for continuing the 'Work Experience Programme' in secondary schools and also for payment of salary of home science graduate teachers appointed under 'Half a Million Job Programme'.

3. *Vocational Guidance Programme*

(Outlay Rs. 5 lakhs)

There is a trained Career Master in many of the secondary schools in the State, whose main function is to implement a programme of occupational information service to high school students. The programme of information service is found to be very useful to high school students. The plan provision is for arranging this vocational guidance programme in secondary schools and for production of cumulative records.

4. *Improvement of Library and Laboratory Facilities in Departmental Secondary Schools*

(Outlay Rs. 25 lakhs)

Many of the high schools, including those opened during the Fifth Plan period, lack laboratory and library facilities. The introduction of new syllabus has necessitated the provision of more library and laboratory facilities. The plan outlay is for providing library and laboratory facilities to high schools in a phased manner.

5. *State Institute of Education*

(Outlay Rs. 35 lakhs)

The State Institute of Education is the academic development wing of the Education Department catering to the needs of primary, secondary and training schools in the matter of curriculum syllabus and inservice training. In view of the increasing number of teachers and the backlog of a large number who have not undergone a refresher course, it is necessary to strengthen the Institute and its academic activities. The outlay proposed is for the strengthening of the academic and administrative wings of the Institute, conduct of seminars and inservice programmes and for construction of a hostel for the Institute.

6. *Institute of Science*

(Outlay Rs. 10 lakhs)

This is an important wing of the State Institute of Education. The Institute of Science is responsible for the qualitative improvement of the education of science in the State. The provision is for strengthening the Institute and also for the conduct of the qualitative improvement of the programmes of the Institute. Expenditure for conducting suitable inservice courses for science teachers and arrangements for the conduct of State Level Science Fair are to be met from this provision.

7. *Examination Reforms*

(Outlay Rs. 3 lakhs)

To make examination objective based, organisation of workshops and training for paper setters for public examinations are necessary. Necessary provision has been made in the Plan for this purpose.

8. *Revision of Curriculum*

(Outlay Rs. 3 lakhs)

Periodical revision of curriculum and text books is inevitable. Based on the experience of teachers and evaluation study, periodical revision of curriculum will have to be undertaken. The plan provision made is for the purpose.

9. *School Complex Programme*

(Outlay Rs. 5 lakhs)

For breaking the isolation existing between primary and secondary schools and for cross utilisation of resources available at the two levels of institutions, school complexes are recommended as an effective

measure. School complexes were started in some schools during the previous Plan periods. The Sixth Plan proposes to introduce this scheme in more schools. The provision is to meet the contingent expenses for discussions and meetings connected with this scheme.

10. *Strengthening of Staff of Large Secondary Schools*

(Outlay Rs. 15 lakhs)

Increasing duties and responsibilities of the headmasters of secondary schools, leave very little time for them for academic supervision in the schools. The provision is to meet the cost of one additional teacher each to be appointed in large secondary schools to relieve the headmaster of his routine work.

*Other Programmes*

1. *Library Movement*

(Outlay Rs. 8 lakhs)

The plan provision is for the payment of contribution to the Raja Ram Mohan Roy Library Foundation and for meeting the expenses of the State Planning Committee of the Foundation.

2. *Popularisation of Science Literature*

(Outlay Rs. 2.50 lakhs)

The provision is for implementing schemes for popularisation of science literature among students. It is proposed to bring out suitable publications useful to students to make them interested in science. It is also proposed to give assistance to voluntary agencies doing useful work for popularising science among students.

3. *Coaching Classes for Scheduled Caste/Scheduled Tribe Students in S.S.L.C. Classes*

(Outlay Rs. 12 lakhs)

The amount proposed in the Plan is to meet the expenditure connected with the special coaching classes to Scheduled Caste/Scheduled Tribe students for the S.S.L.C. Examination.

4. *Formation of Society for School Promotion and Development*

(Outlay Rs. 5 lakhs)

The scheme envisages the formation of a society for school promotion and development. This society will raise resources from financial institutions for the construction of school buildings on the lines of the Health Research and Welfare Society which is undertaking construction of paywards attached to hospitals. The profits earned through the sale of text books and note books will also be utilised for the school construction programme.

5. *Population Education in Secondary Schools State's Share*

(Outlay Rs. 5 lakhs)

This is a new scheme to be introduced in primary and secondary schools, with Central assistance including assistance from N.C.E.R.T. The scheme

envisages the introduction of the subject "population education" in school curriculum while, incorporating suitable lessons in text books, provision of guidelines and training to teachers. The provision also includes creation of a population education cell in the State Institute of Education.

#### 6. *Education Research and Training*

(Outlay Rs. 8 lakhs)

The provision is intended for encouraging research of the various on-going Plan and Non-plan Programmes, to determine their effectiveness and also to decide on the changes to be made. It is also proposed to take up training programmes for Educational Administrators at different levels to strengthen the implementation of the Plan and improvement programmes.

### III. *Teacher Education*

There are at present 92 teacher training schools in the State—30 in the public sector and 62 in the private sector. Many of the schools are lacking in facilities and equipments to cope with the revised curriculum. In order to make primary education qualitatively effective, it is necessary to equip the schools with minimum facilities. A regular programme of inservice education is necessary for maintaining professional competence of primary and secondary school teachers, in view of the introduction of new syllabus in schools.

#### 1. *Teacher Training—Primary*

(Outlay Rs. 45 lakhs)

The Plan provision made is to meet the expenditure towards the training programmes of primary school teachers during the Sixth Plan period.

#### 2. *Teacher Training—Secondary*

(Outlay Rs. 25 lakhs)

The outlay proposed in the Plan is to meet the expenditure to be incurred in connection with the inservice training programme of high school teachers and for providing additional facilities in the existing Basic Training Schools for specialisation.

### IV. *University Education*

Although Kerala had marched ahead of other States in India, in the field of literacy and general education at school level, the State's pace of progress in higher education has been comparatively low. The progress of university education gathered momentum only in the recent past. With the implementation of the Third Five Year Plan the facilities for university education witnessed rapid expansion in the State. At present, there are 133 arts and science colleges in the State with a total student strength of 1.8 lakhs.

#### A. *Development of Universities*

##### 1. *Assistance to Universities*

(Outlay Rs. 395 lakhs)

The assistance to Universities is meant for the expansion and strengthening of the existing schools and Departments and for providing physical and infrastructure facilities. While allocating grants to Universities, the Cochin University deserves special financial support in view of the modest assistance it has received so far and its technological character.

##### 2. *Ship Technology Course*

(Outlay Rs. 5 lakhs)

The proposed outlay is for giving financial assistance to the University of Cochin for the development of Ship Technology Course.

#### B. *Development of Colleges*

##### 1. *Starting of New Government Colleges*

(Outlay Rs. 50 lakhs)

The provision is to meet the expenditure towards the salary of teaching and non-teaching staff to be appointed in those Colleges proposed to be started during the plan period.

##### 2. *Buildings for Existing Colleges*

(Outlay Rs. 40 lakhs)

The construction of buildings for the Government Colleges at Attingal and Kottayam are to be continued. New buildings are required for the existing nine colleges and for the newly proposed ones. The Plan envisages a phased programme of construction work. The Plan provision is for meeting the expenditure in connection with the new construction work including spill over works.

##### 3. *Upgrading of Colleges*

(Outlay Rs. 10 lakhs)

The outlay made in the Plan is meant for the Salary of the staff newly appointed in connection with the upgradation of Government Colleges.

##### 4. *Starting of New Courses in Government Colleges*

(Outlay Rs. 10 lakhs)

New courses have been introduced in 14 Government Colleges during 1979-80 and in 3 Colleges during 1980-81, including post graduate courses. The scheme envisages the extension of the programme in more colleges during the plan period.

##### 5. *Introduction of Shift System/Evening Courses in Government Colleges*

(Outlay Rs. 75 lakhs)

The outlay provided is towards the cost of teaching and non-teaching staff to be appointed in connection with the expansion of shift system in Government Colleges.

## 6. *Introduction of Part-time Courses in Law Colleges*

(Outlay Rs. 5 lakhs)

The scheme envisages the continuance of the Evening Courses in LLB in the Government Law Colleges. The provision also includes the starting of part-time LLB Course in Government Law College, Calicut.

## 7. *Hostels and Staff Quarters*

(Outlay Rs. 10 lakhs)

It has been accepted in principle that all colleges in the State should be provided with hostels and staff quarters. It is also proposed to construct staff quarters in three colleges and hostels in two colleges during the Sixth Plan period.

## 8. *Book Bank Schemes in Government Colleges*

(Outlay Rs. 4 lakhs)

The scheme envisages introduction of text book banks in all Government Colleges in the State so as to give text books on loan to students who are economically backward and to scheduled caste/Scheduled tribe students.

## 9. *Vocationalisation at Plus 2 Stage*

(Outlay Rs. 1 lakhs)

The Sixth Plan envisages the starting of vocational courses in selected colleges in the State at the pre-degree level. It is proposed to start vocational courses in selected government colleges during the Plan period.

## 10. *Direct Payment of Salary to Private College Teachers in Connection with Shift System Upgradation and starting of New Courses.*

(Outlay Rs. 220 lakhs)

The outlay is for direct payment of salary to private college teachers in connection with starting of new courses, shift system and upgradation.

### *Scholarships*

#### 1. *Renewal of Scholarships*

(Outlay Rs. 5 lakhs)

The outlay is for the renewal of scholarships granted to students in Arts, Science, Music, Sanskrit and Sports.

#### 2. *Awards for Students*

(Outlay Rs. 5 lakhs)

It is proposed to institute an award scheme on district basis to make this benefit available to students in backward regions also. Five students who secure the highest marks in the S.S.L.C. Examination in each Revenue District will be given a merit award every year at the rate of Rs. 2000 so long as they continue their studies without failing in examinations.

## G. *Other Programmes*

### 1. *Student Amenities*

(Outlay Rs. 3 lakhs)

The scheme includes the provision of amenities like water cooler and steel furniture to students in Government Colleges.

### 2. *Implementation of U. G.C. Assisted Schemes*

(Outlay Rs. 15 lakhs)

The scheme is intended to give matching contribution to construction works in Government Colleges assisted by University Grants Commission.

### 3. *Development of Under-graduate and Post-graduate Study in Government Colleges with U.G.C. Assistance*

(Outlay Rs. 5 lakhs)

The scheme is meant for the payment of matching grant to U.G.C. assisted schemes to improve educational facilities in Government Colleges at the under-graduate and post-graduate levels.

### 4. *Study Tour*

(Outlay Rs. 3 lakhs)

Study tour is an integral part of the syllabus in science faculties like Biology, Chemistry, Geography, Geology, etc. The provision is for meeting the expenses connected with study tours in colleges.

### 5. *Research*

(Outlay Rs. 4 lakhs)

If some additional facilities are provided in the laboratories and libraries of some of the leading Government Colleges, they could be raised to the level of Research Centres. The outlay is to provide research facilities in three Government Colleges in the State during the Sixth Plan period.

### 6. *Furniture Library and Laboratory Equipments*

(Outlay Rs. 13 lakhs)

All Government Colleges have to be provided with adequate furniture, library and laboratory equipments. Due to the introduction of shift system and new courses in Government Colleges, the need has become greater. The provision is for meeting the expenditure for the purchase of furniture, equipments, books, etc.

7. *Cost of Land Transferred from Ministry of Defence, Government of India*

(Outlay Rs. 5 lakhs)

The scheme is meant for the payment of the cost of land at Haig Barracks transferred from the Ministry of Defence to the State Government for the construction of buildings for Government College, Malappuram. The total cost of the land amounts to Rs. 36 lakhs.

8. *Remedial Courses—Special Coaching Classes for Scheduled Caste/Scheduled Tribe Students*

(Outlay Rs. 3 lakhs)

The Scheme is meant for starting special coaching classes to SC/ST students at the Pre-Degree and Degree levels, in 30 selected colleges in the State.

9. *L.A.S. Coaching Centres*

(Outlay Rs. 2 lakhs)

The scheme envisages the starting of I.A.S. coaching centres for scheduled caste and scheduled tribe students at Government Victoria College, Palghat, and Government Arts and Science College, Calicut.

10. *Book Bank Scheme in the Cosmopolitan Hostels*

(Outlay Rs. 5 lakhs)

The provision is meant for starting book banks in three major cosmopolitan hostels at Trivandrum, Ernakulam and Calicut for students belonging to SC/ST communities.

11. *State Institute of Languages*

(Outlay Rs. 80 lakhs)

The provision is to meet the expenditure for production of literature and other programmes like the conduct of seminars and conferences, award of incentive prizes for production of books in Malayalam, production of bulletins and journals, study in humanities and Kerala culture, production of science dictionary and development of the Regional Centre of the Institute. The provision also includes construction of a building for the Institute.

12. *The State Institute of Encyclopaedic Publications*

(Outlay Rs. 20 lakhs)

The provision proposed is for the continuance of the existing scheme and for implementing new schemes like publication of Children's Encyclopaedia and Publication of Encyclopaedia of Dravidian Culture.

13. *Building for Law College Calicut*

(Outlay Rs. 5 lakhs)

The provision is for the construction of a building for the Law College, Calicut.

## V. Adult Education

Several official and non-official agencies are now engaged in the field of adult education in Kerala. The programme envisages the education of the illiterates within the age group 15-35, numbering about 13.50 lakhs according to 1971 Census. In Kerala, a massive programme of adult education was launched under Centrally Sponsored Scheme which includes opening of adult education centres, conduct of training programmes for the resource persons, preparation of resource materials, etc. The following schemes are included in the State Sector:—

1. *Adult Education Programmes*

(Outlay Rs. 45 lakhs)

The provision is for continuing the existing programmes such as the Adult Education Cells in the Directorate and in the Secretariat, expenditure towards the Adult Education Board and Committee, publicity and propaganda, incentive awards, purchase of equipments etc.

2. *Adult Education Programme for Scheduled Caste/Scheduled Tribe*

(Outlay Rs. 5 lakhs)

The provision is for undertaking adult education programme for the benefit of the scheduled caste and scheduled tribe population in the State. The scheme envisages the opening of Model centres for scheduled caste/scheduled tribe population.

## VI. Physical Education, Youth Welfare and Sports

1. *Improvement of Physical Education in Schools and Development of Scouting and Guiding*

(Outlay Rs. 20 lakhs)

Since education aims at over-all development of individuals, physical education has an important part to play in the general education system. It is necessary to provide required facilities for physical education in schools. The provision is to meet the expenditure for improving the physical education in schools and also for the development of scouting and guiding.

2. *Physical Education Colleges*

(Outlay Rs. 10 lakhs)

The Physical Education College at Calicut has recently started functioning. In 1981-82 it is proposed to revive the Physical Education College at Trivandrum also. The outlay is for meeting the salary of staff and for providing accommodation and equipments for the College.

3. *Constitution of a Youth Welfare Board.*

(Outlay Rs. 5 lakhs)

The provision is for the continuance of the Youth Welfare Board.

4. *Youth Festivals*

(Outlay Rs. 5 lakhs)

Youth Festivals in Kerala have been organised for the development of cultural activities and artistic talents among school children. The provision is for giving assistance for the conduct of youth festivals at District and State levels and Balakalotsavam. Programmes are also envisaged to give further encouragement and training to those who are found to be outstanding at the State level youth festival.

5. *N.C.C./N.S.S.*

(Outlay Rs. 10 lakhs)

The provision is for construction works, creation of a publicity cell in the Directorate of N.C.C., expansion of N.C.C. units etc. The provision also includes the development programmes of National Service Schemes.

6. *Planning Forum*

(Outlay Rs. 2 lakhs)

The outlay proposed is for giving grant-in-aid to the Planning Forum Units functioning in Arts, Science and professional Colleges in the State.

7. *Promotion of Kalarippayattu and Circus*

(Outlay Rs. 3 lakhs)

The scheme envisages the setting up of full fledged 'Kalaries' in all the district headquarters as a phased programme by giving grants to private agencies coming forward to undertake the work. It is also proposed to start a Circus Training Centre at Tellicherry.

8. *Assistance to Kerala Sports Council*

(Outlay Rs. 130 lakhs)

The major items of expenditure incurred by the sports council are the maintenance of sports hostels for schools and colleges, salary to coaches, stipends to National Institute of Sports trainees, supply of sports equipments to district sports councils, assistance to rural sports centres and village recreation clubs, conduct of coaching camps, maintenance of play grounds, establishment charges of the sports council, financial assistance of sportsmen in indigent circumstances etc. The provision is for giving grants to Kerala Sports Council for undertaking the above programmes during the Sixth Plan period.

9. *Sports School, Trivandrum/Opening of New Sports Schools*

(Outlay Rs. 65 lakhs)

The provision is for providing necessary facilities in the Sports School, Trivandrum, and the sports divisions and also for starting two Sports Schools at Kottayam and Kottakkal.

**VII. Direction, Administration and Supervision**1. *Strengthening of Supervision and Administration (Primary)*

(Outlay Rs. 5 lakhs)

For the purpose of supervising the non-formal education and also for achieving universalisation in

the field of primary education, it is necessary to strengthen supervision and administration. The Plan provision is for the purpose.

2. *Strengthening of Administration and Provision of Vehicles*

(Outlay Rs. 125 lakhs)

The provision is for the strengthening of the Department of Public Instruction at all levels. It is also intended to provide vehicles to District Officers and other senior officers.

3. *Strengthening of Planning Machinery in the Directorate of Public Instruction*

(Outlay Rs. 5 lakhs)

The Department requires a strong planning machinery at the headquarters and in each of the educational districts. The outlay is for the appointment of the staff required for the unit.

4. *Strengthening of Planning Statistics and Administrative Wings of the Directorate of Collegiate Education*

(Outlay Rs. 10 lakhs)

The scheme envisages the strengthening of the Planning and Statistical Cell, Provident Fund and Pension sections, Audit Wing and Scholarship unit of the Directorate. The provision is towards this end.

5. *Strengthening of Zonal Offices—Deputy Directorate of Collegiate Education*

(Outlay Rs. 5 lakhs)

The provision proposed is for strengthening the three Zonal Offices of the Directorate of Collegiate Education at Quilon, Ernakulam and Calicut.

**VIII. Other Programmes including Special Education**1. *Improvement of Facilities in the Existing Special Schools*

(Outlay Rs. 10 lakhs)

The existing facilities in the Departmental Special Schools (for the blind, deaf and dumb) are inadequate. The plan outlay is for providing necessary facilities to such schools.

2. *Integrated Education of the Handicapped—State's Share*

(Outlay Rs. 5 lakhs)

The Plan provision is towards State's share (50 per cent) for implementing the scheme. The amount is meant for providing additional facilities in the five Departmental Schools in the State for integrated education of the handicapped.

3. *Development of Sanskrit Education*

(Outlay Rs. 15 lakhs)

The provision is for award of scholarships to students and also for the conduct of orientation courses to teachers and other programmes to improve quality of Sanskrit teaching.

4. *Establishment of a Regional Institute for Language Training*

(Outlay Rs. 10 lakhs)

The scheme envisages imparting inservice and orientation courses to all categories of language teachers. The provision proposed is for this purpose.

5. *Appointment of Hindi Teachers in Non-Hindi Speaking States (State's share)*

(Outlay Rs. 32 lakhs)

The provision proposed is the State's share (50 per cent) for appointing Hindi teachers in Upper primary Schools and High Schools.

TABLE 3.36

## General Education—Scheme-wise Outlay

(Rs. lakhs)

Sl.No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated Expendi- ture	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>1. Elementary Education</b>								
<b>Quality Improvement Programme</b>								
1.	Work Experience Programme in Primary Schools	0.80	5.00	5.00	30.00	..	5.00	..
2.	Improvement of Science Education in Primary Schools	3.72	5.00	5.00	30.00	..	5.00	..
3.	UNICEF Assisted Programme	..	..	..	2.50	..	0.50	..
4.	Introduction of Socially Useful Productive Work	1.91	3.00	3.00	15.00	..	3.00	..
<b>Tribal Welfare</b>								
1.	Opening of Primary Schools in Tribal Sub-Plan Area—Teacher Cost	2.20	2.00	2.00	10.00	..	3.00	..
2.	Supply of Furniture for New Schools in the tribal Sub-Plan Area	1.65	2.00	2.00	10.00	..	1.00	..
3.	Construction of School Buildings in Tribal Sub-Plan Area	..	9.00	9.00	45.00	45.00	7.00	7.00
4.	Construction of Staff Quarters in Tribal Sub-Plan Area	..	5.00	5.00	25.00	25.00	4.00	4.00
<b>Minimum Needs Programme</b>								
1.	Additional Enrolment—Departmental Lower Primary Schools—Teacher Cost	39.09	20.00	20.00	100.00	..	20.00	..
2.	Opening of New Departmental Lower Primary Schools—Buildings	27.06	30.00	30.00	150.00	150.00	30.00	30.00
3.	Supply of Furniture to New Departmental Lower Primary Schools	5.04	5.00	5.00	35.00	..	6.00	..
4.	Additional Enrolment—Departmental Upper Primary Schools—Teacher Cost	46.65	20.00	20.00	100.00	..	20.00	..
5.	Opening of New Departmental Upper Primary Schools—Buildings	42.78	30.00	30.00	120.00	120.00	30.00	30.00
6.	Supply of Furniture to New Departmental Upper Primary Schools	5.00	5.00	5.00	35.00	..	6.00	..
7.	Supply of Furniture to Existing Departmental Lower Primary Schools	5.31	5.00	5.00	45.00	..	6.00	..
8.	Supply of Furniture to Existing Departmental Upper Primary Schools	5.00	5.00	5.00	45.00	..	6.00	..
9.	Improvement of Facilities in Primary Schools	6.27	5.75	5.75	35.00	..	6.00	..
10.	Strengthening of Primary Schools—Improvement of Selected Lower Primary Schools	0.33	5.00	5.00	75.00	..	10.00	..
11.	Replacement and Addition of Departmental schools—Buildings	..	9.00	5.00	100.00	100.00	10.00	10.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.	Minimum Site and Buildings for Schools run in Rented Buildings	..	25.00	25.00	100.00	100.00	25.00	25.00
13.	Appointment of Primary School Teachers from Scheduled Castes/Scheduled Tribes	5.41	2.00	2.00	10.00	..	2.00	..
14.	Additional Enrolment—Non-Government Lower Primary Schools—Teacher cost	59.62	30.00	30.00	165.00	..	30.00	..
15.	Additional Enrolment—Non-Government Upper Primary Schools—Teacher Cost	120.91	30.00	30.00	175.00	..	30.00	..
<i>Other Programmes</i>								
1.	Removal of Backwardness—Including Education of Girls	3.57	3.00	3.00	15.00	..	3.00	..
2.	Institute of Primary Education	2.73	2.00	2.00	20.00	..	3.00	..
3.	Health Education Programme	0.13	0.10	0.10	3.00	..	0.15	..
4.	Pre-Primary Education—Building for Pre-Primary Institution	..	1.00	1.00	15.00	3.00	3.00	1.00
5.	N. C.E.R.T Assisted Schemes—State's Share	..	..	..	8.00	..	1.50	..
6.	Experimental Project for Non-Formal Education—State's share	4.25	10.00	10.00	50.00	..	10.00	..
Sub-Total—Elementary Education		389.43	273.85	269.85	1568.50	543.00	286.15	107.00
<i>II. Secondary Education</i>								
1.	Additional Enrolment—Departmental Secondary Schools—Teacher Cost	107.65	30.00	40.00	180.00	..	30.00	..
2.	Building and Equipments for New High Schools Including Supply of Soil Testing Equipments to Secondary Schools	104.36	23.50	23.50	150.00	150.00	25.00	25.00
3.	Supply of Furniture to Existing Departmental Secondary Schools	14.84	8.00	9.28	40.00	..	8.00	..
4.	Construction of New Buildings in the Place of Temporary Schools	..	15.00	15.00	90.00	90.00	15.00	15.00
5.	Introduction of Vocational Courses in Selected Secondary Schools and Upgrading them as Higher Secondary	..	..	..	50.00	10.00	6.00	1.00
6.	Scholarships							
(i)	Creation of Scholarship Unit and Enhancement of Scholarships	0.89	2.00	2.00	5.00	..	2.00	..
(ii)	Award of Scholarships to Meritorious SC/ST Students in Upper Primary/Secondary Schools	1.79	3.00	3.00	18.00	..	3.00	..
7.	Assistance to Non-Government Secondary schools—Additional Enrolment—Teacher Cost	102.06	40.00	50.00	235.00	..	40.00	..
<i>Quality Improvement Programme</i>								
1.	Improvement of Science Education in Secondary Schools	9.06	4.00	4.00	25.00	5.00	5.00	1.00
2.	Work oriented Education in Secondary Schools	5.88	5.25	5.25	25.00	..	5.25	..
3.	Vocational Guidance Programme	0.45	1.00	1.00	5.00	..	1.00	..
4.	Improvement of Library and Laboratory facilities in Departmental Secondary Schools	8.49	6.00	6.00	25.00	..	7.00	..
5.	State Institute of Education	1.32	3.00	3.00	35.00	10.00	4.00	1.00
6.	Institute of Science	3.72	2.00	2.00	10.00	..	2.50	..
7.	Examination Reforms	0.36	0.50	0.50	3.00	..	0.50	..
8.	Revision of Curriculum	0.54	1.00	1.00	3.00	..	1.00	..
9.	School Complex Programme	0.54	1.00	1.00	5.00	..	1.00	..
10.	Strengthening of Staff of Large Secondary Schools	0.88	2.00	3.00	15.00	..	2.00	..



	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
<i>Other Programmes</i>								
1. Library Movement		2.38	2.50	2.50	8.00	..	2.50	..
2. Popularisation of Science Literature		2.25	0.50	0.50	2.50	..	0.50	..
3. Coaching Class for Scheduled Caste/Scheduled Tribe Students in S.S.L.C. Classes		3.36	2.00	2.00	12.00	..	2.00	..
4. Formation of a Society for School Promotion and Development		..	4.00	4.00	5.00	..	4.00	..
5. Population Education in Secondary Schools—State's Share		..	..	..	5.00	..	1.00	..
6. Education, Research and Training		..	..	..	8.00	..	..	..
Sub-Total—Secondary Education		370.82	156.25	178.53	959.50	265.00	168.25	43.00
<b>III. Teacher Education</b>								
1. Teacher Training—Primary		4.93	6.00	6.00	45.00	..	6.00	..
2. Teacher Training—Secondary		2.86	4.00	4.00	25.00	..	4.00	..
Sub-Total—Teacher Education		7.79	10.00	10.00	70.00	..	10.00	..
<i>University Education</i>								
<b>A. Development of Universities</b>								
1. Assistance to Universities:								
Kerala								
Cochin								
Calicut		82.00	74.00	74.00	395.00	200.00	100.00	50.00
2. Ship Technology Course—Grant-in-aid to Cochin University		9.00	1.00	1.00	5.00	..	1.00	..
<b>3. Development of Colleges</b>								
1. Starting of New Government Colleges		0.29	10.00	10.00	50.00	25.00	10.00	5.00
2. Building for Existing Colleges		7.04	10.55	10.55	40.00	40.00	12.00	12.00
3. Upgrading of Colleges		..	5.00	5.00	10.00	2.00	5.00	1.00
4. Starting of New Courses in Government Colleges		4.50	5.00	5.00	10.00	..	5.00	..
5. Introduction of Shift System/Evening Courses in Government Colleges		5.21	2.00	10.00	75.00	..	10.00	..
6. Introduction of Part-time Course in Law Colleges		..	1.00	1.00	5.00	..	1.00	..
7. Hostels and Staff Quarters		2.98	5.00	5.00	10.00	10.00	5.00	5.00
8. Implementation of Book Bank Scheme in Government Colleges		1.02	2.00	2.00	4.00	..	2.00	..
9. Vocationalisation at Plus 2 Stage		0.14	1.00	0.05	1.00	..	1.00	..
10. Direct Payment of Salary to Private College Teachers in Connection with Shift System, Up-gradation and Starting of New Courses		3.55	80.00	55.00	220.00	..	82.00	..
<i>Scholarships</i>								
1. Renewal of Scholarships		0.50	1.00	1.00	5.00	..	1.50	..
2. Awards for Students		..	..	1.00	5.00	..	1.10	..
<b>C. Other Programmes</b>								
1. Student Amenities		0.22	1.00	1.00	3.00	3.00	1.00	1.00
2. Implementation of U.G.C. Assisted Schemes		3.03	15.00	15.00	15.00	10.00	15.00	10.00
3. Development of U.G./P.G. Studies in Government Colleges with U.G.C. Assistance		1.61	3.00	0.50	5.00	..	4.00	..
4. Study Tour		0.57	1.00	1.00	3.00	..	1.00	..
5. Research		..	1.00	1.00	4.00	2.00	1.00	0.50
6. Furniture, Library and Laboratory Equipments		1.57	5.00	5.00	13.00	10.00	5.00	3.00
7. Cost of Land Transferred from Defence Ministry, Government of India		..	5.00	5.00	5.00	5.00	5.00	5.00
8. Remedial Courses/Special Coaching for Scheduled Caste/Scheduled Tribe Students		..	..	..	5.00	..	2.00	..
9. I.A.S. Coaching Centres		..	..	..	2.00	..	1.50	..
10. Book Bank Scheme in Cosmopolitan Hostels		..	..	..	5.00	..	3.00	..
11. State Institute of Languages		3.50	15.00	15.00	80.00	20.00	15.00	3.00
12. State Institute of Encyclopaedic Publication		3.00	5.00	5.00	20.00	..	5.00	..
13. Building for Law College, Calicut		2.64	1.00	1.00	5.00	5.00	2.00	2.00
Sub-Total—University Education		132.37	249.55	230.10	1000.00	332.00	297.10	97.50

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>V. Adult Education</b>								
1. Adult Education	6.10	22.50	22.50	45.00	..	9.00	..	..
2. Adult Education for Scheduled Castes and Scheduled Tribes	..	2.50	2.50	5.00	..	1.00	..	..
Sub-Total—Adult Education	6.10	25.00	25.00	50.00	..	10.00	..	..
<b>VI. Physical Education, Youth Welfare and Sports</b>								
1. Improvement of Physical Education in schools and Development of Scouting and Guiding	3.42	4.00	4.00	20.00	..	4.00	..	..
2. Physical Education Colleges	0.12	1.00	1.00	10.00	..	2.00	..	..
3. Constitution of a Youth Welfare Board	0.42	1.00	1.00	5.00	..	1.00	..	..
4. Youth Festival	..	1.00	1.00	5.00	..	1.00	..	..
5. N. C. C/N.S.S	2.01	4.00	4.00	10.00	7.00	2.00	2.00	2.00
6. Planning Forums	0.36	1.00	1.00	2.00	..	1.00	..	..
7. Promotion of Kalarippayattu and Circus	..	1.00	1.00	3.00	1.00	1.00	..	..
8. Assistance to Kerala Sports Council	33.43	20.00	60.00	130.00	30.00	40.00	6.00	6.00
9. Sports School Trivandrum—Opening of Sports Schools	5.63	5.00	5.00	65.00	30.00	6.00	..	3.00
10. Providing Facilities for Sports Division in Departmental Schools	1.23	2.00	2.00	..	..	2.00	..	..
Sub-Total—Physical Education, Sports and Youth Welfare	46.62	40.00	80.00	250.00	68.00	60.00	11.00	..
<b>VII. Direction and Administration</b>								
<i>Primary Education</i>								
1. Strengthening of Supervision and Administration	0.17	2.00	2.00	5.00	..	2.00	..	..
<i>Secondary Education</i>								
2. Strengthening of Administration and Provision of Vehicles to Deputy Directors and District Educational Officers	16.51	40.00	40.00	125.00	..	40.00	..	..
3. Strengthening of Planning Machinery in the Directorate of Public Instruction	0.26	1.00	1.00	5.00	..	1.00	..	..
<i>Collegiate Education</i>								
4. Strengthening of Planning, Statistics, Academic and Administrative wings of the Directorate of Collegiate Education	..	1.00	0.50	5.00	..	1.50	..	..
5. Strengthening of Zonal Offices—Deputy Directorate of Collegiate Education	..	1.00	..	5.00	..	1.50	..	..
Sub-Total—Direction and Administration	16.94	45.00	43.50	150.00	..	46.00	..	..
<b>VIII. Other Programmes Including Special Education</b>								
1. Improvement of Facilities in Existing Special Schools	1.67	3.00	3.00	10.00	..	3.00	..	..
2. Integrated Education of the Handicapped—State's Share	0.22	1.25	1.25	5.00	..	1.50	..	..
3. Development of Sanskrit Education	2.85	5.00	5.00	15.00	..	5.00	..	..
4. Establishment of a Regional Institute for Language Training	1.91	3.00	3.00	10.00	..	3.00	..	..
5. Appointment of Hindi Teachers in Non-Hindi Speaking States—State share	24.30	10.00	10.00	32.00	..	10.00	..	..
Sub-Total—Other Programmes	30.95	22.25	22.25	72.00	..	22.50	..	..
Total—General Education	1017.57*	830.00*	866.33*	4120.00	1208.00	900.00	258.50	..

\*Includes outlay for the schemes viz., (1) Enrolment campaign at Panchayat level. (2) Establishment of Text Book Bank. (3) Free supply of Text Books and stationery to SC/ST and Other depressed section of pupils in Primary schools (4) Establishment of schools for talented children from rural areas. (5) Educational survey (6) Youth rallies (7) Construction of school buildings (primary) through C. D. Blocks under rural manpower programme and (8) construction of school Building (secondary) through C. D. Blocks under rural manpower programme. (The last two schemes have been transferred under the Head of Development 'Community Development and Panchayats').

## Art and Culture

The various plan programmes under Art and Culture are provided below:—

### *Music Colleges and Academies*

(Outlay Rs. 5 lakhs)

With the upgradation of the Music Academies at Tripunithura and Palghat into music colleges and with the affiliation of the Sri Swathi Thirunal College of Music, Trivandrum, to the University of Kerala, additional facilities have to be provided in all these institutions. These include creation of visiting professorships in all the three Music Colleges and construction of an air-conditioned library with tape-recording facilities at Sri Swathi Thirunal College of Music, Trivandrum.

### 2. *Kerala Sahitya Academy*

(Outlay Rs. 10 lakhs)

Kerala Sahitya Academy is engaged in promotion of literature. Its main activities are production of children's literature, translation of Malayalam books into other languages and books from other languages into Malayalam, award of incentives to talented writers for producing original contributions in the fields of literature and literary criticism, production of books on literature, language and cultural heritage, conduct of seminars and symposia, etc. The Silver Jubilee of the Academy falls during the year 1981-82. The outlay earmarked is for meeting the expenses for the above programmes during the Sixth Plan period.

### 3. *Kerala Sangeetha Nataka Academy*

(Outlay Rs. 5 lakhs)

The Kerala Sangeetha Nataka Academy has a programme for the development of music and the performing arts. The schemes include a folk-lore museum, library, a mobile theatre, inter-state drama festivals and organisation of short-term theatre courses in technical subjects like make-up, stage setting and lighting. The amount provided is for implementing the above programmes during the Plan period.

### 4. *Kerala Lalithakala Academy*

(Outlay Rs. 8 lakhs)

The main function of the Kerala Lalithakala Academy is to encourage fine arts like painting and sculpture. Apart from continuing the present activities, the Academy needs further expansion. The other schemes proposed are setting up of art galleries for organising one-man exhibitions of paintings as well as of painting by a group of artists at the Academy at Trichur and provision of quarters at Trichur for artists coming from other parts of India and from abroad for the study of fine arts of Kerala.

### 5. *Kerala Kalamandalam*

(Outlay Rs. 13 lakhs)

Under this scheme the following programmes are envisaged in the Sixth Plan: (i) construction of hostels and kalaries, (ii) construction of an open-air theatre; (iii) shifting of museum to Poet Vallathol's house;

(iv) documentation and preservation of art forms; (v) starting of new departments, (vi) improvement of Koodiyattam Department and (vii) providing facilities for research on subjects related to the art forms of Kerala. The provision is for meeting the expenses of the continuing schemes and for taking up some of the new schemes according to priority.

### 6. *Development of Traditional Art Forms (Vasthu Silpa, Thalavadya etc.)*

(Outlay Rs. 2 lakhs)

In order to preserve and promote the traditional wisdom of architecture most suited to the climatic conditions and cultural personality of the State, a Vastuvidyalaya is proposed to be established. The Vastuvidyalaya will impart training in Kerala's traditional architecture and sculpture in wood. The Thalavadyas of Kerala on the Chenda, Maddalam, Thimila etc., have earned a unique place in the field of rhythm. Therefore it is proposed to give Fellowships to the veterans in the field during the plan period.

### 7. *Kathakali (Thekkan Kalari) and Koodiyattam*

(Outlay Rs. 4 lakhs)

The plan provision is for establishing a school for Thekkankalari in Kathakali and a Performance-cum-Training Institute for Koodiyattam at Trivandrum.

### 8. *Kerala History Association*

(Outlay Rs. 2 lakhs)

The Kerala History Association has proposed to take up a project on 'Makers of Modern Kerala'. Under this project materials on the life and activity of 52 eminent men who can be considered as Makers of Modern Kerala will be collected and published. The provision is for giving grant-in-aid to the History Association during the Plan period.

### 9. *Kerala Gazetteers*

(Outlay Rs. 5 lakhs)

The Department has so far published nine District Gazetteers. The outlay provided in the Plan is for continuing the existing programmes and for revision and re-editing work on Kerala History.

### 10. *Non-recurring Grants to Cultural Activities*

(Outlay Rs. 2 lakhs)

There are various voluntary organisations in the State engaged in the promotion of art and culture. The plan outlay earmarked is for giving non-recurring financial assistance to such organisations.

### 11. *Financial Assistance to Men of Arts and Letters*

(Outlay Rs. 12 lakhs)

The scheme envisages award of pension to writers and artists who live in indigent circumstances. The plan provision is for continuing the scheme and to bring within its ambit the masters of traditional craft like carpentry, wood-carving, ivory-carving etc.

12. *Memorials to Eminent Men of Arts and Letters*

(Outlay Rs. 2 lakhs)

At present there are mainly three memorials, viz., Thunchan Memorial at Tirur, Asan Memorial at Thonnakkal and Kunchan Memorial at Ambalapuzha. The plan provision earmarked is for giving grants for the establishment and maintenance of these memorials.

13. *Grant-in-aid to Authors for Production of Books*

(Outlay Rs. 2 lakhs)

This scheme is meant for providing financial assistance to authors for the production of books. This type of assistance is given only for the publication of works of literary or educative value and only to authors who are not able to meet the cost of publication by themselves. The outlay is for continuing the scheme during the Sixth Plan period.

14. *Archaeology*

(Outlay Rs. 55 lakhs)

The plan provision is for continuing the various schemes already taken up such as the reorganisation of the Department, Institute of Folk-lore and Folk-Arts, School of Epigraphy, Light and Sound Programme at Padmanabhapuram Palace, Development of Regional Conservation Laboratory etc. The display techniques in the Archaeological Museum at Ernakulam are to be improved by adding to the collections and display equipments. The provision is also for the acquisition of places of archaeological importance and for acquisition of Hill Palace at Thrrippunithura for Archaeological Museum.

15. *Archives*

(Outlay Rs. 9 lakhs)

The State Archives Department has three Regional Offices located at Trivandrum, Ernakulam and Calicut. The schemes under implementation are construction of modern building for the Department, purchase of equipments for better preservation of age-old records, acquisition of records of historical importance and archival value, training programmes etc. The plan provision allocated is for continuing the existing schemes.

16. *Development of Museums and Zoos*

(Outlay Rs. 15 lakhs)

Kerala has three Museums and Zoo Complexes located at Trivandrum, Trichur and Calicut. The

Shri Chitra Art Gallery at Trivandrum is also under the control of the Department of Museum and Zoos. It has at present a number of schemes which are in the process of being implemented. The most important among them are:—

- (i) Construction of a new building for Shri Chitra Art Gallery;
- (ii) Development of Museum and Zoo at Trichur;
- (iii) Development of Art Gallery at Calicut;
- (iv) Expansion of Museum and Zoo at Trivandrum; and
- (v) Strengthening the administrative set up in the Directorates.

The provision allotted is for continuing the existing programmes.

17. *Public Library, Trivandrum*

(Outlay Rs. 15 lakhs)

Two schemes, one for installing a photocopying machine for repographic service and another for air-conditioning a portion of the library building for the preservation of rare books are under implementation by the State Central Library. The other programmes envisaged in the plan are establishment of a macro-film unit, construction of a building for children's library, and setting up a book preservation laboratory. The provision earmarked is meant for continuing the schemes in operation and to take up some of the new schemes on priority basis.

18. *Kerala Grandhasala Sangham*

(Outlay Rs. 14 lakhs)

The Kerala Grandhasala Sangham with 4091 libraries affiliated to it, is the co-ordinating agency in the State's library movement. The outlay provided in the Plan is mainly meant for enhancing the grant amount given to libraries. The provision is also for the following continuing schemes.

- (i) Village and bell-bicycle libraries;
- (ii) Neo-literate courses in 300 village libraries giving due share to harijan libraries;
- (iii) publication of the weekly 'Sakshara Keralam'; and
- (iv) expansion of the Gradhasala Press.

TABLE 3.37

## Art and Culture—Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Music Colleges and Music Academies	1.19	2.80	2.80	5.00	1.00	2.80	0.25
2	Kerala Sahitya Academy	..	2.00	2.00	10.00	..	2.00	..
3	Kerala Sangeetha Nataka Akademy	1.00	1.00	1.00	5.00	1.00	1.00	0.25
4	Kerala Lalithakala Akademy	1.00	1.00	1.00	8.00	1.50	1.00	0.25
5	Kerala Kalamandalam	2.00	2.00	2.00	13.00	4.00	2.00	1.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
6 Development of Traditional Art Forms (Vastu Silpa, Thalavadya etc.)	..	0.25	0.25	2.00	0.25	0.25	..
7 Kathakali (Thekkankalari) and Koodiyattam at Trivandrum	..	1.25	1.25	4.00	0.50	1.25	..
8 Kerala History Association	0.30	0.50	0.50	2.00	..	0.50	..
9 Kerala Gazetteers	0.46	1.10	1.10	5.00	..	1.10	..
10 Non-recurring Grants to Cultural Activities	0.55	0.50	0.50	2.00	..	0.50	..
11 Financial Assistance to Men of Arts and Letters	9.94	4.00	4.00	12.00	..	4.00	..
12 Memorials to Eminent Men of Arts and Letters	..	0.50	0.50	2.00	..	0.50	..
13 Grant-in-Aid to Authors for Production of Books	0.55	0.50	0.50	2.00	..	0.50	..
14 Archaeology (Including Archaeological Museum)	2.07	2.60	9.60	55.00	25.00	10.60	5.00
15 Archives	0.51	3.00	3.00	9.00	3.00	3.00	1.00
16 Development of Museum and Zoos	1.85	5.00	5.00	35.00	15.00	6.00	4.00
17 Public Library, Trivandrum	0.25	4.00	4.00	15.00	8.00	4.00	2.00
18 Kerala Grandhasala Sanghom	..	4.00	4.00	14.00	..	4.00	..
Total—Art and Culture	21.67	36.00	43.00	200.00	59.25	45.00	13.75

## Technical Education

In the field of technical education, Kerala did not lag behind the rest of India at least in quantitative growth. At present, undergraduate education is being conducted in six engineering colleges. Facility of post-graduate education exists in the two Government colleges and in the Regional Engineering College. Also facilities exist in the two Government colleges for part time engineering degree course for diploma holders. The other institutions existing in Kerala in the field of technical education are: 19 Polytechnics and 25 Junior Technical Schools. There are also 15 Pre-Vocational Training Centres which provide technical education to drop-outs from schools, in selected trades. Under technical education the following schemes are included in the Sixth Plan.

### 1. Direction and Administration—Strengthening of Planning and Statistical Cell and Examination Wing.

(Outlay Rs. 40 lakhs)

The plan provision made is for meeting the expenditure towards the strengthening of the Directorate and also for the construction of the Administrative Block of the Directorate.

### Government Engineering Colleges and Other Institutions

#### 1. Consolidation of facilities in the Engineering Colleges

(Outlay Rs. 50 lakhs)

With the increase in intake, diversification of courses, curriculum development, starting of new elective subjects etc., there is an immediate need for additional floor area in the engineering colleges and other technical institutions. A new orientation of teaching practices calls for special equipments. Rationalisation of the existing courses also requires restructuring of the laboratories. The scheme envisages special attention to institutions where the infrastructure is relatively weak.

37:3118/MC.

#### 2. Starting of one Engineering College

(Outlay Rs. 20 lakhs)

The demand for admission to the engineering colleges is fast increasing and only a small group of applicants could secure admission. There is a felt need for a new engineering college which will not duplicate the effects of the present institutions with respect to disciplines of study. The provision is for providing the infrastructure before starting the college. The college will be started in the last year of the Sixth Plan.

#### 3. Upgrading of one Engineering College

(Outlay Rs. 35 lakhs)

It is proposed to upgrade the College of Engineering, Trivandrum, by providing centralised facilities. The outlay is for establishing.

(i) The Centre for Fundamental and Applied Research;

(ii) The Central Technical Library and Documentation Centre; and

(iii) The Centre for Quality Improvement.

#### 4. Assistance to Computer Centre

(Outlay Rs. 10 lakhs)

The Computer Centre at the College of Engineering is provided with an IBN. 1620 computer with the introduction of different computer courses. At the under-graduate courses the computer time required has substantially increased and the present computing system available is inadequate to cope with this. The capacity can be augmented with the addition of memory models to the existing machine. The provision made is towards the expenditure for increasing the capacity of the computer.

5. *Part-time Courses*

(Outlay Rs. 15 lakhs)

At present part-time degree courses are being conducted in the Trivandrum and Trichur Engineering Colleges for diploma holders and in 4 polytechnics for diploma. The present courses are only in civil, mechanical and electrical. The facilities are to be extended to electronics and other fields.

6. *Granting of Autonomy to one Engineering College*

(Outlay Rs. 2 lakhs)

It is proposed to raise one of the engineering colleges in the State to the level of autonomous body. This institution would need autonomy not only academically but also administratively and financially. The provision made in the Plan is for the purpose.

*Polytechnics*1. *Consolidation of Facilities in Polytechnics (Existing)*

(Outlay Rs. 60 lakhs)

The polytechnics in the State are at different levels of growth and need substantial financial investment for consolidation and modernising the facilities in the workshops, laboratories and libraries. The outlay is meant for the above programmes.

2. *Newly Started Polytechnics*

(Outlay Rs. 50 lakhs)

Government have sanctioned the starting of two polytechnics, one at Palghat and the other at Idukki. The polytechnic at Palghat has already started functioning. The Plan provision is for meeting the capital cost and recurring expenditure of the new institutions.

*Junior Technical Schools*1. *Existing Junior Technical Schools*

(Outlay Rs. 20 lakhs)

The facilities in the existing Junior Technical Schools have to be improved and workshops modernised. The provision in the Plan is for this purpose.

2. *Newly Started Junior Technical Schools*

(Outlay Rs. 50 lakhs)

The Government have sanctioned four Junior Technical Schools at Palghat, Kuttippuram, Idukki and Sultan Battery. The new institutions have to be provided with land, buildings and furniture. The plan provision is for meeting the expenditure of staff to be appointed during the Sixth Plan period.

3. *Vocationalisation of Education at Post-Secondary Stage in Junior Technical Schools*

(Outlay Rs. 2 lakhs)

In the Junior Technical Schools, vocationalisation has already been implemented at the secondary school level. It is proposed to introduce vocationalisation in those institutions at the plus two stage.

*Other Institutions*1. *Pre-Vocational Training Centres*

(Outlay Rs. 15 lakhs)

The scheme envisages practical and job-oriented training in addition to the normal school education leading to continuing education in Junior Technical Schools. It is proposed to attach Pre-Vocational Training Centres to the remaining 12 Junior Technical Schools which do not have Pre-Vocational Training Centres attached to them. The Plan outlay is also for providing additional facilities in the existing Pre-Vocational Training Centres.

2. *Centre for Diploma in Commercial Practice*

(Outlay Rs. 15 lakhs)

The plan provision is for meeting the expenditure on acquisition of land and construction of building, purchase of equipment, re-organisation of the present courses at the existing Centres and organisation of new courses proposed during the Sixth Plan period.

3. *Tailoring and Garment Making Centres*

(Outlay Rs. 10 lakhs)

These centres impart education to girls who do not have the opportunities for higher education, in a useful trade for self-employment. Most of the institutions are now functioning in rented buildings. It is necessary to provide the institutions buildings of their own. It is also proposed to start new centres in unrepresented areas. The plan provision is for this purpose.

4. *Tailoring and Garment Making Centres for Scheduled Castes and Scheduled Tribes.*

(Outlay Rs. 2 lakhs)

At present the Department is running a Centre at Mannarghat for the benefit of SC/ST candidates. It is necessary to open new centres in tribal areas where SC/ST population is concentrated. The provision is for continuing the existing centres and for opening more centres.

5. *College of Fine Arts*

(Outlay Rs. 25 lakhs)

The College of Fine Arts at Trivandrum is conducting B.F.A. courses in painting, sculpture and applied arts. The U.G.C. have recommended the improvement of facilities that are of essential nature for the satisfactory conduct of the course. These include improvement of studio facilities, development of library, provision of audio visual aids for teaching, appointment of Visiting Professors, construction of buildings for museum, art gallery etc. The provision is also meant for the improvement of the Fine Arts Institutes at Mavelikkara and Trichur.

6. *Food Craft Institute at Kalamassery*

(Outlay Rs. 20 lakhs)

The Food Craft Institute at Kalamassery conducts certificate level courses in bakery and confectionary, cookery, canning and food preservation, hotel management etc. Considering the great demand, a centre at

Calicut has been opened and another centre, is proposed to be started at Trivandrum. A full-fledged Diploma Institute is proposed to be attached to the present Food Craft Institute. The provision is for the above programmes.

*Assistance to Non-Government Engineering Colleges and Institutions*

1. *Private Engineering Colleges*  
(Outlay Rs. 20 lakhs)

The scheme envisages payment of grants to the three private engineering colleges at the approved rate of the total cost of development and expansion, construction of buildings, purchase of equipments, etc. Revision of staff structure, modernisation of laboratories etc., are also contemplated.

2. *Private Polytechnics*  
(Outlay Rs. 10 lakhs)

The provision is for giving grants to private Polytechnics. Starting of new courses, revision of staff, construction of buildings, modernisation of laboratories etc., are also envisaged under the scheme.

3. *Assistance to Regional Engineering College, Calicut*  
(Outlay Rs. 6 lakhs)

The provision is towards financial assistance to the Regional Engineering College for campus development.

*Research and Training*

1. *Centres of Excellence*  
(Outlay Rs. 1 lakh)

The Plan scheme envisages establishment of the following Centres:—

- (i) Centre for Geo-Technical Engineering
- (ii) Appropriate Technology Centre
- (iii) Bio-Technology Centre
- (iv) Energy Research Centre
- (v) Centre for Electronic Testing and Evaluation

The Plan provision is for meeting the initial expenses of establishing such centres.

2. *Apprenticeship Training*  
(Outlay Rs. 20 lakhs)

The activities of the placement and training section in the Directorate of Technical Education comprise apprenticeship training, conduct of supervisory development programmes for engineering apprentices in industries, conduct of career-guidance programmes, training of fresh diploma holders etc. The Plan scheme also envisages construction of a building for the existing supervisory Development Centre at Kalamassery. The provision is also for installing a mini-computer with adequate capacity for the purpose of data storage and retrieval.

3. *Management Education*  
(Outlay Rs. 1 lakh)

The scheme envisages starting of management training courses for the benefit of the degree and diploma holders. Entrepreneurial development programmes to identify and extend necessary support to entrepreneurs are also envisaged.

*Other Programmes*

1. *Faculty Development*  
(Outlay Rs. 45 lakhs)

In the Engineering Colleges, the deputation of teachers for Master's and Doctoral courses has to be continued with increased incentives. It is also proposed to introduce Doctoral Courses in Engineering College, Trichur. The other programmes envisaged under the scheme are staff training programme in collaboration with the National Institute of Training and deputation of teaching staff to work in responsible positions in industry.

2. *Modernisation of Laboratories*  
(Outlay Rs. 5 lakhs)

Modernisation of workshops and laboratories in engineering colleges and polytechnics through replacement of worn-out machinery by new ones is essential. The Plan outlay made is for this purpose.

3. *Central Instrument Workshop*  
(Outlay Rs. 10 lakhs)

A Central Instrument Workshop for repair and maintenance of sophisticated instruments and equipments has been set up in the Engineering College, Trivandrum. This Centre is intended to cater to the needs of professional and scientific institutions in the State. The Plan provision is for meeting the cost of the building, equipments and staff of this Centre during the Plan period.

4. *Industrial Residencies*  
(Outlay Rs. 25 lakhs)

The scheme envisages instituting professorship and guest lectures in polytechnics and engineering colleges to maintain collaboration between teaching institutions and industrial establishments.

5. *Revision of staff structure*  
(Outlay Rs. 15 lakhs)

In order to ensure academic excellence, the staff pattern has to be fixed on a scientific basis, both in academic and administrative fields of the teaching institutions including workshops and laboratories. The outlay is meant for the additional expenditure to be incurred consequent on the revision of staff structure.

6. *Extension Centre of Technical Teachers' Training Institute*  
(Outlay Rs. 5 lakhs)

The Extension Centre presently housed in the Government Polytechnic, Kalamassery, is a joint

endeavour of the State and Central Governments. The Plan provision is for the construction of a separate building for the Extension Centre.

#### 7. *Diversification of Courses*

(Outlay Rs. 40 lakhs)

In the case of engineering colleges, the scheme envisages starting of courses in new emerging technologies like production engineering, micro-electronics, power system and control etc. In respect of Polytechnics the scheme envisages diversification through the introduction of elective subjects, starting of new post-diploma courses in disciplines like industrial electronics, airconditioning and refrigeration, foundry technology, bio-medical engineering etc. With regard to Junior Technical Schools, the scheme is for introduction of new job oriented trades.

#### 8. *Student Amenities*

(Outlay Rs. 10 lakhs)

Most of the technical institutions lack facilities like canteen, mess halls, recreation rooms, auditorium, playgrounds, hostels etc. The provision is for creating such facilities in the institutions.

#### 9. *Establishment of Work Centres*

(Outlay Rs. 0.50 lakh)

Work centres are intended to give training to those who could not get the opportunity to undergo institutionalised training in the skill in which they are engaged. For this purpose, the infrastructure facilities in the Junior Technical Schools and Polytechnics in the State are proposed to be utilised.

#### 10. *Library Development*

(Outlay Rs. 10 lakhs)

The present library facilities are inadequate in most of the Engineering Colleges, Polytechnics and other technical institutions. Besides the purchase of books, the libraries should be provided with furniture and space for proper upkeep and display of books. Reprographic and documentation facilities are also envisaged under the scheme.

#### 11. *Science and Technological Museum*

(Outlay Rs. 10 lakhs)

The Government have sanctioned the establishment of a Science and Technological Museum. Acquisition of site, construction of building, collection of exhibits, creation of an organisational structure etc. are to be undertaken for the implementation of the scheme.

#### 12. *Curriculum Development Centre*

(Outlay Rs. 1.50 lakhs)

The Department has to meet the expenditure of staff and other contingencies of the Extension Centre established at Kalamassery. The Centre is instituted for reorganisation and development of polytechnics education, through teacher training, curriculum development, support materials for courses etc.

#### 13. *Industrial Liaison*

(Outlay Rs. 2 lakhs)

In order to evolve a need-based and job-oriented system of education, the linkage between technical institutions and industries is essential. Project works and guest lectures periodically by expert staff in industry to the students and staff of institutions will be continued. The scheme also envisages co-operative programmes of education and seminars with industrial support in selected fields.

#### 14. *Teaching Aids*

(Outlay Rs. 2 lakhs)

The scheme envisages the establishment of Centres for design and fabrication of teaching aids in selected institutions, which will help to bring out the creative talents of faculty.

#### 15. *Free Supply of Text-books to Scheduled Castes and Scheduled Tribes*

(Outlay Rs. 10 lakhs)

The scheme envisages free supply of text books, uniforms, calculators, instruments etc., to be supplied to the SC/ST students in the engineering colleges, polytechnics and junior technical schools.

#### 16. *Book Banks*

(Outlay Rs. 5 lakhs)

The scheme envisages the supply of books in the Book Banks of the government and private institutions, for the use of economically weaker sections of the students.

#### 17. *Matching Grants for Central Schemes*

(Outlay Rs. 15 lakhs)

When special direct Central assistance is given to the institutions for development, a matching share has to be provided by the State Government. The provision is for meeting the expenditure in respect of such schemes.

#### 18. *Remedial Courses to Reduce Wastage*

(Outlay Rs. 1 lakh)

To reduce wastage and to enable all the students of the weaker sections of the community come to the standard expected of the courses, remedial action in the form of special classes, tutorial sessions etc., is envisaged under the scheme.

#### 19. *Construction of Staff Quarters*

(Outlay Rs. 10 lakhs)

The scheme envisages construction of staff quarters for members of the staff in the various institutions.

#### 20. *Special Coaching for All-India Competitive Examinations*

(Outlay Rs. 0.50 lakh)

The scheme envisages special coaching for students, especially for students coming from weaker sections.



in the All India Engineering Services and other competitive examinations. Special guidance programmes for career development are also envisaged under the scheme.

### 21. Rural Development Centres

(Outlay Rs. 0.50 lakh)

These Centres are expected to identify areas of skill in agriculture and industry on the basis of a survey to find out how many people need basic materials and the topics on which information is needed, for example, small industries, house construction etc.

### 22. Technological University

(Outlay Rs. 1 lakh)

To provide for the proper orientation and growth to technical education, it is necessary that the management of technical education be separated from general education system. Academic autonomy to institutions will be the long-term goal and to start with, autonomy should be given to institutions of proven worth under the direction of a Technological University. A token provision is made for conducting preliminary studies on the establishment of a Technological University in the State.

TABLE 3.38

#### Technical Education—Schemewise Outlay

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	Direction and administration—strengthening of planning and statistical cell, Academic inspection wing and Examination wing	1.99	6.00	6.00	40.00	10.00	9.00	2.00
<i>Government Engineering Colleges and Institutions</i>								
1.	Consolidation of facilities in the Engineering Colleges	20.52	11.00	11.00	50.00	15.00	15.00	6.00
2.	Starting of one Engineering College	..	..	..	20.00	5.00	..	..
3.	Upgrading of one Engineering College	..	16.00	15.00	35.00	5.00	15.00	..
4.	Post graduate courses in the Engineering college, Trivandrum*	12.14	16.00	16.00	..	..	..	..
5.	Post graduate courses in the Engineering College, Trichur *	4.32	10.00	10.00	..	..	..	..
6.	Improvement of Polytechnics and Regional Engineering Colleges	0.38	10.00	..	..	..	..	..
7.	Assistance to computer centre	0.48	1.00	1.00	10.00	..	2.00	..
8.	Part-time courses	2.41	2.00	3.50	15.00	..	3.00	..
9.	Granting of Autonomy to one Engineering College	..	0.50	0.50	2.00	..	0.50	..
<i>Polytechnics</i>								
1.	Consolidation of facilities in Polytechnics (Existing)	5.58	13.00	18.00	60.00	20.00	20.00	8.00
2.	Newly started Polytechnics	..	15.00	15.00	50.00	20.00	17.00	7.00
<i>Junior Technical Schools</i>								
1.	Existing Junior Technical Schools	12.92	4.00	5.00	20.00	5.00	6.00	0.50
2.	Newly started Junior Technical Schools	..	10.50	9.50	50.00	20.00	12.00	3.00
3.	Vocationalisation of Education at Post secondary stage in J. T. Schools	..	2.00	..	2.00	..	2.00	..
<i>Other Institutions</i>								
1.	Pre-vocational Training centre	1.59	3.00	5.00	15.00	3.00	3.00	1.00

\* Now these schemes [have been transferred under centrally sponsored schemes.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2. Centre for Diploma in commercial practice	1.46	3.00	3.00	15.00	2.00	3.00	0.25
3. Tailoring and Garment Making centre/vocational Training centre	1.73	2.40	2.40	10.00	1.00	3.00	0.75
4. Tailoring and garment making training centres for scheduled caste/scheduled tribes (Special component plan)	..	0.10	0.10	2.00	0.50	0.50	..
5. College of Fine Arts	3.49	3.50	5.07	25.00	2.00	5.00	0.50
6. Food Craft Institute Kalamassery and other Extension Centres	2.89	7.50	7.50	20.00	..	7.50	..
<i>Assistance to non-Government Engineering Colleges and Institutions</i>							
1. Private Engineering Colleges	2.79	5.00	5.00	20.00	..	7.00	..
2. Private Polytechnics	0.11	3.00	3.00	10.00	..	5.00	..
3. Assistance to Regional Engineering college, Calicut	3.00	1.00	1.00	6.00	..	2.00	..
<i>Research and Training</i>							
1. Centres of Excellence	..	..	..	1.00	..	..	..
2. Apprenticeship Training	1.12	2.00	2.00	20.00	3.00	2.00	..
3. Management Education	0.12	0.30	0.30	1.00	..	0.20	..
<i>Other Programmes</i>							
1. Faculty Development	7.71	9.00	9.00	45.00	..	10.00	..
2. Modernisation of laboratories	1.50	1.00	1.00	5.00	..	2.00	..
3. Central instrument workshop	..	5.00	5.00	10.00	2.00	5.00	0.50
4. Industrial residencies	0.09	0.50	1.00	2.00	..	1.00	..
5. Revision of staff structure	..	1.00	1.00	15.00	..	2.00	..
6. Extension Centre T.T.T.I.	..	2.00	2.00	5.00	5.00	2.00	2.00
7. Diversification of courses	8.47	6.00	6.00	40.00	..	8.00	..
8. Student Amenities	1.62	1.50	1.50	10.00	1.00	1.50	..
9. Establishment of Work centres	..	0.10	0.10	0.50	..	0.10	..
10. Library Development	3.87	2.00	2.00	10.00	..	2.00	..
11. Science & Technology Museum	..	1.00	0.50	10.00	0.50	3.00	..
12. Curriculum Development Centre	0.41	0.50	0.50	1.50	..	0.50	..
13. Industrial Liaison	0.18	0.50	0.50	2.00	..	0.50	..
14. Teaching aids	0.14	0.30	0.30	2.00	..	0.50	..
15. Free supply of Text Books, instruments, uniforms etc., to Scheduled Caste/Scheduled Tribe (Special Com. Plan)	0.23	0.10	0.10	10.00	..	0.50	..
16. Book Banks	1.17	1.00	1.00	5.00	..	1.00	..
17. Matching grant for Central Schemes	0.93	5.00	5.00	15.00	..	5.00	..
18. Remedial courses to reduce wastage	..	0.50	0.50	1.00	..	0.50	..
19. Construction of Staff quarters	..	5.00	5.00	10.00	10.00	5.00	5.00
20. Special coaching for All India Competitive Examination for eligible students	..	0.10	0.10	0.50	..	0.10	..
21. Rural Development Centres	..	0.10	0.10	0.50	..	0.10	..
22. Technological University	..	..	..	1.00	..	..	..
<b>Total</b>	<b>105.68</b>	<b>190.00</b>	<b>187.07</b>	<b>700.00</b>	<b>130.00</b>	<b>190.00</b>	<b>36.50</b>

## Scientific Services and Research

The need for formulation and effective implementation of plans for the development of science and technology has assumed added importance in the context of the National objective of providing the basic minimum needs of the common man. The State Government have recently reconstituted the State level Committee on Science and Technology representing various disciplines and institutions of importance in the region for advising the Government on programmes for the development of science and technology and also for co-ordinating the activities of various institutions. The following programmes are envisaged during the Sixth Five Year Plan.

### 1. Lal Bahdur Sashthri Engineering Research and Consultancy Centre

(Outlay Rs. 20 lakhs)

This Centre has been established in 1976 mainly to act as a link between technical institutions, Universities and other professional bodies in the State and also to provide consultancy service in Design, Development and Experimentation with respect to industrial problems and projects through the facilities available in the institution. The outlay provided in the plan is for giving financial assistance to the Centre for improvement of existing facilities and for providing additional facilities.

### 2. Shree Chitra Tirunal Institute for Medical Sciences and Technology

(Outlay Rs. 30 lakhs)

The Shree Chithra Thirunal Institute for Medical Sciences and Technology was established in 1973 and is being developed as an Institute of National Importance. The Institute has received grants from the Department of Science and Technology, Government of India, since April 1980 both under the plan and non-plan accounts. An amount of Rs. 220 lakhs was provided in 1980-81. In 1981-82, Rs. 55 lakhs has been received so far. These grants help to sustain the hospital services as well as the research and development activities of the Institute.

The Government of Kerala proposes to provide assistance to the Institute for projects and services which are of importance to the Government and people of Kerala. During 1980-81, the Government of Kerala provided a grant of Rs. 10 lakhs, which enabled the Institute to provide 50% of its entire range of hospital services to the poor patients free of cost. It may be noted that 90% of the patients here hail from Kerala. The financial support from the Government of Kerala, also enabled the Institute to undertake long term studies into the causation and control of endomyocardial fibrosis which is a problem of endemic proportions in Kerala. In order to enable the institute to pursue its studies on regional problems such as Endomyocardial fibrosis and also to ensure that the weaker sections of our population continue to benefit from the services of this Institute, it is necessary that adequate financial support is provided by the Government of Kerala.

### 3. Electronic Research and Development Centre

(Outlay Rs. 145 lakhs)

This Centre started in 1974, as an autonomous institution, is engaged in developing systems and equipments in electronics. The Centre is implementing several projects in the following areas:

- (1) digital equipments and systems
- (2) industrial electronics
- (3) T. V. receivers and systems
- (4) communication equipments and systems
- (5) entertainment equipments
- (6) special project for defence products

In the Sixth Plan, besides expanding the present activities, it is proposed to take up a number of new projects in areas like control instrumentation, mini computers and other data processing systems. The outlay provided is for giving grant to the institution for conducting these activities.

### 4. Kerala Forest Research Institute

(Outlay Rs. 225 lakhs)

The Kerala Forest Research Institute, started in 1975 as an autonomous institution, is engaged in advanced studies and research on conservation, development and management of forests, optimum utilisation of forest products and management of wild life. During the Sixth Plan period the Institute proposes to have a sub centre at Thekkady. Other programmes of the Institute during the period include completion of construction of staff quarters, expansion of library, completion of auditorium and augmentation of water supply system. The provision proposed is for giving grant-in-aid for implementing the above programmes.

### 5. Centre for Water Resources Development and Management

(Outlay Rs. 285 lakhs)

This Centre was established in 1978 with the objective of undertaking inter-disciplinary investigation on different aspects of assessment, conservation, development and management of water resources of Kerala. The Centre proposes to establish its main and regional centres and to take up a number of studies during the Sixth Five Year Plan period. The studies intended to be taken up include short term studies on some urgent and pressing problems of water management, initiation of long term studies of inter-disciplinary nature etc. The works proposed during the Plan period are construction of main office buildings and workshops, roads, quarters etc. Land development layout and procurement of equipments for the technical divisions are also proposed during the plan period. The plan provision is for payment of grant-in-aid to the Centre for implementing these programmes.

### 6. Centre for Development Studies

(Outlay Rs. 85 lakhs)

The Centre for Development Studies, an autonomous institution of excellence, is engaged in studies and research relating to development problems of India in general and of Kerala in particular. The plan provision is for giving assistance to the Center for pursuing its activities.

7. *State Committee on Science and Technology*

(Outlay Rs. 45 lakhs)

The State Committee on Science and Technology has been functioning from 1972 onwards co-ordinating Science and Technology programmes in the State. The outlay proposed in the Plan is for the continuous operation of the Scientific Research Fund and for the award of Kerala State Science and Technology Prize.

8. *Establishment of CSIR Complex*

(Outlay Rs. 80 lakhs)

The CSIR had taken over the Industrial Testing and Research Laboratory in Trivandrum to establish a CSIR complex. The State Government have already agreed for the payment of State's contribution for the CSIR complexes in the State which includes the polytechnology Transfer Centre. The provision is for payment of State's share including acquisition of land for CSIR Complex.

9. *State Committee on environmental Planning and Coordination*

(Outlay Rs. 5 lakhs)

The State Committee on Environmental Planning and Coordination has been constituted with a view to integrating the activities of the institutions engaged in environmental studies in the process of planning and implementation of development programmes. The provision is for meeting the expenses in connection with the functioning of the Committee.

10. *Centre for Earth Science Studies*

(Outlay Rs. 200 lakhs)

This Centre, established in 1978 as an autonomous institution, is engaged in various studies relating to earth sciences. During the Sixth Plan Period this Institution proposes to take up detailed studies to beneficiate and upgrade low grade iron ores, bauxites China clay, glass sand, black sand, graphite and lime stone found in Kerala. An integrated geological, geochemical and geophysical survey of the Shear Zones of Kerala is also proposed. The Centre also proposes to take up studies relating to radiation energy, atmospheric electricity, air-sea interaction, sun-weather relationships, coastal zone managements, continental shelf, river systems etc. It is proposed to acquire land and construct buildings to accommodate the various divisions of the Centre. The outlay proposed is for payment of grant-in-aid for implementing the above programmes.

11. *National Transportation Planning and Research Centre*

(Outlay Rs. 5 lakhs)

There is a proposal to set up a National Transportation Planning and Research Centre by converting the

National Traffic Planning and Automation Centre (NATPAC) as an autonomous centre for studying problems relating to transportation and traffic movements in the State. The plan provision earmarked is for advance action in connection with the establishment of the Centre.

12. *Environmental and Ecological Studies*

(Outlay Rs. 5 lakhs)

The State is facing problems of pollution and erosion to the natural scenic attractions of Kerala. It is therefore considered necessary to establish a Centre for undertaking environmental and ecological studies on all major projects. The outlay proposed is for advance action in connection with the establishment of the Centre.

13. *Tropical Botanical Garden and Research Institute*

(Outlay Rs. 25 lakhs)

The Tropical Botanical Garden and Research Institute was established in 1979 as an autonomous society for carrying out botanical, horticultural and chemical research for plant improvement and for introducing and cultivating plants from other countries. The Institute proposes to acquire and develop land, provide water supply and other infrastructure facilities. The outlay proposed is for giving grant-in-aid to the Institute for these works, development of library and documentation section and for other preliminary expenses.

14. *Indian Institute for Regional Development Studies*

(Outlay Rs. 20 lakhs)

This Institute is a society registered in 1976 under Travancore-Cochin Literary, Scientific and Charitable Society Registration Act 1955. Government have sanctioned a recurring grant of Rs. 1 lakh and a capital grant-in-aid for the building complex. The outlay proposed includes the capital grant and the annual recurring grant to enable the Institute to carry out regional development studies.

15. *New Research and Development Centres*

(Outlay Rs. 25 lakhs)

An amount of Rs. 25 lakhs is earmarked in the plan for the conduct of new research and for setting up of new development centres (including University Scientific Centre). The aim is to strengthen the Scientific infrastructure in the universities.

TABLE 3

## Scientific Services and Research—Outlay and Expenditure

(Rs. in lakhs)

Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Lal Bahadur Sastri Engineering Research and Consultancy Centre	2.00	1.00	1.00	20.00	10.00	5.00	1.50
2. Sree Chithra Thirunal Medical Centre	120.00	10.00	10.00	30.00	..	10.00	..
3. Electronic Research and Development Centre	39.57	35.00	45.00	145.00	48.00	45.00	13.00
4. Kerala Forest Research Institute	45.89	35.00	55.00	225.00	135.00	65.00	27.00
5. Centre for Water Resources Development and Management	47.12	100.00	100.00	285.00	190.00	75.00	45.00
6. Centre for Development Studies	13.39	8.00	20.00	85.00	34.00	20.00	5.00
7. Kerala Sasthra Sahitya Parishat	1.90	..	..	..	..	..	..
8. State Committee on Science and Technology	2.96	6.00	6.00	45.00	..	7.00	..
9. Establishment of C.S.I.R. Complex	1.50	19.00	19.00	80.00	..	20.00	..
10. State Committee on Environmental Planning and Co-ordination	..	1.00	1.00	5.00	..	1.00	..
11. Centre for Earth Sciences Studies	48.88	70.00	68.00	200.00	108.00	70.00	30.00
12. National Transportation Planning and Research Centre	..	1.00	1.00	5.00	..	2.00	..
13. Environmental and Ecological Studies	..	1.00	1.00	5.00	..	1.00	..
14. Tropical Botanical Garden and Research Institute	1.00	10.00	10.00	25.00	15.00	5.00	3.00
15. Indian Institute for Regional Development Studies	2.00	1.00	1.00	20.00	15.00	8.00	7.00
16. New Research & Development Centres including University Research Centre	..	1.00	1.00	25.00	15.00	6.00	3.00
17. Science Centre	1.00	1.00	1.00	..	..	..	..
Total—Scientific Services and Research	327.21	300.00	340.00	1200.00	570.00	340.00	134.50

**Health**

Health services in Kerala are of high standard in comparison to many other States in India. The health care system in the State however is still under-developed. The classification of medical institutions is neither service oriented nor based on the concept of integrated medical and health care. The number and distribution of institutions are not need-based which led to the concentration of medical institutions in the urban areas resulting in the widening of regional disparities. One could see wide disparity in the number of institutions from district to district and even from panchayat to panchayat. The High Power Committee on Health Services headed by Dr. K. N. Pai has summarised the drawbacks of the existing set-up to over-crowding in hospitals, lack

of cleanliness, inefficient emergency services, unserviceable state of many costly items of equipments, inefficient clinical facilities and gross inadequacy of drugs and hospital supplies. There is demand for more institutions, inpatient facilities and better quality medical and para-medical personnel.

Though Kerala has achieved the norm of bed population ratio viz. one bed per thousand population in 1969-70 itself, inspite of the high density of population in the State, the bed population ratio is less than the desired norm in the districts of Idukki, Malappuram, Palghat, Quilon and Cannanore. The network of medical institutions of the three flourishing systems of medicine in the State viz., Allopathy, Ayurveda and Homoeopathy, provides every panchayat with atleast a

Government medical institution. In addition to this, there is a large number of well-run private institutions. The Pai Committee recommends the increase of both the number and beds of institutions so as to make available to the people health and medical care at their easy reach. Management and supervision will have to be strengthened in order to rectify the defects in the proper utilisation of the existing infrastructure.

A short description of the schemes proposed to be taken up in the plan period 1980-85 is given below:—

### Minimum Needs Programme

#### 1. *Primary Health Centres—Strengthening of Primary Health Centres and Sub-Centres and Starting New Ones*

(Outlay Rs. 405 lakhs).

This scheme is intended for the improvement of medical and health facilities of the rural people. The present norms of one P.H. Centre for every lakh of population and one sub-centre for every 10,000 population are to be revised to one P.H. Centre for every 80,000 population and one sub-centre for every 5000 population. The outlay earmarked will be utilised for the realisation of the above objective. A sum of Rs. 55 lakhs is set apart as the Special Component Plan for scheduled castes and scheduled tribes.

#### 2. *Drugs for Existing Sub-Centres*

(Outlay Rs. 126 lakhs).

The Plan provision is for the supply of drugs to the existing and new sub centres and other institutions. An amount of Rs. 21 lakhs is the outlay for special component plan for scheduled castes.

#### 3. *Mobile Medical Unit for Tribal Block, Attappady*

(Outlay Rs. 15 lakhs).

The provision made is for the construction of buildings and for appointment of staff in the P.H. Centres in the Tribal Block at Attappady.

#### 4. *Rural Dispensaries in Backward Areas*

(Outlay Rs. 150 lakhs)\*

The plan provision made is for starting Government rural dispensaries in all the panchayats where there is no dispensary at present and improvement of facilities in the existing rural dispensaries and hospitals. The share of the special component plan for the scheme is Rs. 60 lakhs.

#### 5. *Community Health Workers Scheme*

(Outlay Rs. 61 lakhs)

This scheme introduced by the Government of India envisages the training of members of the local community, in health and health delivery so as to impart the basic knowledge about health care to the local people. The training will relate to subjects like prevailing health problems, promotion of nutrition basic sanitation, maternal and child health care, family planning, immunisation etc. In view of the well-developed health delivery system of the State, the

Government of India accorded approval for a modified form of community worker scheme to be introduced in the State which contemplates a better scientific approach to meet the basic health needs of the rural population of Kerala. This includes special services for children by appointing paediatricians in P.H. Centres, laboratory services for the rural population and provision of more medicines to the rural patients. The outlay proposed in the Plan is the State share for the implementation of this revised scheme.

### II. *Hospitals and Dispensaries*

#### 1. *Improvement of Health Care and Delivery System*

(Outlay Rs. 185 lakhs).

This scheme which contains some of the important recommendations of the Pai Committee Report is the major scheme under hospitals and dispensaries. The scheme includes the following minor schemes which are intended for raising the efficiency of the institutions: raising bed strength in district hospitals, introducing all essential specialities in district hospitals, better equipment to major hospitals including sterilizer, raising bed strength in taluk headquarters hospitals, providing specialities, opening new units and strengthening of medical record section in taluk hospitals, improvement of health care system and continuing specialities in major hospitals.

#### 2. *Construction of District Hospital Buildings at Idukki and Malappuram*

(Outlay Rs. 15 lakhs).

The amount provided in the Plan will be utilised for construction of buildings for district hospitals, Malappuram and Idukki.

#### 3. *Institute for Mental Health and Neuro Science*

(Outlay Rs. 15 lakhs).

The present mental health care in the State is mainly confined to the three mental hospitals at Trivandrum, Trichur and Calicut. Only meagre facilities are available at the district hospitals. Nearly one per cent of the population suffer from mental illness, severe enough to pay urgent attention and another 4 to 6 per cent suffer from mental disorder. An Institute of Mental Health and Neuro Science may be established by amalgamating the mental hospital at Calicut or Trivandrum. The Institute will serve as a co-ordinating centre. The scheme is yet to be taken up. The R & D for the proposed Institute for Research, Education, Training and Rehabilitation of the Mentally retarded will also be undertaken by this Institute.

#### 4. *Opening New Taluk Hospitals at Devikulam Peermade, Udumbanchola etc.*

(Outlay Rs. 15 lakhs).

The Plan provision is for improving taluk headquarters hospitals at Peermade, Devikulam and Udumbanchola.

#### 5. *Polyclinics in District and General Hospitals*

(Outlay Rs. 29 lakhs).

Only three district hospitals at Cannanore, Pithat and Trichur have at present the facilities of Polyclinics.

The remaining eight district hospitals will be provided with polyclinics for which financial provision is made in the Plan.

6. *Construction of Building and Provision of Vehicles to District Medical Stores*

(Outlay Rs. 10 lakhs)

The provision is for completing the spillover works relating to this scheme.

7. *Improving Medical Facilities in Idukki District*

(Outlay Rs. 5 lakhs)

The outlay earmarked will be utilised for improving the medical facilities in Idukki District by constructing additional buildings, by providing additional staff and vehicles suitable to the difficult terrains.

8. *Providing Ambulance Vans in District and Taluk Hospitals*

(Outlay Rs. 5 lakhs)

The outlay allocated is for the purchase of ambulance vans in district and taluk head quarters hospitals.

9. *Health Transport including Mobile unit for Repairs and Maintenance of Hospital Equipments.*

(Outlay Rs. 9 lakhs)

The outlay proposed is for starting few more additional mobile workshops in order to carry out the maintenance work more efficiently. It is also proposed to start one more mobile health equipment repair unit.

10. *Drug Banks in District Hospitals*

(Outlay Rs. 4.60 lakhs)

Drugs Banks will be opened in District hospitals with the assistance of Rotary clubs, Medical Associations and other organisations. The provision is for meeting the salary of the pharmacists.

11. *Mobile Dispensary Kuttanad*

(Outlay Rs. 3 lakhs)

The provision is for the continuance of the (floating) dispensary sanctioned for Kuttanad area, for the purchase of medicine, for appointment of necessary staff etc.

12. *Revision of Staff Pattern (Nurses)*

(Outlay Rs. 33.30 lakhs)

The provision made in the plan is for appointment of staff nurses in order to raise the nurse-bed ratio and also for the continuance of the staff already sanctioned.

13. *Health Care Programme in Selected Areas*

Certain areas are selected under the Health Care Programme. All families in the selected areas will be given medical check up at regular intervals. The allocation for this is to carry out this programme.

14. *Cancer Detection Centre in District Hospitals*

(Outlay Rs. 15 lakhs)

The amount provided in the Plan will be utilised for starting cancer detection centres at district hospitals as a part of cancer control programmes.

15. *Opening of District office and office of the District Medical Officer (Health) Wynad*

(Outlay Rs. 5.50 lakhs)

The provision proposed is for meeting expenditure on opening of office of the District Medical Officer of Health, district medical store etc., for the proposed Wynad district.

16. *Janatha Payward and Payward Scheme*

(Outlay Rs. 180 lakhs)

Janatha paywards are proposed to be started in district and taluk hospitals. The Kerala Health Research and Welfare Society will be entrusted with this work. The provision made is the State Government share in the capital expenditure for the construction of payward.

17. *Construction of Staff Quarters for Rural dispensaries (KFR & Ws.)*

(Outlay Rs. 40 lakhs)

The outlay provided will be utilised for the construction of staff quarters for the Rural dispensaries.

*Medical Education and Research*

1. *Medical College Trivandrum*

(Outlay Rs. 170 lakhs)

The Medical College, Trivandrum, which is nearing 30 years of existence, has a well consolidated undergraduate programme. The State is facing shortage in post graduates in clinical subjects necessitating the increase of seats for Post Graduate Course. There is need for increasing paramedical seats also. Separate programmes have to be carried out for the development of new specialities like oncology, chest diseases, Neurology, gastro-enterology etc. The Plan provision includes the cost of the implementation of schemes under gastro-enterology and centre for respiratory allergy and antigen manufacture.

2. *Medical College Kottayam*

(Outlay Rs. 170 lakhs)

The Medical College, Kottayam, is still functioning in an old building and accommodation for the staff is also inadequate. A separate block for obstetrics and gynaecology department near to the Institute of Child Health in the Medical College Campus is also necessary. The Construction of the College building will be completed during the sixth Plan period. The provision includes the expenditure for the development of the Institute of Child Health.

3. *Medical College Alleppey*

(Outlay Rs. 170 lakhs)

The T.D. Medical College, Alleppey, was a private college, the administration of which was taken over

by the Government during 1967 for a period of five years. Finally the college was vested with the Government from 1973. It is essential to complete the work of the hospital building during the Sixth Plan period. Development of pre and para clinical department, development of specialities, provision of equipment, construction of college and hospital buildings, construction of school of nursing, pharmacy building etc., are some of the schemes proposed to be implemented during the plan period.

4. *Medical College, Calicut*

(Outlay Rs. 165 lakhs)

Medical College, Calicut, started in 1957 has grown into a large complex with the intake capacity of 180 students at the undergraduate level, and with post graduate courses in different branches of medicine. Admission to the M.B.B.S course has been enhanced to 200 from 1980-81. It has been proposed to increase the number of seats in various post graduate courses also. New specialities have to be started to keep pace with the rapidly expanding frontiers of medical science. The outlay earmarked is for the above purposes.

5. *Regional Limb Fitting Centre, Medical College, Trivandrum*

(Outlay Rs. 15 lakhs)

The amount provided is the matching grant which has to be paid by the State Government to the Regional Limb Fitting Centre according to the contract entered into between the State and ALIMCO, Poona.

6. *Nursing Education—Paramedical Training Programme and Training of Health Visitors in P.H. Nursing*

(Outlay Rs. 40 lakhs)

The provision made in the Plan is for continuance of the training programme for nurses. The training of general nurses is continued in district hospitals. The annual intake of trainees has increased from 245 to 270.

7. *College of Pharmaceutical Science, Trivandrum*

(Outlay Rs. 10 lakhs)

A separate building for the Pharmaceutical College was constructed in the Medical College, Trivandrum, in 1975. There is no sufficient accommodation in the college due to the non-completion of the second floor as was originally planned. The outlay earmarked will be utilised for the construction of the second floor and starting of M. Pharm. course.

8. *Reorientation of Medical Education and Upgradation of the Department of Ophthalmology—State Share*

(Outlay Rs. 55 lakhs)

This is a centrally sponsored scheme with 50 per cent central assistance. The amount provided is for the implementation of the scheme in the three Medical Colleges of Trivandrum, Kottayam and Calicut.

9. *Providing Generators in Medical College Hospitals*

(Outlay Rs. 5 lakhs)

The Sixth Plan provision is for installing generators in all the Medical College hospitals in the State.

10. *Establishment of Regional Cancer Institute, Trivandrum—State Share*

(Outlay Rs. 60 lakhs)

The Cancer Institute at Trivandrum is proposed to be raised to the status of a Regional Cancer Centre of national reputation. The Institute is proposed as a scheme having 100 per cent central assistance. The amount provided in the plan is a token provision to meet the initial expenses.

11. *Dental College*

(Outlay Rs. 30 lakhs)

The present facilities in the Dental College, Trivandrum, are grossly inadequate to meet the academic/service activities of the college. The additional construction required by the college can be done on a phased programme. The amount earmarked for the development of the college is proposed to be utilised for the purchase of equipments/instruments, furniture, books, for starting Maxillo facial surgery etc. The high incidence of oral cancer necessitates the starting of a Maxillo facial surgery unit in the college. Further, the staff pattern of the College was fixed in 1965. This has to be revised in the light of the increased academic and service load. It is also proposed to provide refresher course in dentistry. The Dental Council of India insisted that community dentistry should be taught in dental colleges. The scheme would involve the procurement of mobile van and organisation of dental clinics in rural centres in order to expose the students to the dental problems of the community. The outlay includes provision for this scheme also.

12. *Training of Teachers in Specialities and Continuing Medical Education*

(Outlay Rs. 10 lakhs)

The Plan outlay is for continuing the training programme for specialists and teaching staff in the medical colleges.

For the various schemes under medical education and research a total amount of Rs. 900 lakhs is earmarked in the Sixth Plan.

*Public Health and Sanitation*

*Control of Communicable Diseases*

1. *Tuberculosis*

(Outlay Rs. 45 lakhs)

Of the total outlay of Rs. 45 lakhs, an amount of Rs. 5 lakhs is for the operational cost of the scheme and Rs. 40 lakhs is the State's share for carrying out this centrally sponsored scheme.

2. *National Malaria Eradication Programme*

(Outlay Rs. 100 lakhs)

Of the total outlay of Rs. 100 lakhs, an amount of Rs. 35 lakhs is the additional cost for the continuance



of the Malaria Eradication Programme. The expenditure for the creation of posts of District Malaria Officers, laboratory technicians and Basic Health Workers and the extra cost on focal spray operations will have to be met from this amount. The balance amount of Rs. 65 lakhs is the State's share of this centrally sponsored Scheme,

### 3. *Filaria Control (State Share)*

(Outlay Rs. 60 lakhs)

The outlay set apart is for the continuance of the existing two filaria control units and four clinics. It is proposed to start new units and clinics during the Sixth Plan period.

### 4. *Cholera*

(Outlay Rs. 5 lakhs)

The outlay made in the Plan is the State's share of the centrally sponsored scheme for control of cholera.

### 5. *Leprosy Control (State Share)*

(Outlay Rs. 6.60 lakhs)

The Plan provision represents the State's share of the Centrally sponsored scheme for leprosy control.

### 6. *Control of Sexually Transmitted Diseases (State Share)*

(Outlay Rs. 25 lakhs)

The State Plan provision represents the State's share for this scheme.

### 7. *Prevention of Blindness including Prevention of Visual Impairment and Control of Blindness—Mobile Units—(State share)*

(Outlay Rs. 22 lakhs)

The Plan provision represents the State's share for the implementation of this programme.

### 8. *Training and Employment of Multi-purpose Workers (State Share)*

(Outlay Rs. 70 lakhs)

The multipurpose worker scheme is a centrally sponsored scheme with 50 per cent central assistance. The Scheme is being implemented in two districts with effect from 1-4-1978. It is continued in the P.H. Centre level in districts and at the training centres. The number of persons trained is comparatively less in the districts of Alleppey, Kottayam, Idukki, Ernakulam and Trichur. The training programme has to be strengthened in these districts. The outlay proposed in the Plan is the State's share for the implementation of the scheme.

### 9. *Mass immunisation Programme*

(Outlay Rs. 15 lakhs)

The amount earmarked in the Plan is for the continuance of the programme of preventive inoculation against tuberculosis, small pox, diphtheria, tetanus and whooping cough among children in the age group 0 to 5.

## *Other Systems of Medicines*

### *Indian Systems of Medicine*

#### *Ayurveda—Minimum Needs Programme*

##### 1. *Opening of New Dispensaries*

(Outlay Rs. 58 lakhs)

The aim of this scheme is provision of an Ayurveda dispensary in the Panchayats in which there is no Government Ayurveda institution at present. An amount of Rs. 58 lakhs has been provided in the Sixth Plan for starting new Ayurveda Dispensaries. Out of this total provision, an amount of Rs. 18 lakhs is earmarked for the benefit of the people belonging to Scheduled Caste/Scheduled Tribes.

##### 2. *Upgrading Dispensaries into Hospitals*

(Outlay Rs. 14 lakhs)

Many dispensaries, started more than two decades ago, still remain without adding to their facilities though the number of beneficiaries around the locality has increased considerably. It is intended to upgrade the dispensaries into hospitals where there is urgent need. An outlay of Rs. 14 lakhs is envisaged for this Scheme in the Sixth Plan.

##### 3. *Opening of New Ayurveda Hospitals in Rural Areas*

(Outlay Rs. 29 lakhs)

The Ayurveda hospitals functioning in rural areas are very few in number. Under this scheme it is proposed to provide more number of hospitals in rural areas. An amount of Rs. 29 lakhs is set apart in the plan for the scheme. Out of the total provision an amount of Rs. 9 lakhs is allotted for the benefit of people belonging to Scheduled Castes and Scheduled Tribes.

##### 4. *Construction of Building to Ayurveda Hospitals and Dispensaries and Increasing Bed Strength*

(Outlay Rs. 18 lakhs)

A large number of Ayurveda institutions are run in inconvenient rented buildings. The number of beds in these institutions is also limited. Hence more buildings are to be constructed during the Sixth Plan period. Simultaneously the number of beds is to be increased in the existing hospitals. An amount of Rs. 18 lakhs is provided for the implementation of this scheme in the Plan.

##### 5. *Construction of Nurse's Quarters to Hospitals in Rural areas*

(Outlay Rs. 13 lakhs)

Accommodation facilities are quite poor in rural areas where most of the departmental hospitals are situated. The Plan outlay provided will be used for the construction of nurses' quarters near the hospitals.

##### 6. *Starting of Mobile Dispensaries*

(Outlay Rs. 5 lakhs)

Mobile dispensaries are more useful in remote rural areas where travelling facilities for the public are poor.

At present there is only one mobile dispensary under the Department of Indigenous Medicine. So more mobile units are to be started during the plan period. An amount of Rs. 5 lakhs is earmarked in the Plan for this scheme.

#### *Hospitals and Dispensaries*

##### 1. *Construction of Buildings to Ayurveda Hospitals*

(Outlay Rs. 8 lakhs)

Many of the Ayurveda hospitals in the State are accommodated in inconvenient rented buildings. Hence more buildings are to be constructed to suit the requirements of the hospitals during the plan period. An amount of Rs. 8 lakhs is allotted for this purpose.

##### 2. *Construction of Buildings to District Hospitals*

(Outlay Rs. 2 lakhs)

Provision of Rs. 2 lakhs is provided for the construction of Ayurveda District Hospital buildings.

##### 3. *Raising the Status of Hospitals into District Hospitals*

(Outlay Rs. 8 lakhs)

At present, only five districts, viz., Quilon, Ernakulam, Trichur, Palghat and Cannanore have hospitals of the status of a district hospital. It is proposed to raise the status of the hospitals at the District headquarters to that of District hospitals by increasing their bed strength and by providing facilities for different special treatments. The amount allotted for the scheme in the plan is Rs. 8 lakhs.

##### 4. (a) *Strengthening of Staff in the Directorate of Indian systems of Medicine*

(Outlay Rs. 5 lakhs)

For the efficient working of the Directorate additional staff is necessary. The outlay provided for the strengthening of staff in the Directorate is Rs. 5 lakhs.

##### 4. (b) *Strengthening of Administrative Wing in the District Offices*

(Outlay Rs. 5 lakhs)

The District Offices of the Directorate have to function with wider powers particularly at the time of introduction of District Administration programmes. For this, additional staff is required in the District Offices. The scheme envisaged in the Plan is to strengthen the administrative wing at the district level for which an amount of Rs. 5 lakhs is allotted.

##### 5. *Improvement of Mental Hospital at Kottakkal*

(Outlay Rs. 3 lakhs)

The outlay provided in the plan under this scheme is for the improvement of the existing facilities in the Mental Hospital at Kottakkal.

##### 6. *Establishment of Sidha Vaidya Hospitals and Dispensaries*

(Outlay Rs. 1 lakh)

An amount of Rs. 1 lakh is allotted in the Plan for opening more sidha dispensaries in the State.

##### 7. *Purchase of Vehicles for the Directorate and District Offices*

(Outlay Rs. 7 lakhs)

An outlay of Rs. 7 lakhs is earmarked in the Sixth Plan for the purchase of vehicles for the Directorate and District Offices.

##### 8. *Starting of 'Marma' Section in Taluk Hospitals and Development of Panchakarma*

(Outlay Rs. 2 lakhs)

Facilities for 'Marma' and 'Panchakarma' treatments are not available in most of the ayurveda hospitals. An outlay of Rs. 2 lakhs is allotted in the plan to provide necessary facilities in hospitals so that they can undertake 'Marma' and 'Panchakarma' treatments.

##### 9. *Nature Cure Centre, Varkala*

(Outlay Rs. 6 lakhs)

Nature cure is found to be very effective for certain types of diseases. The aim of the scheme is to start a Nature Cure Centre at Varkala and to provide necessary buildings for its effective functioning. The amount allotted for the scheme is Rs. 6 lakhs.

##### 10. *Opening of New Hospitals other than in Rural Areas*

(Outlay Rs. 7 lakhs)

There are no ayurveda hospitals in certain taluks and urban areas. The aim of the scheme is to start new hospitals in such areas. The amount provided in the plan for this scheme is Rs. 7 lakhs.

##### 11. *Regional Research Institute, Poojappura (including Model Demonstration Garden of Herbs and Botanical Gardens)*

(Outlay Rs. 35 lakhs)

The programme is to construct buildings for the Post-graduate Centre, RRI, Poojappura, Publication Division and Drugs Standardisation Unit at the proposed site in the Ayurveda Research Institute compound at Poojappura. The construction of buildings for accommodating Post-graduate Centre in Ayurveda including college building, hospital wards, hostels etc. has to be taken up in a phased programme. The total outlay earmarked for the scheme in the Sixth Plan is Rs. 35 lakhs.

##### 12. *Improvement of Central Store and Establishment of District Stores*

(Outlay Rs. 10 lakhs)

It is proposed to open stores in various districts and make further improvements to the Central Store attached to the Directorate. The outlay provided in the plan for the implementation of the scheme is Rs. 10 lakhs.

13. *Construction of Buildings for District Offices*

(Outlay Rs. 2 lakhs)

It is proposed to construct buildings to house the District Offices in those district headquarters where Government land is available. The outlay provided for the period 1980-85 is meant for the completion of works that have already been started.

14. *Raising the Bed strength in the District Ayurveda Hospitals.*

(Outlay Rs. 8 lakhs)

The bed strength of the district hospitals is only 50 which is found to be inadequate. Also no separate allocation of beds is made for those patients undergoing treatments of special cases like Visha, Netra, Marma, etc. Therefore it is proposed to increase the bed strength in district hospitals from 50 to 200. The outlay provided for this scheme in the Plan is Rs. 8 lakhs.

*Education (Ayurveda)*1. *Construction of buildings for Pharmacy, Hostel, Hospital, College and Staff Quarters for the Ayurveda College, Trippunithura*

(Outlay Rs. 35 lakhs)

The staff and students of the Ayurveda College, Trippunithura, are experiencing difficulties due to the lack of residential facilities. The present bed strength in the hospital is insufficient for imparting clinical training to students. Construction of blocks for two departments, "Swasthavrittha" and "Sanskrit Samhita and Sidhantha" is also necessary. There are no facilities for out patient section in the present collegiate hospital. As the construction of the above buildings are creation of additional facilities, an essential provision of Rs. 35 lakhs is earmarked in the Plan.

2. *Degree Course in Pharmacy*

(Outlay Rs. 3 lakhs)

It is proposed to start a degree course in pharmacy in the Ayurveda College at Trivandrum since there is no pharmacy course in Ayurveda in Kerala. Preliminary facilities to be provided are Physics and Chemistry laboratories and museum as required in the syllabus. A sum of Rs. 3 lakhs is set apart for this purpose in the Plan.

3. *Ayurveda College, Trivandrum*

(Outlay Rs. 10 lakhs)

This scheme aims at the general development of Ayurveda College at Trivandrum. The B.A. M.S. degree course has been started from the year 1979-80. The staff pattern and facilities prescribed by the Central Council will have to be made available here also. The scheme is intended to meet the salary of staff and purchase of equipments. An amount of Rs. 10 lakhs is earmarked for the scheme in the Plan.

4. *Grant-in-aid to Private Ayurveda College at Shornur, Kottakkal and Ollur*

(Outlay Rs. 3 lakhs)

An outlay of Rs. 3 lakhs is allotted in the Plan for providing grants to private Ayurveda Colleges at Shornur, Kottakkal and Ollur to improve the facilities in these colleges.

5. *Construction of Men's and Ladies Hostels, Staff Quarters, Pharmacy Building etc., for Ayurveda College, Trivandrum.*

(Outlay Rs. 20 lakhs)

The construction of staff quarters and one hostel to students is yet to be completed. Additional buildings for the expansion of various units in the Ayurveda College at Trivandrum are also necessary. For this purpose, a total outlay of Rs. 20 lakhs is provided in the Plan.

6. *Expansion of Collegiate Hospital at Trivandrum*

(Outlay Rs. 8 lakhs)

The Collegiate Hospital at Trivandrum is now having only a bed strength of 210 while the Maternity Hospital is having a bed strength of 64. But considering the strength of students more beds are required for their clinical training. A provision of Rs. 8 lakhs is allotted in the Plan for the expansion of Collegiate Hospital at Trivandrum.

7. *Payward Facilities for Ayurveda College hospitals.*

(Outlay Rs. 10 lakhs)

At present there are no paywards attached to the Ayurveda College Hospital at Trivandrum. A provision of Rs. 10 lakhs is earmarked in the Plan for constructing paywards.

8. *Strengthening of Publication Division - Ayurveda College, Trivandrum.*

(Outlay Rs. 6 lakhs)

Ayurveda text books and reference books are very rare. Hence sufficient copies of text books and reference books will have to be printed and published immediately. There are books which require reprinting also. Hence an amount of Rs. 6 lakhs is earmarked in the Plan to strengthen the Publication Division of the Ayurveda College at Trivandrum.

9. *Ayurveda College, Trippunithura*

(Outlay Rs. 12 lakhs)

The main aim of this scheme is strengthening of the major departments in the Ayurveda College at Trippunithura. The outlay provided in the plan for the scheme is Rs. 12 lakhs.

10. *Training Programme for Nurses and Pharmacists*

(Outlay Rs. 2 lakhs)

There are no sufficient candidates for appointment as Nurses and Pharmacists. Regular training courses are to be conducted until sufficient number of candidates becomes available. A provision of Rs. 2 lakhs is earmarked in the Plan for conducting training courses.

11. *Training in Prakrithi Chikilsa*

(Outlay Rs. 2 lakhs)

The nature cure system of treatment has proved an effective system in curing a good number of diseases. At present there is no training centre in the Public sector for this system of treatment in Kerala. The amount allotted in the plan will be used for starting a Prakrithi Chikilsa Centre at Trivandrum.

12. *Collection and Preservation of Manuscripts*

(Outlay Rs. 3 lakhs)

There are numerous palmleaf and hand-written manuscripts in the custody of traditional physicians in the rural parts of Kerala and also with the erstwhile royal families. Strenuous efforts are to be made to identify these custodians and get the manuscripts, copied and translated. A survey, personal perusal, collection of data, preparation of the catalogue etc. are the items of work to be done in this field. A sum of Rs. 3 lakhs is set apart for this purpose in the Plan.

13. *Preparation of Text Books*

(Outlay Rs. 4 lakhs)

Suitable text books are not available for ayurveda students studying at graduate and post-graduate levels. Hence priority should be given for the publication of text books for these students. Amount allotted for the scheme in the Sixth Plan is Rs. 4 lakhs.

14. *Expansion of Collegiate Libraries*

(Outlay Rs. 4 lakhs)

Publications dealing with medical science should be procured and kept for reference for the students and staff of Ayurveda Colleges. An outlay of Rs. 4 lakhs is provided for the expansion of collegiate libraries during the plan period.

15. *Specialisation in various Branches of Ayurveda*

(Outlay Rs. 2 lakhs)

Facilities will have to be provided for the graduates in Ayurveda to specialise in subjects according to their talent. This will help to improve the system of education and treatment. The amount allotted for this purpose in the plan is Rs. 2 lakhs.

16. *Condensed Degree Course for Diploma Holders*

(Outlay Rs. 2.50 lakhs)

The aim of the condensed degree course is to conduct degree courses for the benefit of Ayurveda diploma holders. A sum of Rs. 2.50 lakhs is earmarked for this programme in the Plan.

17. *Refresher Course for Paramedical Staff, Teachers and Medical Officers*

(Outlay Rs. 2.50 lakhs)

Teachers, Medical Officers and Private practitioners practising Ayurveda do not get any chance to learn advanced theory and treatment due to various reasons. Periodical refresher courses will be very helpful for them. The outlay of Rs. 2.50 lakhs allotted in this Plan will be utilised for conducting refresher courses.

**II Homoeopathy***I. Minimum Needs Programme**1. Rural Dispensaries*

(Outlay Rs. 60 lakhs)

It is proposed to start one dispensary in each Panchayat on a phased programme. The Plan provision will be used for the maintenance of the existing dispensaries as also to open new ones. A sum of Rs. 60 lakhs is allotted for the scheme in the Sixth Plan out of which an amount of Rs. 20 lakhs will be for the benefit of Scheduled Castes and Scheduled Tribes.

*II. Hospital and Dispensaries**1. Construction of Buildings for Existing Hospitals and Dispensaries*

(Outlay Rs. 5 lakhs)

At present most of the hospitals and dispensaries are housed in rented buildings. New buildings are to be constructed for these institutions on a phased programme. Construction of buildings may be undertaken for Government Homoeopathic hospitals at Palghat and Neeleshwar and for dispensaries at Ernakulam and Vellora and other places where Government land is available. The amount allotted for the period 1980-85 under this scheme is Rs. 5 lakhs.

*2. District Hospitals and Dispensaries (including opening of Hospitals and Dispensaries in Idukki, Malappuram and Quilon Districts)*

(Outlay Rs. 12 lakhs)

The plan provision is for maintenance of the hospital at Idukki, maintenance of the existing dispensaries at Malappuram and Idukki districts and for starting a 25 bedded hospital at Quilon.

*3. Strengthening of Administrative Machinery including Building for the Directorate*

(Outlay Rs. 5 lakhs)

The administrative machinery in the Directorate has to be strengthened to cope with the increase in workload. The Directorate is now housed in a rented building. A provision of Rs. 5 lakhs is made for strengthening the administrative machinery and for the construction of building for the Directorate.

#### 4. District Offices

(Outlay Rs. 3 lakhs)

An amount of Rs. 3 lakhs is earmarked in the Plan for the continuance of the two district offices opened during the year 1979-80.

#### 5. Taluk Hospitals

(Outlay Rs. 14 lakhs)

The purpose of the scheme is to open 25 bedded hospitals in each taluk where the health care facilities are relatively poor. The amount provided for this scheme in the Plan is Rs. 14 lakhs.

#### 6. Increasing Bed Strength in District and Taluk Hospitals

(Outlay Rs. 1 lakh)

At present there are only 260 hospital beds in the State under the homoeopathic system of medicine. The Plan provision is intended for the maintenance of additional beds proposed to be sanctioned this year and to increase the bed strength in more hospitals.

#### 7. Providing Modern Equipments and Other Facilities in Hospitals

(Outlay Rs. 1.50 lakhs)

Modern devices like laboratory facilities and other diagnostic amenities in 14 hospitals to facilitate quick diagnosis will have to be made available. At least the district Headquarters hospitals should be equipped with these essential facilities. The provision made for this programme in the Plan is Rs. 1.5 lakhs.

#### 8. Starting of Drug Units

(Outlay Rs. 6 lakhs)

There is already a Pharmacy in the co-operative sector for the manufacture of homoeo medicines. But medicines produced by this Pharmacy are not sufficient. It is proposed to start a Drug Unit in Public sector for the manufacture of homoeo medicines mainly for supplying to Departmental hospitals and dispensaries. The amount provided for the scheme in the Plan is Rs. 6 lakhs.

#### 9. Co-operative Society for the Manufacture of Homoeo Medicines

(Outlay Rs. 1.50 lakhs)

There is a homoeopathic co-operative pharmacy functioning at Alleppey where homoeo medicines are manufactured. The outlay of Rs. 1.50 lakhs is provided in the Plan for giving financial assistance to this co-operative society.

#### 10. Purchase of Departmental vehicles

(Outlay Rs. 4 lakhs)

The outlay of Rs. 4 lakhs is allotted for the purchase of three departmental vehicles during the Plan period.

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### III. Education

#### 1. Starting of Degree College and Hospital

(Outlay Rs. 10 lakhs)

The existing degree college in homoeopathy is located at Calicut. A provision of Rs. 10 lakhs is made in the Plan for starting a new degree college and collegiate hospital in the southern part of Kerala.

#### 2. Development of Existing Homoeopathic Degree College Kozhikode and construction of Hospital Buildings.

(Outlay Rs. 50 lakhs)

The overall development of the College and Collegiate Hospital at Kozhikode is highly necessary. The bed strength and staff strength also will have to be raised. Modern equipments and other facilities such as X-ray, clinical laboratory, etc., are to be provided for undertaking clinical training to the students of the Homoeo College. The Plan programme involves acquisition of land and provision of necessary equipments and furniture. A provision of Rs. 50 lakhs is allotted in the Plan for meeting the above items of expenditure.

#### 3. Refresher Course to Medical Officers.

(Outlay Rs. 2 lakhs)

Refresher courses are necessary to Medical Officers for increasing their knowledge in homoeopathy and for acquiring knowledge about the latest developments in homoeopathy. A sum of Rs. 2 lakhs is provided for this programme in the Plan.

#### Other Programmes

##### 1. Power Laundries and Generators

(Outlay Rs. 15 lakhs)

It is proposed to provide during the plan period power laundries and generators in major hospitals where they do not exist at present.

##### 2. Food Administration (Augmentation)

(Outlay Rs. 49 lakhs)

The amount provided in the Plan will be utilised for the efficient enforcement of Food Adulteration Act by posting of additional staff etc.

##### 3. Drugs Control.

(Outlay Rs. 20 lakhs)

The plan provision is for the development of the Drug Testing Laboratory and expansion of the Inspectorate.

##### 4. Health Statistics and Research

(Outlay Rs. 1 lakh)

The outlay made in the Plan is for strengthening the statistical wing in the Directorate of Health Services and peripheral institutions.

5. *Health Education and Publicity*

(Outlay Rs. 5 lakhs)

The provision in the Plan is for strengthening the existing media division introducing the hospital health education scheme, continuing the Integrated Health Package Programme and for organising seminars on sexually transmitted diseases and on sex education.

6. *School Health Programme—Health Card for School Children*

(Outlay Rs. 275 lakhs)

School Health Programme had been started in 17 Primary Health Centres. A comprehensive physical examination and medical test of the entire school-going children by introducing health card system in all schools has been started in the State. The existing scheme of School Health Programme will be merged with the new scheme. The amount provided is for the implementation of this new scheme during the Sixth Plan period.

7. *State Public Health Laboratory and Regional Laboratories*

(Outlay Rs. 30 lakhs)

The development of the State Public Health laboratory is so designed that by the end of the Sixth Five Year Plan period it will play the major role in (i) public health programme, (ii) vaccines and sterile solution manufacture, (iii) supply of reagents and equipments for all the laboratories in the State and (iv) training and research so as to ensure sophisticated investigation. An amount of Rs. 30 lakhs is earmarked for this scheme in the Plan.

8. *Chemical Examiner's Laboratory*

(Outlay Rs. 30 lakhs)

The Chemical Examiner's Laboratory caters to the needs of judiciary in crime detections. More than 15,000 articles involved in various crime heads are to be examined in the laboratory every year. The outlay

proposed in the Plan is for strengthening the Central Laboratory at Trivandrum and for the establishment of two Regional Chemical Examiner's Laboratories at Calicut and Ernakulam, appointment of additional staff and purchases of modern equipments.

9. *Government Analyst's Laboratory*

(Outlay Rs. 45 lakhs)

The provision made in the Plan is for the continuance of the Government Analyst's Laboratory, Trivandrum and Regional Analytical Laboratories at Ernakulam and Kozhikode. The amount will also be utilised for the conduct of orientation courses for food inspectors.

10. *Tribal Sub Plan*

(Outlay Rs. 15 lakhs)

The Plan provision is for the continuance of Maternity and Child Health Centre and Mobile Medical Unit already sanctioned, including vehicles.

11. *Pharmaceutical Corporation*

(Outlay Rs. 15 lakhs)

Pharmaceutical Corporation (Indian Medicine) Kerala Limited, Trichur, is a fully Government-owned company. Apart from catering to the needs of Government hospitals and dispensaries, it meets the requirements of medicine of the public also. The outlay of Rs. 15 lakhs provided is the share capital contribution to the Corporation.

12. *E. S. I. Scheme*

(Outlay Rs. 30 lakhs)

The Department provides free medical benefit to the employees and their families covered by the E.S.I. Act. The provision made is the State's share viz. 1/8 the plan expenditure for the implementation of the scheme. The outlay provided will be utilised for strengthening of administrative machinery at the headquarters and starting of regional offices, continuance of the existing hospitals and dispensaries and opening of new E.S.I. dispensaries.

TABLE 3.40

## Public Health and Sanitation—Scheme wise Outlay

(Rs. in lakhs)

Sl. No.	Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>I. Allopathy</i>								
1 Minimum Need Programmes								
a.	Strengthening of Primary Health Centres and Sub-Centres and Opening of New Primary Health Centres and Sub Centres	17.43	64.501	64.50	350.00	130.00	60.50	30.00
(b)	Special Component Plan	..	..	..	55.00	20.00	5.00	2.50

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. (a) Drugs for Existing Sub Centres		15.85	20.00	20.00	105.00	..	17.00	..
(b) Special Component Plan		..	..	..	21.00	..	3.00	..
3. Mobile Medical Unit for Tribal Block Attappdy		0.49	2.50	2.50	15.00	..	2.50	..
4. (a) Government Dispensaries in Backward Areas		33.39	25.00	25.00	90.00	25.00	15.00	4.00
(b) Special Component Plan		..	..	..	50.00	15.00	10.00	2.50
5. Community Health Workers—State Share		1.63	5.50	5.50	61.00	..	13.00	..
Sub Total		68.79	117.501	117.50	757.00	190.00	126.00	39.00
<i>II. Hospitals and Dispensaries</i>								
1. Improvement of Health Care and Delivery System*		37.13	29.50	29.50	185.00	130.00	30.00	21.00
2. Construction of District Hospital, Malappuram	}	..	5.00	5.00	15.00	8.00	5.00	3.00
3. Construction of District Hospital, Idukki		..	1.00	1.00	15.00	..	0.50	..
4. Institute of Mental Health and Neuro Sciences		..	1.00	1.00	15.00	..	0.50	..
5. Opening of New Taluk Hospitals at Devikulam, Peermade, Udumbanchola etc.		1.47	3.00	3.00	15.00	15.00	3.00	3.00
6. Polyclinics in District and General Hospitals		28.30	5.00	5.00	29.00	23.00	5.00	4.00
7. Construction of Building and Provision of Vehicles to District Medical Stores		5.15	2.00	2.00	10.00	10.00	2.00	2.00
8. Purchase and Distribution of Medicines for Flood Relief Operations 1978		0.06	..	..	..	..	..	..
9. Improving Medical Facilities in Idukki District		..	1.00	2.13	5.00	..	1.00	..
10. Providing Ambulance Van to District and Taluk Headquarters Hospitals		0.01	1.00	1.00	5.00	..	1.00	..
11. Establishment of Central Sterilisation Unit in District Hospitals		0.22	..	..	..	..	..	..
12. Mobile Unit for Repairs and Maintenance of Hospital equipments		0.18	1.32	1.32	9.00	..	2.00	..
13. Drug Banks in District Hospitals		0.54	0.60	0.60	4.60	..	1.00	..
14. Mobile Dispensary, Kuttanad		0.30	1.00	1.00	3.00	..	1.00	..
15. Revision of Staff Pattern—Nurses		1.56	5.00	5.00	33.30	..	5.00	..
16. Health Care Programme in Selected Areas		0.67	0.10	0.10	..	..	..	..
17. Cancer Detection Centre in District Hospital		0.05	2.00	2.00	15.00	..	3.00	..
18. Opening of District Office and Office of DMO(H) Wynad		..	..	..	5.50	..	1.00	..
19. (a) Janatha Paywards and Payward Scheme		0.80	49.001	49.00	180.00	180.00	45.00	45.00
(b) Construction of Staff Quarters for Rural Dispensaries (KHR&WS)		1.26	8.00	8.00	40.00	40.00	8.00	8.00
Sub Total		77.70	114.521	115.65	569.40	406.00	113.50	86.00
<i>III. Education</i>								
1. Medical College, Trivandrum†		22.33	34.00	31.00	170.00	120.00	39.00	27.00
2. Medical College, Kottayam		14.58	35.00	30.00	170.00	90.00	35.00	20.00
3. Medical College, Alleppey		6.54	31.00	25.00	170.0	150.00	35.00	31.00
4. Medical College, Calicut		22.14	26.00	22.00	165.00	115.00	30.00	22.00

\* Includes the following schemes.—(1) Raising the bed strength in district Hospitals (2) Introducing all essential specialities in district hospitals (3) Better equipments to major hospitals including sterilizer (4) Taluk headquarters hospitals Raising bed strength. (5) Providing specialities, opening new units and strengthening medical record section in Taluk hospitals. (6) Improvement of Health care system (7) Continuing specialities in major hospitals (8) Implementation of Pai Committee Report.

† Includes: (1) Department of gastro enterology (2) Centre of respiratory allergy and antigen manufacture.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	Starting of Physical Medicine in the Medical College, Calicut	0.02	..	..	..	..	..	..
6.	Regional Limb Fitting Centre, Medical College, Trivandrum	..	2.50	1.00	15.00	..	2.50	..
7.	Nursing Education	7.01	15.50	15.50	40.00	..	16.00	..
8.	College of Pharmaceutical Science, Trivandrum	0.01	3.00	3.00	10.00	..	3.00	..
9.	Reorientation of Medical Education and Up-gradation of the Department of Ophthalmology, Medical College, Trivandrum—State Share	71.49	20.00	20.00	55.00	20.00	10.00	8.00
10.	Peripheral Limb Fitting Centre—Medical College Calicut	2.59	..	..	..	..	..	..
11.	Providing Generators in the Medical College, Hospitals	..	1.00	1.00	5.00	..	1.00	..
12.	Starting of a Dental Wing in the Medical College, Calicut	0.11	..	..	..	..	..	..
13.	Paediatric Institute in the Medical College, Kottayam	0.05	..	..	..	..	..	..
14.	Establishment of Regional Cancer Institute, Trivandrum—State Share	5.72	6.00	6.00	60.00	60.00	10.00	10.00
15.	Dental College, Trivandrum	..	1.00	1.00	30.00	20.00	5.00	3.00
16.	Prevention of Visual Impairment and Control of Blindness—Mobile Unit	1.05	..	..	..	..	..	..
17.	Providing Better Facilities to Epilepsy and Headache Clinic and Rheumatic Clinic in the Medical College, Trivandrum	0.02	..	..	..	..	..	..
18.	Training of Teachers in Specialities and Continuing Medical Education	1.11	3.00	3.00	10.00	..	2.00	..
	Sub-Total	154.77	178.00	158.50	900.00	575.00	188.50	121.00
<i>IV. Prevention and Control of Diseases</i>								
1.	Control of Communicable Diseases: Tuberculosis (Operational cost)	0.07	1.00	1.00	5.00	..	1.00	..
2.	Prevention of Air and Water Pollution	9.00	3.00	9.00	..	..	..	Shifted to sewerage and water supply.
3.	National Malaria Eradication programme—Additional Operational Cost	0.64	7.60	7.60	35.00	..	7.00	..
4.	Filariasis control—State Share	3.75	13.00	12.00	60.00	..	12.00	..
5.	Cholera—State Share	0.01	1.00	1.00	5.00	..	1.00	..
6.	Small Pox Eradication—State Share	5.42	..	..	..	..	..	..
7.	Tuberculosis (Excluding Operational Cost)—State Share	3.55	12.00	12.00	40.00	..	5.00	..
8.	Leprosy Control—State Share	3.21	2.00	2.00	6.60	..	4.60	..
9.	Control of Sexually Transmitted Diseases—State Share	0.19	5.00	5.00	25.00	..	5.00	..
10.	N.M.E.P.—State Share	7.47	13.00	13.00	65.00	..	13.00	..
11.	National Programme for Prevention and Control of Visual Impairment—State Share	11.64	12.00	12.00	22.00	..	10.00	..
12.	Training and Employment of Multipurpose Workers—State Share	9.17	5.00	5.00	70.00	..	12.50	..
13.	Prevention of Blindness	0.34	..	..	..	..	..	..
14.	Mass Immunisation Programme	7.21	2.00	2.00	15.00	..	3.00	..
	Sub Total	61.67	76.60	81.60	348.60	..	74.10	..
<i>Other Systems of Medicines—Ayurvedic:</i>								
<i>Minimum Needs Programme:</i>								
1.	Opening of New Dispensaries	4.16	8.00	8.00	40.00	5.00	9.00	3.00
2.	Special Component Plan	..	..	..	18.00	2.00	3.00	1.00



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3. Upgrading of Dispensaries into Hospital	1.21	4.00	4.00	14.00	..	4.00	..
4. (a) Opening of New Ayurveda Hospitals in Rural Areas	..	4.00	4.00	20.00	3.00	3.00	1.00
(b) Special Component Plan	..	..	..	9.00	2.00	1.00	0.50
5. Construction of Buildings to Ayurveda Hospitals, Dispensaries and Increasing Bed Strength	7.59	3.50	3.50	18.00	8.00	3.50	2.50
6. Construction of Nurses' Quarters to Hospitals in Rural Areas	..	5.00	5.00	13.00	13.00	5.00	5.00
7. Starting of Mobile Dispensaries	0.59	1.00	1.00	5.00	..	1.00	..
Sub Total :	13.55	25.50	25.50	137.00	33.00	29.50	13.00

*I. Hospitals and Dispensaries:*

1. Construction of Buildings to Ayurveda Hospitals	..	6.00	6.00	8.00	8.00	4.00	4.00
2. Construction of Buildings for District Hospitals	..	2.00	2.00	2.00	..	..	..
3. Raising the Status of Ayurveda Hospitals into District Hospitals	0.64	3.00	3.00	8.00	..	3.00	..
4. Establishment of Drugs Standardisation Unit	0.36	..	..	..	..	..	..
5. (a) Strengthening of Staff Wing in the Directorate	0.70	2.00	2.00	5.00	..	1.00	..
(b) Strengthening of Administrative Wing in the District Offices	..	..	..	5.00	..	..	..
6. Improvement of Mental Hospital, Kottakkal	0.22	1.00	1.00	3.00	..	1.00	..
7. Establishment of Sidha Vaidya Hospitals and Dispensaries	0.47	0.50	0.50	1.00	..	0.10	..
8. Purchase of Vehicles for Directorate and District Offices	0.18	1.50	1.50	7.00	..	1.50	..
9. Starting 'Marma' Section in Taluk Hospitals and Development of Panchakarma Treatment	0.23	0.50	0.50	2.00	..	0.40	..
10. Establishment of a Nature Cure Centre at Varkala	0.23	2.50	2.50	6.00	..	2.00	..
11. Opening of New Hospitals Other than in Rural Areas	..	1.00	1.00	7.00	2.00	1.00	0.30
12. Regional Research Institute, Poojappura including Model Demonstration Garden of Herbs and Botanical Garden—State Share	2.23	10.10	10.10	35.00	35.00	5.00	5.00
13. Improvement of Central Stores and Establishment of District Stores	0.01	3.50	3.50	10.00	..	3.50	..
14. Construction of Buildings for District Offices	..	..	..	2.00	2.00	..	..
15. Raising the Bed Strength in District Hospitals.	..	..	..	8.00	..	..	..
Sub Total	5.27	33.60	33.60	109.00	47.00	22.50	9.30

*I. Education:*

1. Construction of Pharmacy Buildings, Hospitals, Staff Quarters and Men's Hostel for Ayurveda College, Trippunithura	18.61	5.00	5.00	35.00	35.00	5.00	5.00
2. Continuing Degree Course in Pharmacy	..	0.25	0.25	3.00	..	0.50	..
3. Ayurveda College, Trivandrum	..	1.00	1.00	10.00	..	2.00	..
4. Grant-in-aid to Private Ayurveda Colleges, Shornur, Kottakkal and Ollur	0.97	0.85	0.85	3.00	..	0.95	..
5. Construction of Men's and Ladies' Hostels and Staff Quarters, Pharmacy Building etc. for Ayurveda College, Trivandrum	2.64	2.00	2.00	20.00	20.00	2.00	2.00
6. Expansion of Collegiate Hospital, Trivandrum	..	1.00	1.00	8.00	6.00	1.50	1.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
7. Payward Facilities for Ayurveda College Hospitals	..	1.00	1.00	10.00	10.00	1.00	1.00
8. Publication Division in Ayurveda College, Trivandrum	..	0.50	0.50	6.00	..	1.00	..
9. Ayurveda College, Trippunithura	1.00	1.50	1.50	12.00	..	2.00	..
10. Training of Pharmacists and Nurses in Ayurveda	0.03	0.25	0.25	2.00	..	0.25	..
11. Training in Prakrithi Chikilsa	..	0.30	0.30	2.00	..	0.50	..
12. Collection and Preservation of Manuscripts	0.03	0.20	0.20	3.00	..	0.50	..
13. Preparation of Text Books	0.85	0.35	0.35	4.00	4.00	0.50	0.50
14. Expansion of College Libraries	0.20	0.50	0.50	4.00	4.00	1.00	1.00
15. Specialisation in Various Branches of Ayurveda	..	0.20	0.20	2.00	..	0.50	..
16. Condensed Degree Courses	..	0.50	0.50	2.50	..	0.50	..
17. Refresher Course for Paramedical Staff, Teachers and Medical Officers	..	0.50	0.50	2.50	..	0.50	..
18. National Institute of Ayurveda	..	0.001	..	0.001	..	..	..
Sub Total	24.33	15.901	15.90	129.001	79.00	20.20	10.50
Total (Ayurveda)	43.15	75.001	75.00	375.001	159.00	72.20	32.80
<i>Homoeopathy:</i>							
<i>I. Minimum Needs Programme:</i>							
(a) Opening of Homoeo Rural Dispensaries	4.32	7.25	5.25	40.00	10.00	6.00	2.00
(b) Special Component Plan	..	..	..	20.00	5.00	2.00	1.00
Sub Total:	4.32	7.25	5.25	60.00	15.00	8.00	3.00
<i>II. Hospitals and Dispensaries :</i>							
1. Construction of Building for Existing Homoeo Hospitals/Dispensaries	2.63	0.75	1.00	5.00	5.00	1.00	1.00
2. District Hospitals and Dispensaries (including Opening of Homoeo Dispensaries and Hospitals in Idukki, Malappuram and Quilon)	3.80	3.65	3.65	12.00	..	4.00	..
3. Strengthening of Administrative Machinery including Building for Directorate	0.70	2.10	2.00	5.00	2.00	2.00	1.00
4. Starting of District Offices	0.20	1.00	1.00	3.00	..	..	..
5. Opening of Taluk Hospitals	1.03	2.00	2.00	14.00	..	3.00	..
6. Increasing Bed Strength in the District and Taluk Hospitals.	0.52	0.25	0.25	1.00	..	0.50	..
7. Providing Modern Equipments and other facilities in Hospitals	0.50	0.25	0.25	1.50	..	0.25	..
8. Starting of Drugs Unit.	..	0.25	0.25	6.00	4.50	0.25	..
9. Co-operative Society for the Manufacture of Homoeo Medicines	0.90	0.50	0.50	1.50	1.50	0.50	0.50
10. Purchase of Departmental Vehicles	..	..	..	4.00	4.00	..	..
Sub-total :	10.28	10.75	10.90	53.00	17.00	11.50	2.50
<i>I II. Education :</i>							
1. Starting of Degree College and Hospitals in Homoeopathy	0.60	2.00	2.00	10.00	7.00	2.00	1.50
2. Development of existing Homoeopathy Degree College, Calicut, Buildings and Hospital Buildings	1.53	11.00	4.00	50.00	25.00	11.00	5.50
3. Starting of College for Condensed Degree Course	..	0.50	0.50	..	..	..	..
4. Financial Aid for Upgrading Existing Diploma Colleges	..	0.50	0.50	..	..	..	..
5. Refresher Courses to Staff and Medical Officers—Training Course	..	..	..	2.00	..	..	..
Sub-Total	2.13	14.00	7.00	62.00	32.00	13.00	7.00
Total (Homoeopathy)	16.73	32.00	23.15	175.00	64.00	32.50	12.50

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Other Health Schemes :</i>							
1. Schemes Benefiting Scheduled Castes and Scheduled Tribes—Special Component Plan	1.61	5.00	..	..	..	..	..
2. Starting of Power Laundries and Establishment of Generators in District and Taluk Hospitals	..	0.50	0.50	15.00	..	3.00	..
3. Prevention of Food Adulteration—Food Administration (Augmentation)	0.47	9.00	9.00	49.00	..	9.00	..
4. Drugs Control	2.14	4.00	4.00	20.00	..	4.00	..
5. Health Statistics and Research	0.02	0.20	0.20	1.00	..	0.20	..
6. Health Education and Publicity	2.00	1.00	1.00	5.00	..	1.00	..
7. Health Card for School Children	2.81	4.00	80.00	275.00	..	100.00	..
8. Public Health Laboratories	0.17	3.00	3.00	30.00	..	4.00	..
9. Chemical Examiner's Laboratory	0.99	2.30	2.30	30.00	..	5.70	..
10. Government Analyst's Laboratory	2.89	6.00	6.00	45.00	..	6.00	..
11. Tribal Area Sub Plan	0.03	3.00	3.00	15.00	..	3.00	..
12. Pharmaceutical Corporation	..	1.00	1.00	15.00	..	3.00	..
Sub-Total :	13.13	39.00	110.00	500.00	..	138.90	..
E.S.I. Scheme	2.75	3.38	3.38	30.00	..	4.30	..
	+19.25@	+23.66@	+23.66@	..	..	+30.10@	..
Total—Public Health and Sanitation :	438.69	636.003	684.78	3655.001	1394.00	750.00	291.30
	+19.25@	+23.66@	+23.66@	..	..	+30.10@	..

@ Share of E.S.I. Corporation

### Sewerage and Water Supply

The decade 1981-1990, is declared as the 'International Decade for Drinking Water Supply and Sanitation. The following are the objectives and targets proposed for the Decade:

- (i) Urban water supply: 100% coverage of all the urban areas.
- (ii) Urban sewerage 100% coverage of all the Class I towns and 80% coverage of the remaining urban population.
- (iii) Rural water supply: 100% coverage of the entire rural population.
- (iv) Rural sanitation 25% coverage of the rural population.

The objectives and targets for the Sixth Plan have been set within this perspective frame. Realisation of these objectives would require huge investments. In this connection the possibility of obtaining substantial assistance from international and bilateral agencies are being explored. Already a number of water supply schemes are posed for bilateral and World Bank assistance. The following are the Sixth Plan programmes.

### Direction and Administration

#### 1. Setting up of a Planning Cell and a Statistical Unit

(Outlay Rs. 7 lakhs)

The provision is for the creation of a Planning Cell and Statistical Unit in the Public Health Engineering Department for planning, evaluation, monitoring and collection and compilation of statistical data, relating to the sewerage and water supply programmes in the State.

#### 2. Strengthening of the Execution Units for Plan Schemes and re-organisation of Department

(Outlay Rs. 50 lakhs)

A large number of schemes are now under execution and more schemes are proposed to be taken up during the Sixth Plan period and the International Decade for Drinking Water and Sanitation. The existing staff position is inadequate to cope with this increased workload. Hence it is proposed to strengthen the execution units and to re-organise the Department. The provision is intended for strengthening the execution units for plan schemes with additional staff and vehicles and for reorganisation of the Department to cope with the increased workload anticipated in the International Drinking Water Supply and Sanitation Decade and also for continuance of the existing units.

3. *Investigation, Planning and Design Units, including Strengthening of Investigation, Planning and Design Units*  
(Outlay Rs. 125 lakhs)

For the realisation of the objectives and targets sets for the decade, a large number of water supply and sewerage projects have to be prepared for availing of financial assistance from the World Bank and other financial institutions. The Investigation, Planning and Design units of the Department of Public Health Engineering have to be suitably strengthened for this task. The outlay is meant for the continuance of the existing units and for their strengthening.

#### Research

4. *Research Wing*  
(Outlay Rs. 2 lakhs)

For undertaking research on the various aspects of quality control and operation of water treatment plants, etc., a research wing with a cell for ground water exploration is essential in the Public Health Engineering Department. The provision is meant for the creation of such a wing.

#### Training

5. *Training Programme*  
(Outlay Rs. 5 lakhs)

The outlay is meant for imparting training to the personnel of the Public Health Engineering Department on the various aspects of Public Health Engineering.

#### Machinery and Equipment

6. *Inventory Control, Staff and Equipment*  
(Outlay Rs. 1 lakh)

The purchase, storage, upkeep and utilisation of large variety of materials and equipments which are essential for the execution and maintenance of water supply and sewerage systems, have to be organised on scientific lines. A special organisation has to be set up in the Public Health Engineering Department for the purchase of major items of materials and for controlling and watching their effective utilisation. The provision is intended for the creation of an inventory control unit with the necessary staff and equipments required for inventory control.

#### Sewerage Schemes

##### (a) Fresh Schemes

7. *Trivandrum Sewerage Scheme*  
(Outlay Rs. 325 lakhs)

The scheme is intended to provide sewerage facilities to an additional area of 15 sq. km. in Trivandrum City.

8. *Quilon Sewerage Scheme*  
(Outlay Rs. 200 lakhs)

The scheme is intended to provide sewerage facilities in the most densely populated areas of Quilon Town.

9. *Calicut Sewerage Scheme*  
(Outlay Rs. 225 lakhs)  
The scheme is designed to cover an area of 45 sq. km. in Calicut Town.

10. *Guruvayoor Sewerage Scheme*  
(Outlay Rs. 20 lakhs)  
The scheme is intended to provide sewerage facilities to the entire Guruvayoor township.

##### (b) New Scheme

It is proposed to take up sewerage schemes to cover the remaining areas of Trivandrum, Quilon, Cochin and Calicut and also to commence work on the following sewerage schemes during the Sixth Plan period. The provision is for the above purposes.

11. *Alleppey Sewerage Schemes*  
(Outlay Rs. 13 lakhs)

12. *Palghat Sewerage Scheme*  
(Outlay Rs. 10 lakhs)

13. *Trichur Sewerage Scheme*  
(Outlay Rs. 10 lakhs)

14. *Cannanore Sewerage Schemes*  
(Outlay Rs. 10 lakhs)

15. *Kottayam Sewerage Scheme*  
(Outlay Rs. 10 lakhs)

##### (c) Rural sewerage schemes

16. *Distribution of ESP type Latrines*  
(Outlay Rs. 130 lakhs)

The scheme envisages supply of E.S.P. Type squatting slabs at subsidised rates to the economically weaker sections especially to the Harijans and residents of the housing colonies of the weaker sections. The provision is meant for the above purpose.

17. *U.N.D.P. Project for Low Cost Sanitation:*  
(Outlay Rs. 50 lakhs)

As part of the programmes for the International Decade for Drinking Water and Sanitation, it is decided to implement the UNDP project for low cost sanitation in rural areas. The programme is proposed to be implemented from 1982-83 onwards. It envisages distribution of squatting slabs among poor people of the rural areas. The provision is for the implementation of the programme.

#### Drainage Schemes

##### Fresh Schemes

18. *Cochin Storm Water Drainage Scheme*  
(Outlay Rs. 78 lakhs)

Many parts of the Cochin City become flooded during the rainy season. The necessity for a city drainage scheme was keenly felt during the previous seasons especially during the 1979 rainy season. The provision is meant for the above scheme.

*Urban Water Supply Schemes**(a) Fresh Schemes*

19. *Greater Cochin Water Supply and Sewerage Scheme*  
(Outlay Rs. 400 lakhs)

Under this comprehensive scheme for water supply and sewerage to Greater Cochin area, only a limited area of the City is proposed to be covered during the Sixth Plan period. The outlay proposed is for the above scheme.

20. *Chalaky Water Supply Scheme*  
(Outlay Rs. 8 lakhs)

The scheme is designed to serve the entire Municipality. The outlay proposed is for the above scheme.

21. *Punalur Water Supply Scheme*  
(Outlay Rs. 8.50 lakhs)

The scheme is intended to provide water supply to the entire municipal town. The outlay proposed is for the above scheme.

22. *Tirur Water Supply Scheme*  
(Outlay Rs. 9.50 lakhs)

The outlay proposed is for the implementation of the Tirur Water Supply Scheme benefiting the entire municipal area.

23. *Vaikom Water Supply Scheme*  
(Outlay Rs. 35 lakhs)

This scheme is designed to serve the Vaikom Municipal Town and some of the neighbouring Panchayats. The outlay proposed is for the implementation of these schemes.

24. *Construction of a Storage Dam at Peppara for Augmentation of the Trivandrum Water Supply Scheme*  
(Outlay Rs. 550 lakhs)

The provision is to complete the balance works on the construction of the dam to meet the increasing demand for water in Trivandrum.

25. *Cranganore Water Supply Scheme*  
(Outlay Rs. 120 lakhs)

The scheme is intended to provide water supply to the entire Cranganore municipal town and the outlay proposed is for the implementation of the scheme.

26. *Angamali Water Supply Scheme*  
(Outlay Rs. 80 lakhs)

The provision is meant for the implementation of the scheme benefiting the entire Angamali area.

27. *Completion of Partially Commissioned Schemes*  
(Outlay Rs. 170 lakhs)

The outlay proposed is for the completion of the balance works on the partially commissioned schemes.

28. *Improvements to Existing Schemes*  
(Outlay Rs. 100 lakhs)

The provision is for improvements to some of the existing water supply schemes which are in urgent need of improvements.

*New Schemes*

The following fresh urban water supply schemes including for those newly formed Municipalities, are

proposed for implementation during the Sixth Plan period.

29. *Pathanamthitta water supply scheme*  
(Outlay Rs. 85 lakhs)

30. *Thodupuzha water supply scheme*  
(Outlay Rs. 100 lakhs)

31. *Trippunithura water supply scheme*  
(Outlay Rs. 100 lakhs)

32. *Nedumangad water supply scheme*  
(Outlay Rs. 5 lakhs)

33. *Chengannur water supply scheme*  
(Outlay Rs. 5 lakhs)

34. *Kothamangalam water supply scheme*  
(Outlay Rs. 5 lakhs)

35. *Ponnani water supply scheme*  
(Outlay Rs. 5 lakhs)

36. *Chowghat water supply scheme*  
(Outlay Rs. 5 lakhs)

37. *Shoranur water supply scheme*  
(Outlay Rs. 5 lakhs)

38. *Mangeri water supply scheme*  
(Outlay Rs. 5 lakhs)

39. *Varkala water supply scheme*  
(Outlay Rs. 5 lakhs)

*World Bank Assistance Schemes*

40. *Quilon Water Supply (Augmentation Scheme)*  
(Outlay Rs. 430 lakhs)

The existing water supply scheme to Quilon town is inadequate to meet the present demand and an augmentation scheme is to be implemented urgently. It is proposed to take up this scheme with World Bank assistance. The outlay is for the implementation of the scheme.

41. *Kottayam Water Supply (Augmentation Scheme)*  
(Outlay Rs. 300 lakhs)

The Kottayam water supply scheme is also in urgent need in augmentation. The scheme is proposed to be taken up and completed during the Sixth Plan period with loan assistance from World Bank.

42. *Idukki Township Water Supply (Augmentation Scheme)*  
(Outlay Rs. 200 lakhs)

It is proposed to provide drinking water supply facility to the Idukki Township during the Sixth Plan period with World Bank loan assistance.

*Other Augmentation Schemes*

43. *Palghat Water Supply (Augmentation) Scheme*  
(Outlay Rs. 85 lakhs)

The scheme is meant for augmenting the existing Water Supply system which is inadequate to meet the present demand.

44. *Trichur Water Supply (Augmentation) Scheme*  
(Outlay Rs. 145 lakhs)

This scheme envisages the augmentation of the existing scheme which is grossly inadequate to meet the present demand.

*Other Continuing (Augmentation) Schemes*

Provision has been included in the Sixth Plan for the following continuing Water Supply (Augmentation) Schemes:—

45. *Malappuram water supply (augmentation) scheme*  
(Outlay Rs. 30 lakhs)
46. *Kayamkulam water supply (augmentation) scheme*  
(Outlay Rs. 15 lakhs)
47. *Sherthalai water supply (augmentation) scheme*  
(Outlay Rs. 20 lakhs)
48. *Palai water supply (augmentation) scheme*  
(Outlay Rs. 20 lakhs)

In addition to the above, the following new urban water supply (augmentation) schemes will be taken up during the Sixth plan period.

49. *Alleppey water supply (Augmentation) scheme*  
(Outlay Rs. 10 lakhs)
50. *Cannanore water supply (Augmentation) scheme*  
(Outlay Rs. 12 lakhs)
51. *Badagara water supply (Augmentation) scheme*  
(Outlay Rs. 5 lakhs)
52. *Greater Trivandrum water supply scheme*  
(Outlay Rs. 20 lakhs)
53. *Greater Calicut water supply scheme*  
(Outlay Rs. 20 lakhs)

*Minimum Needs Programme*

*Rural Water Supply Schemes*

*Piped Water Supply*

54. *Rural Water Supply Schemes (L.I.C. Aided)*  
(Outlay Rs. 481 lakhs)

A number of rural water supply schemes are proposed to be taken up during the Sixth Plan period with L.I.C. loan assistance. The outlay provided is for the implementation of such schemes.

55. *Other Rural Water Supply Schemes (Continuing and New ones)*  
(Outlay Rs. 200 lakhs)

These are schemes proposed to be taken up without L.I.C. Loan Assistance. The outlay provided is for the implementation of such schemes.

56. *Comprehensive Water Supply Scheme to Ayloor-Nemmara*  
(Outlay Rs. 42 lakhs)

The outlay proposed is for the execution of the water supply scheme for the benefit of the Ayloor-Nemmara area.

57. *Sabarimala Water Supply Scheme*  
(Outlay Rs. 50 lakhs)

The scheme envisages provision of drinking water to Sabarimala area for the benefit of the pilgrims. The scheme is proposed to be completed during the Sixth Plan period.

58. *Accelerated Rural Water Supply Schemes (Spill over)*  
(Outlay Rs. 5 lakhs)

Certain rural water supply schemes taken up under the centrally sponsored schemes, 'accelerated rural water supply scheme' could not be completed when the scheme was discontinued after 1973-74. The provision is meant for completing these spillover works under the State sector.

59. *Improvements to Existing Rural Water Supply Schemes*  
(Outlay Rs. 20 lakhs)

The provision is meant for effecting necessary improvements, as and when found necessary, to the existing rural water supply schemes.

60. *Special Repairs and Maintenance*  
(Outlay Rs. 25 lakhs)

The provision is meant for making special repairs and maintenance works to the damaged schemes.

*Water Supply Schemes Benefiting Weaker Sections of the Society*

61. *Other Rural Water Supply Schemes Benefiting Harijans—Special Component Plan*  
(Outlay Rs. 400 lakhs)

Water supply schemes exclusively for the benefit of Harijans are being implemented under this programme. The outlay proposed is for the same.

62. *Protected Water Supply to Tribal Areas*  
(Outlay Rs. 100 lakhs)

Schemes exclusively for the benefit of tribals in the tribal sub-plan areas are proposed to be implemented under this programme. The outlay proposed is for the implementation of the above schemes.

*Schemes Posed for Bilateral Assistance*

The following are the rural water supply schemes posed for bilateral assistance:—

63. *Comprehensive Water Supply Schemes to Nattika Firka*  
(Outlay Rs. 400 lakhs)

The scheme is proposed to be completed during the Sixth Plan period with bilateral assistance. The outlay proposed is for the same.

64. *Comprehensive Water Supply Scheme to Vakom, Kadakkavur, Chirayinkil, Anjengo, etc.*  
(Outlay Rs. 150 lakhs)

It is proposed to complete the scheme during the Sixth Plan period with bilateral assistance. The outlay proposed is for the same.

65. *Kuttanad Water Supply Scheme*

(Outlay Rs. 250 lakhs)

Works on this scheme have been dragging for long due to inadequacy of budgetary allocations. It is proposed to complete this scheme during the Sixth Plan period with bilateral assistance.

*Rural Water Supply Schemes Posed for World Bank Assistance*

The following rural water supply schemes are posed for World Bank assistance. The provision made is for the commencement of works on the respective schemes:—

66. Water supply scheme to Cochin development area (Central Zone & South-West Zones—Rural) (Rs. 924 lakhs)
67. Vilappil water supply scheme (Rs. 30 lakhs)
68. Vechoochira water supply scheme (Rs. 42 lakhs)
69. Koipuram water supply scheme (Rs. 40 lakhs)
70. Cheriyana water supply scheme (Rs. 30 lakhs)
71. Thalana water supply scheme (Rs. 14 lakhs)
72. Comprehensive water supply scheme to Chithara, Kadakkal and Nilamel (Rs. 125 lakhs)
73. Comprehensive water supply scheme to Aloor, Ezhamkulam and Pattazhi (Rs. 80 lakhs)
74. Comprehensive water supply scheme to Kundara and adjoining Panchayats (Rs. 140 lakhs)
75. Comprehensive water supply scheme to Vadavucode, Puthencruz and Ayikaranad (Rs. 40 lakhs)
76. Comprehensive water supply scheme to Mala, Annamanada, Kuzhoor and Poyya (Rs. 35 lakhs)
77. Comprehensive water supply scheme to Kottathara, Mattathucode and Anaketty (Rs. 18 lakhs)
78. Comprehensive water supply scheme to Thavanur, Edappal, Vattamkulam, Alumcode, etc. (Rs. 70 lakhs)
79. Comprehensive water supply scheme to Sulthan Battery and Noolpuzha (Rs. 80 lakhs)
80. Comprehensive water supply scheme to Quilandy and adjacent panchayats (Rs. 180 lakhs)
81. Comprehensive water supply scheme to Chumbalukode, Kondotty and Feroke (Rs. 150 lakhs)
82. Comprehensive water supply scheme to Payyanur and adjacent Panchayats (Rs. 200 lakhs)
83. Comprehensive water supply scheme to Kottakkal and Parappur. (Rs. 30 lakhs)

*New Schemes (Ru) Posed for Bilateral Assistance*

As a number of foreign Governments, like the Government of Sweden, Denmark, Netherlands, West Germany, etc., have shown interest in assisting rural drinking water supply schemes in India, the following schemes are posed for bilateral assistance. The provision is for commencement of preliminary works on the schemes:—

84. Comprehensive rural water supply scheme to Kolenchery and adjoining Panchayats (Rs. 20 lakhs)
85. Do. to Pavaratty, Chalissery and adjoining Panchayats (Rs. 20 lakhs)
86. Do. to Meenangadi and adjoining Panchayats (Rs. 10 lakhs)
87. Do. to Manathody, Thondarnad, Ambalavayal and adjoining panchayats (Rs. 10 lakhs)
88. Do. to Vythiri, Chundal and adjoining Panchayats (Rs. 10 lakhs)
89. Do. to Mepadi and adjoining Panchayats (Rs. 10 lakhs)
90. Do. to Aryanadu, Poovachal and adjoining Panchayats (Rs. 10 lakhs)
91. Do. to Thrikkunnapuzha and adjoining Panchayats (Rs. 10 lakhs)

*Bored Wells/Tube wells with hand pumps*92. *Open draw wells*

(Outlay Rs. 150 lakhs)

The scheme envisages provision of drinking water facilities through open draw wells in areas not served by piped water supply. Open draw wells will be provided in all Harijan and Girijan colonies, colonies under the One Lakh Housing Scheme, remote backward villages and places where there is concentration of economically weaker sections of the community. The programme will be tied-up with the housing schemes for weaker sections. It is also proposed to provide financial assistance to Harijans and economically backward sections to construct parapet wells to existing drinking water wells to avoid contamination of the well water by the leaching of flood water into the wells during rainy seasons.

93. *Prevention of Air and Water Pollution*

(Outlay Rs. 60 lakhs)

The provision is for giving financial assistance to the Air and Water Pollution Control Board for the prevention and control of air and water pollution in the State and to facilitate its functions under the Concerned Central Acts. The provision is for the continuance of the current programmes of the Board, for strengthening its laboratories with modern equipments, and also for imparting training to the staff.

TABLE 3.41

## Sewerage and Water Supply—Scheme-wise Outlay

(Rs. in lakhs)

Sl.No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay (B.E.)	Anticipated Expenditure (R.E.)	Outlay	Capital Content	Approved Outlay (B.E.)	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Direction and Administration</i>								
1.	Setting up of a Planning Cell and a Statistical Unit	..	3.00	1.02	7.00	..	3.00	..
2.	Strengthening of Execution Unit for the Implementation of Plan Schemes & Re-organisation of Department	..	1.00	8.38	50.00	..	5.50	..
3.	Investigation, Planning and Design Units, including Strengthening of I.P.D. Units	25.97	24.00 5.00	27.00 12.00	125.00	..	40.00	..
<i>Research</i>								
4.	Research Wing	..	1.00	1.00	2.00	..	1.00	..
<i>Training</i>								
5.	Training Programme	1.16	2.00	2.00	5.00	..	1.00	..
<i>Machinery and Equipment</i>								
6.	Inventory Control, Staff and Equipment	..	1.00	1.00	1.00	..	0.50	..
Sub Total 1 to 6		27.13	37.00	52.40	190.00	..	51.00	..
<i>Sewerage Schemes:</i>								
<i>Fresh Schemes</i>								
7.	Trivandrum Sewerage Scheme	32.62	45.00	45.00	325.00	214.00	55.00	37.00
8.	Quilon Sewerage Scheme	24.72	45.00	45.00	200.00	132.00	40.00	27.00
9.	Calicut Sewerage Scheme	26.70	45.00	45.00	225.00	148.00	40.00	27.00
10.	Guruvayoor Sewerage Scheme	6.35	10.00	10.00	20.00	16.00	10.00	7.00
11.	Alleppey Sewerage Scheme	..	..	..	13.00	8.00	..	..
12.	Palghat Sewerage Scheme	..	..	..	10.00	7.00	..	..
13.	Trichur Sewerage Scheme	..	..	..	10.00	7.00	..	..
14.	Cannanore Sewerage Scheme	..	..	..	10.00	7.00	..	..
15.	Kottayam Sewerage Scheme	..	..	..	10.00	7.00	..	..
<i>Rural Sewerage Scheme</i>								
16.	(a) E.S.P. Type Latrines	21.77	5.00	5.00	45.00	29.00	5.00	3.00
	(b) ,, Special Component Plan	..	15.00	15.00	85.00	48.00	15.00	..
17.	(a) U.N.D.P. Project for Low Cost Sanitation (to be implemented by P.H.E.D.)	..	..	..	30.00	19.00	..	..
	(b) ,, Special Component Plan	..	..	..	20.00	13.00	..	..
<i>Drainage Schemes:</i>								
<i>Fresh Schemes</i>								
18.	Cochin Storm Water Drainage Scheme	..	20.00	20.00	78.00	47.00	15.00	10.00



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Urban Water Supply Schemes</i>								
<i>Fresh schemes</i>								
19.	Greater Cochin Water Supply and Sewerage Scheme	126.78	100.00	61.00	400.00	260.00	80.00	53.00
20.	Chalakydy Water Supply Scheme	8.08	2.00	2.00	8.00	5.00	1.00	0.66
21.	Punalur Water Supply Scheme	7.78	2.00	4.00	8.50	6.00	1.00	0.66
22.	Tirur Water Supply Scheme	6.41	3.00	3.00	9.50	6.00	1.00	0.06
23.	Vaikom Water Supply Scheme	27.36	2.00	12.00	35.00	23.00	9.00	6.00
24.	Construction of Storage Dam at Peppara for Augmentation of Trivandrum Water Supply Scheme	53.34	170.00	200.00	550.00	363.00	170.00	113.00
25.	Cranganore Water Supply Scheme	33.77	25.00	30.00	120.00	80.00	30.00	20.00
26.	Angamali Water Supply Scheme	8.55	10.00	15.00	80.00	52.00	17.00	12.00
27.	Completion of Partially Commissioned Schemes	80.74	20.00	107.00	170.00	110.00	25.00	17.00
28.	Improvements to Existing Water Supply Schemes	..	25.00	25.00	100.00	66.00	1.00	0.66
29.	Pathanamthitta Water Supply Scheme	..	10.00	10.00	85.00	56.00	17.00	12.00
30.	Thodupuzha Water Supply Scheme	..	10.00	10.00	100.00	66.00	15.00	10.00
31.	Thrippunithura Water Supply Scheme	..	15.00	15.00	100.00	66.00	17.00	12.00
<i>Water Supply Schemes to Newly Formed Municipalities</i>								
32.	Nedumangad Water Supply Scheme	..	..	..	5.00	3.00	}	
33.	Chengannore do.				5.00	3.00		
34.	Kothamangalam do.				5.00	3.00		
35.	Ponnani do.				5.00	3.00		
36.	Chowghat do.				5.00	3.00		
37.	Shoranur do.	..	17.00	17.00	5.00	3.00		
38.	Manjeri do.				5.00	3.00		
39.	Varkala do.				5.00	3.00		
<i>Augmentation Schemes</i>								
<i>(a) World Bank Scheme (Urban)</i>								
40.	Quilon Water Supply Scheme	..	..	..	430.00	284.00	35.00	24.00
41.	Kottayam do.	..	1.00	1.00	300.00	200.00	30.00	20.00
42.	Idukki Township do.	..	..	..	200.00	135.00	25.00	17.00
<i>Other Augmentation Schemes</i>								
43.	Palghat Water Supply (Augmentation) Scheme	65.37	25.00	25.00	85.00	56.00	15.00	10.00
44.	Trichur Water Supply (Augmentation) Scheme	113.51	45.00	45.00	145.00	95.00	15.00	10.00
45.	Malappuram Water Supply (Augmentation) Scheme	13.96	20.00	20.00	30.00	20.00	3.00	2.00
46.	Kayamkulam Water Supply (Augmentation) Scheme	17.17	10.00	10.00	15.00	9.00	3.00	2.00
47.	Shertalai Water Supply (Augmentation) Scheme	7.65	10.00	10.00	20.00	14.00	5.00	3.00
48.	Palai Water Supply (Augmentation) Scheme	12.38	10.00	10.00	20.00	14.00	5.00	3.00
49.	Alleppey Water Supply (Augmentation) Scheme	..	..	..	10.00	6.00	1.00	0.66
50.	Cannanore Water Supply (Augmentation) Scheme	..	..	..	12.00	7.00	6.00	4.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
51.	Badagara Water Supply (Augmentation) Scheme	..	..	..	5.00	3.00	1.00	0.66
52.	Greater Trivandrum Water Supply Scheme	..	..	..	20.00	13.00	1.00	0.66
53.	Greater Calicut Water Supply Scheme	..	..	..	20.00	13.00	1.00	0.66
Sub Total 7 to 53		695.01	717.00	817.00	4199.00	2754.00	717.00	470.78
<i>Minimum Needs Programme</i>								
<i>Rural Water Supply Schemes</i>								
<i>Piped Water Supply</i>								
54.	(a) Rural Water Supply Schemes (L.I.C. Aided)	91.16	200.00	52.00	361.00	234.00	153.00	100.00
	(b) Rural Water Supply Scheme (Special Component Plan)	..	..	..	120.00	78.00	17.00	10.00
55.	Other Rural Water Supply Schemes	163.12	37.00	139.42	200.00	130.00	54.00	36.00
56.	Comprehensive Water Supply Schemes at Ayloor, Nemmara	8.92	15.00	15.00	42.00	28.00	15.00	10.00
57.	Sabarimala Water Supply Scheme	..	20.00	20.00	50.00	33.00	20.00	14.00
58.	Accelerated Rural Water Supply Schemes (Spillover)	1.45	1.00	1.00	5.00	3.00	2.00	1.20
59.	Improvements to Existing Schemes	..	..	..	20.00	13.00	2.00	1.20
60.	Special Repairs and Maintenance	..	5.00	5.00	25.00	16.00	5.00	3.00
<i>Water Supply Schemes Benefiting Weaker Sections of the Society</i>								
61.	Other Rural Water Supply Schemes Benefiting Harijans—Special Component Plan	64.85	153.00	96.38	400.00	265.00	150.00	110.00
62.	Protected Water Supply to Tribal Areas (Tribal Sub Plan)	17.76	14.00	32.94	100.00	66.00	20.00	14.00
<i>Schemes Posed for Bilateral Assistance</i>								
63.	Comprehensive Water Supply Schemes to Nattika Firka	2.76	5.00	5.00	400.00	265.00	15.00	30.00
64.	Comprehensive Water Supply Schemes to Vakkom—Anjengo	0.18	15.00	15.00	150.00	100.00	15.00	30.00
65.	Kuttanad Water Supply Scheme	..	..	..	250.00	162.00	10.00	33.00
<i>Schemes Posed for World Bank Assistance</i>								
66.	Water Supply Scheme to Cochin Development Area (Central Zone and South West Zones Rural)	..	..	..	924.00	600.00	4.00	30.00
67.	Vilappil Water Supply Scheme	..	..	..	30.00	20.00	2.00	1.20
68.	Vechoochira Water Supply Scheme	..	..	..	42.00	28.00	2.00	1.20
69.	Koipuram Water Supply Scheme	..	..	..	40.00	27.00	2.00	1.20
70.	Cheriyana Water Supply Scheme	..	..	..	30.00	20.00	2.00	1.20
71.	Thalanad Water Supply Scheme	..	..	..	14.00	9.00	1.00	0.66
72.	Comprehensive Water Supply Schemes to Chithara Kadakkal and Nilamel	..	..	..	125.00	83.00	4.00	2.64
73.	Comprehensive Water Supply Schemes to Adoor Ezhamkulam and Pattazhi	..	..	..	80.00	53.00	1.00	0.66
74.	Comprehensive Water Supply Schemes to Kundara and Adjoining Panchayats	..	..	..	140.00	92.00	1.00	0.66
75.	Comprehensive Water Supply Schemes to Vadavukode, Puthencruz and Ayikaranad	..	..	..	40.00	27.00	1.00	0.66
76.	Comprehensive Water Supply Schemes to Mala, Annamanada, Kuzhoor and Poyya	..	..	..	35.00	23.00	1.00	0.66

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
77.	Comprehensive Water Supply Schemes to Kottathara, Mattachucadu and Anakketty	--	--	--	18.00	12.00	1.00	0.66
78.	Comprehensive Water Supply Schemes to Thavanur Edappal, Vattamkulam, Alumcode, etc.	..	..	--	70.00	46.00	1.00	0.66
79.	Comprehensive Water Supply Schemes to Sulthan Battery and Noolpuzha	..	--	..	80.00	53.00	1.00	0.66
80.	Comprehensive Water Supply Schemes to Quilandy and Adjacent Panchayats	..	..	..	180.00	117.00	1.00	0.66
81.	Comprehensive Water Supply Schemes to Chumalakode, Kondotty and Feroke	..	..	..	150.00	100.00	1.00	0.66
82.	Comprehensive Water Supply Schemes to Payyanur and Adjacent Panchayats	..	..	..	200.00	132.00	1.00	0.66
83.	Comprehensive Water Supply Schemes to Kottakkal and Perappur	..	..	..	30.00	20.00	1.00	0.66
<i>New Schemes Posed for Bilateral Assistance</i>								
84.	Comprehensive Rural Water Supply Scheme to Kolenchery and Adjacent Panchayats	..	..	..	20.00	13.00	..	..
85.	Do. to Pavaratty, Chalissery and adjoining Panchayats	..	..	..	20.00	13.00	..	..
86.	Do. to Meenangadi and Adjoining Panchayats	..	..	..	10.00	7.00	..	..
87.	Do. to Manamthody, Thondarnad, Ambalavayal and Adjoining Panchayats	..	..	..	10.00	7.00	..	..
88.	Do. to Vythiri, Chundal and Adjoining Panchayats	..	..	..	10.00	7.00	..	..
89.	Do. to Meppadi and Adjoining Panchayats	..	..	..	10.00	7.00	..	..
90.	Do. to Aryanad, Poovachal and Adjoining Panchayats	..	..	..	10.00	7.00	..	..
91.	Do. to Thikkunnapuzha and Adjoining Panchayats	..	..	..	10.00	7.00	..	..
92.	(a) Open Draw Wells	40.26	10.00	10.00	50.00	..	10.00	..
	(b) Special Component Plan	..	20.00	20.00	100.00	..	20.00	..
	Total M.N.P. (54 to 92)	390.46	495.00	411.74	4601.00	2923.00	676.00	437.76
<i>Pollution Control</i>								
93.	Prevention of Air and Water Pollution	..	..	..	60.00	..	6.00	..
	Total—Sewerage and Water Supply	1112.60	1249.00	1281.14	9050.00	5677.00	1450.00	908.54

## Housing

### 1. Low Income Group Housing Scheme

(Outlay Rs. 200 lakhs)

The scheme envisages financial assistance by way of loans for house construction to persons whose annual income does not exceed Rs. 7200 and who have no house of their own. Loans are advanced at 8 per cent rate of interest, repayable in 360 equal monthly instalments or 30 equal annual instalments. The maximum loan admissible is Rs. 14,500. The outlay is for continuing the scheme.

### 2. Middle Income Group Housing Scheme

(Outlay Rs. 145 lakhs)

Under this scheme loans for house construction are advanced at 8 per cent rate of interest to persons who have no house of their own and whose annual income falls between Rs. 7,201 and Rs. 18,000. The maximum loan admissible is Rs. 27,500. The loan is repayable in 300 equal monthly instalments or 25 equal annual instalments. The outlay is for continuing the programme.

3. *Rental Housing Scheme for the Employees of State Government and Local Bodies*

(Outlay Rs. 600 lakhs)

The scheme is intended to construct houses and to lease them on rental basis to the employees of State Government. It is proposed to provide rental housing accommodation to Government servants in all major towns in the State raising finance from institutional agencies like the HUDCO. The scheme will be implemented through the Housing Board. The scheme includes provision for the construction of a four storeyed building to accommodate 250 male employees of the Government Secretariat on rental basis. The outlay is for the above purposes and also for the payment of annuity to the Kerala State Housing Board for the houses constructed by them earlier under the rental housing scheme.

4. *Construction of Residential Quarters to Government Servants*

(Outlay Rs. 100 lakhs)

The provision is for the construction of residential quarters to Government servants belonging to the higher income groups. The provision is for continuing the scheme.

*Minimum Needs Programme*

5. *Provision of house Sites to Rural Workers*

(Outlay Rs. 425 lakhs)

Under this scheme developed plots in small and medium colonies provided with access to roads, drainage, individual sanitary latrines, drinking water facilities etc., are distributed, to the landless families. Surplus land taken over by Government under the Land Reforms Act is also utilised for the scheme. The scheme is implemented in selected panchayats and 50 per cent of the house sites available in the panchayat area is earmarked for allotment to landless agricultural workers belonging to Scheduled Castes and Scheduled Tribes. The outlay proposed is for continuing the schemes during the Sixth Plan period.

6. *Construction of Huts/Houses for Rural Workers*

(Outlay Rs. 350 lakhs)

Under this scheme Financial Assistance (Rs. 1,000) is provided for the construction of houses in house sites already allotted to landless workers in rural areas. The financial assistance is meant for the purchase of timber and tiles for the construction of houses. The outlay is provided for continuing the scheme.

7. *Settlement of Agricultural Labourers in Government Puzamboke Lands*

(Outlay Rs. 25 lakhs)

The scheme provides for financial assistance for house construction at the rate of Rs. 1,500 (grant Rs. 1,100 and loan Rs. 400) to assignees of Government Puzamboke lands and to agricultural workers owning land not exceeding 2 acres. Fifty per cent of such financial assistance is reserved to members of scheduled castes and scheduled tribes. The outlay is for continuing the above scheme.

8. *Kerala State Development Corporation for SC and ST Financial Assistance for Housing*

(Outlay Rs. 400 lakhs)

The Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes has taken up in 1978-79 a housing scheme for the construction of 10,000 low cost subsidised houses at a unit cost of Rs. 3,000 (Rs. 1500 loan and 1500 grant). The scheme involves a per unit subsidy of Rs. 1500 plus interest on loan besides administration and supervision charges to the Corporation.

During 1980-85 the Corporation proposes to take up the following new subsidised low cost housing schemes

(a) *Construction of 10,000 Low Cost Houses at a Unit Cost of Rs. 3700.*

The scheme is proposed to be taken up with loan assistance from the HUDCO and grants from Government. Each housing unit will cost Rs. 3700 (Rs. 2000 as loan and Rs. 1700 as grant). The scheme involves a per unit subsidy of Rs. 1700 plus interest on loan, besides administration and supervision charges to the Corporation. Government have accorded sanction for the implementation of the scheme.

(b) *Construction of one Lakh Subsidised Low Cost Houses at a Unit Cost of Rs. 5000*

The scheme envisages construction of one lakh low cost houses during 1981-82 to 1984-85 at the rate 25,000 houses per year. Each house will cost Rs. 5000 (Rs. 2500 as loan and Rs. 2500 as grant). The scheme involves a per unit subsidy of Rs. 2500 plus interest on loan, besides administration and supervision charges to the Corporation.

(c) *Structural Improvements to Existing Houses*

The scheme envisages financial assistance for providing strong roofs and tiles to 16,600 existing houses at the rate of Rs. 2500 per house (Rs. 1500 as loan and Rs. 1000 as grant). The scheme involves a per unit subsidy of Rs. 1000 plus interest on loan, besides administration and supervision charges to the Corporation.

The outlay is for meeting the subsidy element of the above schemes.

9. *Kerala State Housing Board*

(Outlay Rs. 900 lakhs)

The Housing Board depend mainly on institutional finance for implementing their housing programmes. At the same time the Board require seed capital to serve as a buffer finance to make good the short falls in institutional finance raised by the Board for its various housing programmes. This seed capital is provided in the form of public borrowing. The outlay provided is for the public borrowing of the Housing Board.

10. *Slum Clearance and Rehousing*

(Outlay Rs. 50 lakhs)

The Chengalchoola Slum Improvement scheme at Trivandrum is the only major slum improvement and

rehousing scheme taken up by Government so far. The expenditure on this scheme is at present charged under the scheme "co-operative housing scheme for economically weaker sections."

It is necessary to take up slum improvement and rehousing schemes in some of the major cities during the Sixth Plan period. The provision is for taking up slum improvement and rehousing schemes in some of the major cities in the State and also for continuing slum improvement scheme at Chengalchoola.

11. *Upgradation of Marginal Settlements*  
(Outlay Rs. 50 lakhs)

The scheme "Making Structural and Environmental Changes to Existing Houses" is now redesignated as "upgradation of marginal settlements." The scheme is meant for providing financial assistance to families for the upgradation of their existing sub-standard houses. Financial assistance in the form of loans is given to such families to change the roof (from perishable to durable), to provide additional accommodation and to improve sanitary facilities such as bath and closet and water supply. The scheme is implemented through local bodies. The plan outlay is for continuing the scheme.

12. *Police Housing Scheme*  
(Outlay Rs. 150 lakhs)

According to the norms approved by Government, family quarters are to be constructed for 100 per cent of the staff of local police and special units as well as the staff of the Armed Police Battalions and Armed Reserves except the Head Constables and Police Constables. For Head Constables/Havildars and the Police Constables, Naik/Lance Naiks of Armed Police Battalions and Armed Reserves, family quarters are to be provided for only 50 per cent of their respective strength. The balance 50 per cent is to be provided barracks accommodation. The personnel covered by the police housing scheme in the State during 1979-80 was only 44.6 per cent. This has to reach the level of 58.2 per cent. To reach this level the Finance Commission has awarded funds for police housing under non-plan. An action plan has been prepared to achieve this level by utilizing the funds under Plan and Non-Plan sources. During the Sixth Plan period it is proposed to construct 1320 housing units and 1600 barracks for men. This will raise the satisfaction level to 57.7 per cent. The outlay is for the above purpose and for payment of annuity to the Housing Board for the 417 flats constructed by them for police personnel at Cochin.

13. *Government Servant's/ Policemen's Housing Co-operatives*  
(Outlay Rs. 80 lakhs)

The outlay is meant for providing share capital contribution, and loans to Government Servant's/ Policemen's housing co-operatives besides providing interest subsidy to reduce the rate of interest charged on the member borrowers of these societies.

14. *Loans to Government Servants*  
(Outlay Rs. 600 lakhs)

The outlay is meant for providing house construction advances to Government Servants.

*Others*

15. *Land Acquisition and Development*  
(Outlay Rs. 5 lakhs)

The Plan provision is meant for acquisition and development of land for house construction, for the different State sponsored housing schemes.

16. *Housing Scheme for Industrial Workers*  
(Outlay Rs. 16 lakhs)

The Kerala State Housing Board has drawn up proposals for a housing scheme for industrial workers drawing loan assistance from the HUDCO. According to the scheme, Government have to provide a subsidy of Rs. 500 and loan assistance of Rs. 2500 for each house constructed under the scheme. The provision is for the above scheme and also for maintenance of the houses constructed earlier under the subsidised industrial Housing scheme and housing scheme for the economically weaker sections of the community.

17. *Share capital Contribution to the Kerala Co-operative Housing Federation*  
(Outlay Rs. 120 lakhs)

The Co-operative Housing Federation has programme to assist the construction of 38,350 houses during the Sixth Plan period. To cope with this task, the Federation proposes to organise 79 new Primary Housing Co-operatives in areas not covered so far. The Federation has to augment its resources to implement this massive programme by raising institutional finance mainly from the L. I. C. The share capital base of the Federation has to be strengthened to raise its borrowing capacity. The provision is towards share capital contribution to the Co-operative Housing Federation.

18. *Kerala School Teachers and Non-Teaching staff's welfare Society (Margin Money for Housing)*  
(Outlay Rs. 100 lakhs)

The provision is meant for providing margin money to the society to enable the teachers and non-teaching staff to build their own houses with assistance from financial institutions like the HUDCO, LIC etc.

19. *Sponsored Research in Low cost Housing*  
(Outlay Rs. 5 lakhs)

At a time when cost of house building materials is soaring up, it is essential to develop new and cheap substitutes to reduce construction costs to the extent possible. The outlay is provided for sponsored research in low cost housing using locally available materials to be undertaken by the Lal Bahadur Sastri Engineering Research and Consultancy Centre, Trivandrum.

20. *Housing Scheme for Plantation Labour*  
(Outlay Rs. 8 lakhs)

The scheme envisages provision of financial assistance to the Planters, to provide rent free standard residential accommodation to plantation workers, at the rate of 50 per cent in the shape of loan and 37.5

per cent as subsidy per house with a ceiling cost of Rs. 5000. The balance 12.5 per cent will be borne by the employer. This was a Centrally sponsored scheme discontinued since 1979-80. It is proposed to continue the scheme in the state sector. However, assistance under the scheme will be provided only to the weaker links among the planters coming under the provisions of the Plantation Labour Act.

#### 21. Village Housing Project Scheme

(Outlay Rs. 80 lakhs)

The scheme recognises the fact that improvement of village housing should form part of a programme for the all round economic and physical development of the rural areas. Under the scheme financial assistance for house construction is given to the residents of selected villages or to housing co-operatives for house construction on an aided self-help basis. The scheme envisages also provision of common amenities such as streets and drains in these villages. The outlay is for continuing the scheme.

#### 22. Co-operative Housing Scheme for Economically Weaker Sections

(Outlay Rs. 300 lakhs)

The Co-operative Sector and the Housing Board have jointly launched a housing scheme for economically weaker sections in rural areas. The bulk of the finance comes as loans from HUDCO and the Co-operative sector. Government gives a grant of Rs. 500 per house. It is proposed to construct 25,000 houses every year

under this scheme. The provision is for meeting the grant portion of the above programme.

#### 23. Housing Scheme in Kasargod

(Outlay Rs. 10 lakhs)

The scheme envisages improvement of the housing conditions in the backward taluks of Kasargod and Hosdurg. The outlay is for continuing the programme.

#### 24. Tribal Sub-Plan

(Outlay Rs. 50 lakhs)

The scheme is meant for providing houses to every tribal family in the sub-plan area in a phased manner. The outlay is for the construction of houses to tribal families in the sub-plan area.

#### 25. Colonisation Scheme in Attappady

(Outlay Rs. 30 lakhs)

The scheme envisages development of the Attappady valley with infrastructure for the rehabilitation of the tribals. The outlay is meant for continuing the programme during the Sixth Plan.

#### 26. Chempu Kayal Reclamation Scheme

(Outlay Rs. 1 lakh)

The provision is for the settlement of agricultural labourers who are homeless on account of Chempu Kayal reclamation Scheme.

TABLE 3.42

#### Housing—Scheme-wise Outlay

(Rs. lakhs)

Name of Scheme/Project	1979-80	1980-81		1980-85		1981-82	
	Actuals	Approved Outlay (B.E.)	Anticipated Expenditure (R.E.)	Outlay	Capital Content	Approved Outlay (B.E.)	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Low Income Group Housing Scheme	26.94	60.00	80.80	200.00	130.00	75.00	49.00
2. Middle Income Group Housing Scheme	40.66	40.00	71.75	145.00	95.25	50.00	32.50
3. Rental Housing Scheme for Government and Local Bodies' Employees	26.58	40.00	102.71	600.00	390.00	40.00	26.00
4. Government Residential Quarters	33.50	35.00	35.00	100.00	65.00	40.00	26.00
Sub Total 1 to 4	127.68	175.00	290.26	1045.00	679.25	205.00	133.50
<i>Minimum Needs Programme:</i>							
5. Provision of House Sites for Landless Workers in Rural Areas	70.57	80.00	80.00	425.00	..	80.00	..
6. Construction of Huts/Houses for Rural Workers	11.36	10.00	68.00	350.00	227.50	10.00	6.50
7. Settlement of Agricultural Labourers in Government Poramboke Lands	4.23	5.00	5.00	25.00	16.00	4.999	3.00
8. Assistance to Kerala State Development Corporation for SC & ST	57.87	75.00	75.00	400.00	260.00	75.00	49.00
Sub Total M.N.P. (5 to 8)	144.03	170.00	228.00	1200.00	503.50	169.999	58.50

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
9. Kerala State Housing Board	110.00* 53.42 }	110.00* 60.00 }	110.00* 60.00 }	900.00*	585.00	200.00*	130.00
Sub Total 9	163.42	170.00	170.00	900.00	585.00	200.00	130.00
10. Slum Clearance and Rehousing	..	..	..	50.00	32.50	11.00	7.00
11. Upgradation of Marginal Settlements	10.01	9.00	9.00	50.00	32.50	9.00	6.00
Sub Total 10 to 11	10.01	9.00	9.00	100.00	65.00	20.00	13.00
12. Police Housing Scheme	64.88	50.00	50.00	150.00	97.50	40.00	26.00
13. Government Servants/Police-men's housing Co-operative Societies	13.00	2.00	2.00	80.00	52.00	20.00	13.00
Sub Total 12 & 13	77.88	52.00	52.00	230.00	149.50	60.00	39.00
14. House Building Advance to Government Servants	298.41	200.00	400.00	600.00	390.00	200.00	130.00
<i>Other Schemes:</i>							
15. Land Acquisition and Development	18.39	..	50.00	5.00	..	..	..
16. Housing Scheme for Industrial Workers	0.15	1.00	1.00	16.00	10.00	1.00	0.50
17. Kerala Co-operative Housing Federation	20.00	20.00	20.00	20.00 } † 100.00 }	13.00 } 65.00 }	25.00	16.00
18. Kerala School Teaching and Non-teaching staff's Welfare Society for Housing	..	..	50.00	100.00	65.00	30.00	19.50
19. Sponsored Research in Low Cost Housing	5.00	1.00	1.00	5.00	..	1.00	..
20. Housing Scheme for Plantation Workers	5.72	..	8.00	8.00	5.00	..	..
21. Village Housing Project	25.33	20.00	51.75	80.00	52.00	25.00	16.00
22. Co-operative Housing Scheme for Economically Weaker Sections	..	..	..	300.00	195.00	60.00	39.00
23. Housing Scheme for Kasargode	1.48	2.00	2.00	10.00	6.50	2.00	1.00
24. Tribal Area Sub Plan	0.07	10.00	10.00	50.00	32.50	10.00	6.50
25. Colonisation Scheme in Attappady	2.88	6.00	6.00	30.00	19.50	6.00	4.00
26. Settlement Scheme to Assignees of Kayal Lands—Chempu Kayal Reclamation Scheme	..	..	..	1.00	0.50	0.001	..
Sub Total—Other Schemes	79.02	60.00	199.75	725.00	464.00	160.001	102.50
Total—Housing	900.45	836.00	1349.01	4300.00	2836.25	1015.00	606.50

\*Market Borrowing

† Rs. 20 lakhs for share capital contribution and Rs. 100 lakhs for market borrowing

## Urban Development

The concept of planned urban development is of recent origin in the country. The major agencies concerned with urban development in the State are the Department of Town Planning and Municipalities and the Kerala Urban Development Finance Corporation. The following are the schemes proposed for the Sixth Plan.

### *Financial Assistance to Local Bodies for Town Improvement Works—*

#### *Remunerative Schemes:*

#### 1. *Kerala Urban Development Finance Corporation*

(Outlay Rs. 580 lakhs)

This Corporation, a Government owned private limited Company, was formed with the main objective of ensuring the overall orderly development of cities and towns in the State. The Corporation provides financial assistance to urban local bodies in the State by way of loans and advances for the execution of their remunerative development programmes such as construction of busstands, markets, shopping centres, commercial complexes, lodging houses, etc. The outlay is for giving loan finance to the Corporation by way of market borrowing.

#### 2. *Share Capital Contribution to the K.U.D.F.C.*

(Outlay Rs. 20 lakhs)

The debt-equity ratio of the Kerala Urban Development Finance Corporation at present is 101:2 and it is necessary to maintain a healthy debt-equity ratio for this financing agency. Further the Board has already approved schemes worth Rs. 12 crores proposed by urban local bodies. The Corporation also has plans to take up economically viable joint ventures, urban development Schemes etc., in collaboration with the local bodies. The share capital base of the Corporation has to be raised to take up these activities. The provision is for this purpose.

#### *Non-remunerative Town Improvement Schemes*

#### 3. *Financial Assistance to Municipalities/Corporations*

(Outlay Rs. 50 lakhs)

The scheme envisages payment of financial assistance to Urban local bodies by way of loans and grants for their non-remunerative undertakings such as construction of roads, culverts, bridges, drains, office buildings, town halls, maternity and child welfare centres, libraries, parks, playgrounds, stadia etc.

#### *Town and Regional Planning*

#### 4. *District Planning Units of the Department*

(Outlay Rs. 10 lakhs)

At present there is no Planning Unit at Alleppey. The outlay is for starting a District Planning Unit at Alleppey and for strengthening and continuing the District Planning Units at Trichur, Kottayam and Cannanore.

#### 5. *Master Plan for Agro-Industrial Centres, Urban Areas and Tourist Centres*

(Outlay Rs. 9 lakhs)

It is proposed to prepare Master Plans for the development of all Municipal Towns in the State in a phased manner. Detailed proposals for priority development areas also have to be worked out. So far, development plans have been prepared for 14 Municipal Towns. It is proposed to prepare such development plans for the remaining towns in the State in a phased manner. The outlay provided is for continuing the ongoing projects for Punalur, Shertallai, Palai and Kodungalloor and also for taking up new projects during Sixth Plan period.

#### 6. *Re-organisation of Head Quarters Office and Subordinate Offices of the Town Planning Department*

(Outlay Rs. 18 lakhs)

It is proposed to reorganise the headquarters office of the Chief Town Planner into 8 functional divisions for technical and administrative efficiency. The provision is made for the above reorganisation.

#### 7. *Traffic Operation Plan for Major Urban Centres*

(Outlay Rs. 5 lakhs)

Urban Traffic and Transportation Plans are at present being prepared for the cities of Trivandrum, Cochin, and Calicut by NATPAC (National Traffic Planning and Automation Centre) on contract basis. Similar Plans for the major urban Centres like Quilon, Kottayam, Trichur, Alleppey, Palghat, Cannanore, etc., have to be prepared. It is proposed to create an urban Traffic and Transportation Planning Cell for the purpose in the Town Planning Department. The provision is made for the above purpose.

#### 8. *Creation of Planning and Development Authorities in selected Urban Centres*

(Outlay Rs. 50 lakhs)

The outlay provided is for the creation of Planning and Development Authorities at Kottayam, Idukki, Quilon, Trichur, Malappuram, etc., and also to provide financial assistance to the existing Development Authorities, Trivandrum Town Planning Trust, etc., for meeting the establishment expenses of these authorities in their early stages of existence.

#### 9. *Implementation of Development Plans in Urban areas—Financial Assistance to Planning and Development Authorities for Implementation of Development Plans*

(Outlay Rs. 160 lakhs)

The outlay provided is for giving financial assistance (grant-in-aid) to Development Authorities, Town Planning Trusts and Local bodies for:

(i) the implementation of priority development projects under sanctioned planning schemes. The provision is mainly for acquisition and development of land for the projects;

(ii) for implementing urban environmental improvement schemes within their jurisdiction;



(iii) for acquisition of cheap land in and around cities and towns in advance for implementation of non-remunerative urban development schemes like construction of roads, playgrounds, parks, etc., and

(iv) for developing the Township at Idukki.

10. *Preparation of a State Spatial Development Plan*  
(Outlay Rs. 15 lakhs)

It is proposed to prepare a comprehensive development plan, locating the important growth centres in the State and evolving policies for infrastructure development. The provision is for the creation of staff for taking up the project.

*Town and Country/Regional Planning*

11. *State Town and Country Planning Board*  
(Outlay Rs. 2 lakhs)

A State Town and Country Planning Board has been constituted to guide, control and monitor the formulation of the State Spatial Development Plan and to preserve the unique character, atmosphere and natural setting of monuments and other places of tourist interest in the State. The provision is for the creation of a nucleus staff for the functioning of the Board.

12. *Creation of an Evaluation and Monitoring Cell*  
(Outlay Rs. 5 lakhs)

The provision is for continuing the Evaluation and Monitoring Cell in the Town Planning Department for evaluating and monitoring the preparation of Master Plans and Town Planning Schemes under the Five Year Plan and their implementation.

13. *Scheme for Development of Growth Centres*  
(Outlay Rs. 8 lakhs)

This scheme aims at research studies for identifying growth centres for the creation of employment, provision of infrastructural facilities and other amenities in the backward districts of the State. A scheme for development of Kayamkulam in Alleppey district is under preparation.

14. *Training of Personnel (including Apprenticeship Training)*  
(Outlay Rs. 9 lakhs)

The scheme is meant for imparting training to the technical personnel of the Department of Town Planning in Town and Country Planning and also for inservice orientation, and for giving training to the apprentices. The outlay is meant for the above purposes.

15. *Improvement and Development of Small, Medium and Intermediate Towns—Centrally sponsored with 50 per cent Central Assistance—Matching Contribution from the State Government*  
(Outlay Rs. 350 lakhs)

The scheme envisages provision of financial assistance for improvement of small and medium town in the State for which project reports have been prepared. The provision is to meet the State's share of this centrally sponsored scheme.

16. *Re-Development of Blighted Spots in Major Urban Centres*  
(Outlay Rs. 5 lakhs)

A scheme for the re-development of blighted spots occurring in the core areas in the major urban centres of the State is proposed to be taken up during the sixth plan period. The main problems in such affected areas are over crowding, narrowness of streets and roads, mixed land uses, sub-standard buildings, under utilisation of valuable land, etc. The scheme envisages detailed studies of the affected areas, preparation of detailed town planning schemes for such blighted areas and providing financial assistance for implementation of such schemes.

17. *Decennial Urban Land Use Survey Coinciding with Census Operation*  
(Outlay Rs. 4 lakhs)

The Town and Country Planning Organisation has requested all States to undertake decennial land use surveys of urban areas along with the census operations 1981. The provision is meant for the same.

*Minimum Needs Programme*

18. *Slum Clearance/Improvement in Municipal/City Corporation Areas*  
(Outlay Rs. 600 lakhs)

The slum improvement scheme aims at the eradication of slums in urban areas by improving the slums, where the poor and low income group families live in sub-standard conditions, by providing water supply, street lighting and communication facilities. A massive slum clearance/improvement programme covering the major slums in all Municipal Corporations and Towns of the State with a time bound programme to eradicate slums within a period of 10 years at a total cost of Rs. 20 crores has already been drawn up. The provision provided is for financial assistance by way of grant (50 per cent) and loans (50 per cent) to urban local bodies for implementing the above programme during the Sixth Plan period.

TABLE 3.43

Urban Development—Scheme-wise Outlay

(Rs. lakhs)

Sl. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay (B.E.)	Anticipated Expenditure (R.E.)	Outlay	Capital Content	Outlay (B.E.)	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<i>Financial Assistance to Local Bodies</i>								
<i>Remunerative Schemes</i>								
1.	Kerala Urban Development Finance Corporation	110.00*	110.00*	110.00*	580.00*	385.00	110.00*	71.00

\*Market borrowing

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2. Share Capital Contribution to Kerala Urban Development—Finance Corporation	..	..	..	20.00	..	..	..
3. Town Improvement Scheme Non-remunerative schemes—Financial Assistance to Municipalities/Corporations	18.27	10.00	10.00	50.00	32.00	10.00	7.00
4. District Planning Units of the Department	0.43	2.00	2.00	10.00	..	2.00	..
5. Master Plans for Agro-Industrial Centres, Urban areas and Tourist Centres	1.03	1.60	1.60	9.00	..	1.60	..
6. Re-organisation of Headquarters Unit and Subordinate Offices of the Town Planning Department	..	3.00	3.00	18.00	..	3.00	..
7. Traffic Operation Plan for Major Urban Centres	10.27	1.00	1.00	5.00	..	1.00	..
8. Creation of Planning and Development Authorities in Selected Urban Areas	6.81	8.00†† 0.00†	8.00†† 0.00†	50.00††	..	7.999†† 0.00†	..
9. Implementation of Development Plans in Urban Areas—Financial Assistance to Planning and Development Authorities for Implementing Development Plan (Grant-in-Aid)	40.00** 11.00	10.00** 4.00	10.00** 4.00	160.00**	104.00	16.00	10.00
10. Preparation of a State Spatial Development Plan	..	3.00	3.00	15.00	..	3.00	..
<i>Town and Country/Regional Planning</i>							
11. State Town and Country Planning Board	..	0.70	0.70	2.00	..	0.70	..
12. Creation of an Evaluation and Monitoring Cell	..	0.70	0.70	5.00	..	0.70	..
13. Scheme for the Development of Growth Centres	..	1.50	1.50	8.00	..	1.50	..
14. Training of Personnel (including Apprenticeship Training)	0.96	1.50	1.50	9.00	..	1.50	..
15. Improvement and Development of Smaller Towns (50% Central Assistance) Matching Contribution from State Government	2.40	75.00	75.00	350.00	227.00	75.00	46.00
16. Re-development of Blighted Spots in Major Urban Centres	..	..	..	5.00	..	..	..
17. Decennial Urban Land Use Survey coinciding with Census Operation	..	..	..	4.00	..	1.00	..
18. Cochin Town Planning Trust	37.50	..	..	..	..	..	..
<i>Environmental Improvement of Slum Minimum Needs Programme</i>							
19. Slum Improvement in Municipal/City Corporation Areas	10.00	65.00	65.00	600.00	390.00	65.00	46.00
Total-Urban Development	248.67	297.001	297.002	1900.00	1138.00	300.00	186.00

† Includes the scheme "Idukki Development Authority" and Trivandrum Town Planning Trust Authority.

\*\* Includes the schemes "Urban Environmental Improvement" and Urban Development including land acquisition.

## Information and Publicity

The success of development programmes, in general, depends very much on the active co-operation and participation of the people. This, in turn, can be achieved only with the help of a well equipped and dynamic publicity media. The Public Relations Department of the State has to be geared up for this positive role. The following are the schemes proposed under Information and Publicity:

### Direction and Administration—Press Information Service

#### 1. Press Tours

(Outlay Rs. 3 lakhs)

The object of the scheme is to conduct press tours to areas of developmental and cultural importance of other States and within the State and to ensure press coverage on topics of interest. Also inter-state exchange of journalists is arranged to project the image of the State and to ensure national integration.

2. *Press Academy*

(Outlay Rs. 10 lakhs)

The Kerala Press Academy with its headquarters at Ernakulam is an autonomous body charged with the responsibility of building up infrastructure for the development of a healthy and responsive press in the State. The Academy has drawn up programmes for imparting inservice training, research, exhibitions and publication of books and periodicals on journalism and related matters. It also proposes to construct a building complex to accommodate its office, hostels for trainees and quarters in a three acre plot already acquired by the Academy. The provision is for giving financial assistance to the Academy for the above activities.

*Field Publicity*3. *Strengthening of Field Publicity Organisation*

(Outlay Rs. 10 lakhs)

The outlay provided is for the construction of Rengasalas at Ernakulam, Calicut, Trichur, Kottayam and Cannanore, purchase of vehicles for the District Information Offices at Trivandrum, Quilon, Trichur, Kottayam, Wynad and for the formation of two Field Publicity Units one at Kasargode and another at New Delhi attached to the Information Office there.

4. *Exhibition*

(Outlay Rs. 10 lakhs)

The provision is meant for publicity regarding the development activities in the State through exhibitions. The Public Relations Department has to participate in the several Rural Exhibitions and All India Exhibitions.

5. *Community Listening Sets—Special Component Plan*

(Outlay Rs. 1.25 lakhs)

The scheme is intended for the supply of community listening sets free of cost/at subsidised rates for installation in Harijan predominant areas and tribal pockets and also to libraries, institutions, cosmopolitan hostels etc., serving Scheduled Castes and Scheduled Tribes.

*Songs and Drama Service*6. *Cultural Affairs (Songs & Drama)*

(Outlay Rs. 10 lakhs)

The provision is for organising inter-State exchange of cultural troupes, giving State Awards for professional drama and also for organising cultural programmes on special occasions.

*Photo Services*7. *Photo Publicity*

(Outlay Rs. 6.50 lakhs)

The provision is meant for providing vehicles to the photographic units attached to the Regional Offices at Ernakulam and Calicut, purchase of Cameras and other photographic materials and also photo coverage.

*Advertising and Visual Publicity*8. *Display Advertisements*

(Outlay Rs. 10 lakhs)

Newspapers and periodicals are used as powerful media for publicity by issuing display advertisements on important welfare and development activities. The provision is for issuing display advertisements in popular Dailies and other periodicals within and outside the State.

9. *Information Centres*

(Outlay Rs. 1.75 lakhs)

The provision is meant for starting Information Centres at Malappuram, Idukki, Kasargode, Kattappana, and Wynad and also for re-equipping and expanding the existing centres.

10. *Films*

(Outlay Rs. 10 lakhs)

The provision is for the production of documentaries and newsreels on developmental and welfare programmes of Government, on the life and contributions of important personalities and also for the purchase of children's films.

*Publications*11. *Publicity Materials*

(Outlay Rs. 3.50 lakhs)

The scheme is meant for the production of publicity materials like posters, pamphlets, booklets, wall calendars, media hand books etc., on a massive scale and also for the publication of the Departmental journals 'JANAPADHAM' and 'KERALA CALLING'.

12. *Publication of Books*

(Outlay Rs. 0.50 lakhs)

The provision is proposed for getting books written on important cultural, educational and social topics by eminent authors and publishing them as priced ones, and also for reviewing and revising the more important books published by the Department on earlier occasions.

*Research and Training in mass communication*13. *Training of Field Publicity Officers*

(Outlay Rs. 0.50 lakh)

The scheme is for giving training to the Officers of the Public Relations Department at the Indian Institute of Mass Communications, New Delhi, National Institute for Rural Development, Hyderabad and also for deputing Officers for participating in seminars and workshops on problems of communication and for training at the DAVP under the Government of India, Ministry of Information and Broadcasting in advertisements and exhibitions.

*Others*14. *Welfare Fund for Journalists*

(Outlay Rs. 8 lakhs)

The provision is meant for Government's contribution to the Welfare Fund for Journalists.

15. *Welfare Fund for Cine Artists*

(Outlay Rs. 5 lakhs)

The provision is meant for Government's contribution to the Welfare Fund for Cine Artists.

TABLE 3.44

## Information and Publicity—Scheme-wise Outlay

(Rs. lakhs)

Sl. No.	Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay (B.E.)	Anticipa- ted expendi- ture (R.E.)	Outlay	Capital Content	Approved Outlay (B.E.)	Capital Content
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Press Information Service</i>								
1.	Press Tours	0.65	0.30	1.30	3.00	..	0.30	..
2.	Press Academy	1.00	1.00	1.00	10.00	6.50	1.00	0.65
<i>Field Publicity</i>								
3.	Strengthening of Field Publicity	0.95	1.25	1.25	10.00	6.50	1.25	0.85
4.	Exhibition	18.41	1.00	1.00	10.00	..	1.00	..
5.	Community Listening Sets (Special Component Plan)	0.46	0.25	0.25	1.25	..	0.25	..
<i>Songs and Drama Service</i>								
6.	Cultural Affairs (Songs and Drama)	1.09	2.00	2.00	10.00	..	2.00	..
<i>Photo Service</i>								
7.	Photo Publicity	0.46	1.50	1.50	6.50	..	1.50	..
<i>Advertising and Visual Publicity</i>								
8.	Display Advertisement	1.16	1.00	3.00	10.00	..	1.00	..
9.	Information Centres	0.10	0.25	0.25	1.75	..	0.25	..
10.	Films	1.99	1.50	1.50	10.00	..	1.50	..
11.	Publicity Materials	1.01	0.75	0.75	3.50	..	0.75	..
12.	Publication of Books	..	0.10	0.10	0.50	..	0.10	..
<i>Research and Training in Mass Communications</i>								
13.	Training of Field Publicity Officers	0.08	0.10	0.10	0.50	..	0.10	..
<i>Others</i>								
14.	Welfare Fund for Journalists—Government Contribution	0.50	1.00	1.00	8.00	..	1.00	..
15.	Welfare Fund for Cine-Artistes—Government Contribution	1.00	1.00	1.00	5.00	..	1.00	..
Total—Information and Publicity		28.86	13.00	16.00	90.00	13.00	13.00	1.50

**Labour and Labour Welfare***Direction and Administration*1. *Development of the Directorate of Training*

(Outlay Rs. 7 lakhs)

The number of institutions under the control of the Department of Industrial Training has increased substantially during recent years and more institutions are proposed to be started during the Sixth Plan period. For the effective supervision and control of these institutions, the Department of Industrial Training has to be reorganised and strengthened with regional offices and supporting staff. The provision is meant for the above purpose.

*Working Conditions and Safety*2. *Machinery for the Enforcement of Agricultural Labourers' Minimum Wages*

(Outlay Rs. 10 lakhs)

The scheme envisages setting up of a separate wing for the enforcement of the provisions of the Agricultural Labourers' Minimum Wages Act, 1948 and the Kerala Agricultural Workers Act 1974. The Kerala Agricultural Workers' Act contains provisions for the appointment of inspectors conciliation officers and Agricultural Tribunals for the enforcement of the Act and Rules. For the effective enforcement of the provisions contained in the Act and Rules the existing machinery consisting of one Inspector for

each District, notified as Inspectors and Conciliation Officers under the Agricultural Workers Act is quite inadequate. Considering the quantum and despatch of the work involved it is proposed to adequately strengthen the machinery by creating a separate and full-fledged wing for the purpose in the Department of Labour. The wing will consist of (a) Taluk level Inspectors of Agricultural Labour; (b) District level Conciliation Officers; (c) three Zonal Agricultural Tribunals; and (d) a Joint Labour Commissioner at the headquarters as head of the Minimum Wages Implementation Machinery.

The scheme is proposed as a centrally sponsored one. The outlay is meant as State's share of the expenditure.

### 3. Industrial Hygiene Laboratory

(Outlay Rs. 7 lakhs)

The provision is meant for establishing an Industrial Hygiene Laboratory in order to enable the State Director of Factories and Boilers to effectively enforce the provisions of the Factories Act for the protection of the health of the workers who are likely to be exposed to air pollutants in the working environment. Foreign equipments, technical guidance service and training facilities required for the project are expected under the UNDP Technical Assistance Scheme. The outlay proposed is towards cost of establishing the laboratory with appropriate accommodation, recruitment of necessary staff and procurement of certain indigenous equipments and materials.

### General Labour Welfare

#### 4. Labour Welfare Fund Board

(Outlay Rs. 23 lakhs)

The Labour Welfare Fund Board is a statutory body constituted for promoting the welfare of the workers coming under the coverage of the Labour Welfare Fund Act, 1975. Every employee coming under the coverage of the Act has to contribute fifty paise and every employer in respect of each such worker rupee one per half year to the Fund. Such contributions and matching contribution from Government constitute the resources of the Fund for its various welfare programmes for the benefit of the workers. The following are the welfare programmes proposed to be implemented by the Board during the Sixth Plan period:

- (a) Award of scholarships for higher education to the children of workers;
- (b) Payment of compassionate relief to the dependants of employees dying in harness;
- (c) Provision of vocational training to children of workers;
- (d) Holiday Home for workers at Thekkady;
- (e) Financial assistance to libraries for workers;
- (f) Opening Welfare Centres for workers;
- (g) Provision of employment to dependants of workers;
- (h) Higher education facilities to workers; and
- (i) Study tours and visits for workers.

The outlay provided is towards State's contribution to the Labour Welfare Fund for implementing the above labour welfare programmes.

#### 5. Welfare Fund for Cashew Workers

(Outlay Rs. 1 lakh)

It is proposed to constitute a Welfare Fund for workers employed in cashew industry. The provision is towards Government's contribution to the Fund.

#### 6. Welfare Fund for Coir Workers

(Outlay Rs. 1 lakh)

Steps are under way to constitute a Welfare Fund for the benefit of the workers engaged in the coir industry. The outlay is towards Governments' contribution to the Fund.

#### 7. The Kerala Coconut, Palmyra and Aracanut Tree Climbers Welfare Scheme

(Outlay Rs. 10 lakhs)

The scheme introduced in 1980 with retrospective effect from 1-4-1979 envisages payment of an ex-gratia financial assistance of Rs. 5000 to an employee in the event of his permanent and total disablement as a result of an accident arising out of and in the course of his employment. In the case of his death as a result of the accident the ex-gratia financial assistance will be given to his dependants. The outlay is meant for the above purpose.

### Education and Training

#### 8. Strengthening of I. T. Is.

(Outlay Rs. 47 lakhs)

The Industrial Training Institutes in the State need substantial strengthening in order to ensure the quality of the instructions imparted in these Institutes. The I. T. Is., in general, are not equipped according to prescribed pattern. Most of the machines and equipments available are old and outmoded. Modern machinery and equipments in adequate measure are not available for instruction in modern trades like Electronics, Mechanic (Refrigeration and Air conditioning), Mechanic (Radio and Television) etc. The majority of the Industrial Training Institutes is lacking in basic amenities such as proper buildings, compound walls, playgrounds, auditoriums, libraries, hostels, staff quarters etc., It is proposed to strengthen the I. T. Is with these instructions and related facilities in a phased manner. The following programmes are proposed to be taken up during the Sixth Plan period:

- (a) Modernisation of machinery and equipments;
- (b) Construction of Institute buildings;
- (c) Construction of staff quarters;
- (d) Construction of hostel buildings for the I. T. Is;
- (e) Providing proper library facilities in all the I. T. Is and related instruction centres; and
- (f) Diversification of Trades like Electronics, Mechanical (Refrigeration and Air conditioning), Mechanical (Radio & Television) Stenography etc., The outlay provided is for the above purposes.

9. *New Industrial Training Institutes*

(Outlay Rs. 74 lakhs)

The provision is meant for starting new I. T. Is including I. T. I., Kasargode, I. T. I. for the handicapped and I. T. I. for women, Trivandrum.

10. *Regional Vocational Training Institute for Women*

(Outlay Rs. 5 lakhs)

This Institute is proposed to be set up at Trivandrum in the Central Sector with S. I. D. A. aid. As per the agreement, the State Government has to provide the necessary land and building for the Institute. The other inputs will be provided by the Government of India and S. I. D. A. The outlay is for meeting the State Governments' commitments for the project.

11. *C. T. I. Training and Retraining*

(Outlay Rs. 5 lakhs)

In order to keep the instructional staff abreast of the modern trends in industrial processes and techniques they have to be given periodical training. The provision is meant for deputing the instructors for training in the various C. T. Is.

12. *Advanced Courses—Post I. T. I. Training*

(Outlay Rs. 5 lakhs)

The scheme envisages provision of intensive training for one or two years to selected I.T.I. certificate holders in selected trades to make them proficient enough to undertake work independently in modern trades. The provision is for introducing some modern trades in the I.T.Is. for such training.

13. *Scheme for Scheduled Castes and Scheduled Tribes*

(Outlay Rs. 5 lakhs)

This scheme aims at offering intensive training to the Scheduled Caste and Scheduled Tribe candidates. There is acute scarcity of skilled persons belonging to Scheduled Castes and Scheduled Tribes especially in popular trades. The proposed outlay is for the introduction of intensive course in the I.T.Is. exclusively for Scheduled Castes and Scheduled Tribes.

14. *Scheme for giving Training to Trainees Sponsored by the Labour Welfare Fund Board*

(Outlay Rs. 1 lakh)

This is a scheme for giving training to the trainees sponsored by the Labour Welfare Fund Board. The entire amount will be reimbursed by the Labour Welfare Fund Board.

15. *Advanced Vocational Training System*

(Outlay Rs. 13 lakhs)

The A.V.T.S. at Kalamassery is at present accommodated in the I.T.I., Kalamassery. A separate

building and necessary indigenous machines and equipment will have to be provided to the system as part of the State Governments Commitments to this UNDP/ILO aided project. The provision is for the above purpose.

16. *Apprenticeship Training Scheme*

(Outlay Rs. 15 lakhs)

In order to provide facilities for related instruction classes to Apprentices, seven Related Instruction Centres have been started in the State. However, difficulties are being experienced in providing Basic Training facilities to apprentices in the newly designated trades such as printing, catering, chemical, tailoring, agricultural group of trades etc. as these trades are not available in the I.T.Is. concerned. Further, Related Instruction Centres are not available at present in the Districts of Idukki, Palghat, Malappuram and Cannanore. It is, therefore, proposed to set up Basic Training Centres for Printing, Catering, Chemical and Tailoring trades and also to establish four Related Instruction Centres, in a phased manner. The provision is for the above purposes and also for continuing the current programmes.

*Development of Institutions*17. *Institute of Labour and Employment*

(Outlay Rs. 4 lakhs)

The provision is towards financial assistance to the Institute for continuing its research and training programmes.

*Employment Services*18. *National Employment Scheme—Establishment of Town/Taluk Employment Exchanges*

(Outlay Rs. 15 lakhs)

The rapid increase in the number of applicants in the Live Register of Employment Exchanges in the State is creating various administrative problems resulting in the deterioration of the quality of the services rendered by the Exchanges. The Employment Exchanges in the State are now located in urban centres i.e. at the District headquarters. For rendering better service to the rural population, decentralisation of the employment services through the opening of Employment Exchanges at Taluk levels is necessary. It is proposed to open Taluk Employment Exchanges in all the Taluks in the State except in 5 Taluks where Town Employment Exchanges having jurisdiction over the concerned Taluk is now functioning. The proposal is to open 52 Taluk Employment Exchanges in a phased manner. The outlay provided is for opening 16 Taluk Employment Exchanges during the Sixth Plan period, besides continuing the Town Employment Exchanges already created.

19. *Strengthening of Vocational Guidance Programme*

(Outlay Rs. 1 lakh)

The Vocational Guidance Units attached to 6 Employment Exchanges in the State have been strengthened during 1978-79 to cope with the heavy demands.

on the Units from job seekers. It is necessary to strengthen the Vocational Guidance Units in the remaining 5 Employment Exchanges. The outlay is meant for strengthening the Vocational Guidance Units attached to 5 Employment Exchanges and also for continuance of the existing units.

20. *Strengthening of Employment Market Information Programme*

(Outlay Rs. 3 lakhs)

The Employment Market Information programme aims at getting every unemployed in the State registered in the Employment Exchanges and covering all employers under the Market Information Programme. For this, the Employment Market Information Units attached to the Employment Exchanges have to be strengthened. Units attached to 3 Employment Exchanges have been strengthened in 1978-79 and a 'Peripatetic team for street surveys' has been sanctioned in 1979-80. In the Sixth Plan, it is proposed to strengthen the Employment Market Information Units in the remaining 8 Employment Exchanges. Of these, 2 Units have already been strengthened in 1980-81. The outlay is for strengthening the Employment Market Information Units besides for continuance of the existing units.

21. *Establishment of Special Cells for SC/ST and Ex-servicemen*

(Outlay Rs. 3 lakhs)

A special cell for Scheduled Castes/Scheduled Tribes and Ex-servicemen is now functioning at Trivandrum to render special assistance to the applicants belonging to the Scheduled Castes/Scheduled Tribes and Ex-servicemen categories. It is proposed to establish such units attached to the remaining 10 District Employment Exchanges in the State. The outlay is meant for the continuance and strengthening of the special cell for SC/ST and ex-servicemen at Trivandrum and also for establishing 10 such cells attached to the remaining 10 Districts Employment Exchanges.

22. *Establishment of Coaching-cum-Guidance Centres for Scheduled Castes and Scheduled Tribes*

(Outlay Rs. 4 lakhs)

The outlay is meant for giving coaching/guidance for competitive tests/interviews to selected candidates belonging to SC & ST. It is proposed to establish 11 such coaching-cum-guidance centres (one in each District) during the Sixth Plan period.

23. *Overseas Development Employment Promotion Consultants Ltd.*

(Outlay Rs. 16 lakhs)

The Overseas Development and Employment Promotion Consultants Ltd. is a Joint Stock Company registered in November 1977 and fully owned by the State Government with an authorised share capital of Rs. 100 lakhs. Its paid up share capital as on 1979-80 is Rs. 23.29 lakhs. The objectives of the Company are to promote employment in foreign countries,

backup industrial ventures abroad, raise the necessary financial resources from Indians working abroad for projects in India, promote export of traditional and non-traditional goods from the country etc.

The Company is licenced by the Central Ministry of Labour as an authorised recruiting agent and during these initial years of its existence it has concentrated in exploring employment opportunities in foreign countries for semi-skilled, skilled, technical and educated Keralites. It has successfully met the demands for personnel from several countries in West Asia and North Africa. The total number of personnel placed for overseas jobs by the Company is about 950. The annual earnings of these personnel in foreign exchange is of the order of Rs. 3.00 crores, a major portion of which is remitted to India. However, the placement activities of the Company for overseas employment is a welfare service and the Company is precluded from charging any fees from the beneficiary employees as per terms of its licence.

The service charges realised from the foreign employers are just nominal and even this will have to be dispensed with in order to make it sufficiently attractive for the foreign employers to recruit through the Company. Therefore, the Government will have to pay service charges to the Company for its placement services.

The Company has an export licence and has made a beginning last year by exporting small quantities of tea and a few live plants to U.A.E. The Company proposes to diversify its activities and take up the following ventures during the Sixth Plan period.

- (a) Export of traditional and non-traditional products of Indian origin in a substantial way;
- (b) Industrial ventures in Kerala with participation from overseas Indians in the form of share capital/public deposits/convertible debentures;
- (c) Joint ventures abroad such as irrigation projects, agricultural farms, land development schemes etc. for which several enquiries have been received.
- (d) Housing schemes in Kerala for Overseas Keralites.

These are all bankable schemes and are capable of attracting investments from overseas Indians. However, as promoters of these ventures, the Company requires margin money from Government by way of Share capital participation.

The outlay proposed is for payment of service charges to the Company for its placement services and also for providing margin money to the Company by way of share capital contribution for undertaking the above industrial ventures.

24. *Hostel for Working Women*

(Outlay Rs. 20 lakhs)

As more and more women are getting employed and that too in places far off from their native places, very often, they are forced to accommodate themselves in

places without adequate facilities. Although there are a few working women's hostels functioning in some of the district headquarters, more hostels are to be set up in the district headquarters and important centres in the State. Assistance from financial institutions will be available for this programme. The provision is for the margin money for attracting institutional finance.

## 25. Employment Generation Scheme

(Outlay Rs. 500 lakhs)

The plan provision is for employment generation schemes such as, training in catering technology, training of family welfare promoters, training of national small saving organisers etc. in Urban areas. Programmes for the rural segment are merged with the schemes, "National Rural Employment Programme" under the Community Development and Panchayat sector.

TABLE 3.45

### Labour and Labour Welfare—Scheme-wise Outlay

Name of the Scheme/Project*	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved outlay (B. E.)	Anticipated expenditure (R. E.)	Proposed outlay	Capital content	Outlay B. E.	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Direction and Administration</i>							
1. Development of the Directorate of Training	0.80	2.00	2.00	7.00	..	1.50	..
<i>Working Conditions and Safety</i>							
2. Machinery for enforcement of Agricultural Labourers' Minimum Wages Act	..	..	..	10.00	..	3.00	..
3. Industrial Hygiene Laboratory	..	..	..	7.00	2.00	2.00	..
Sub Total 2 & 3	..	..	..	17.00	2.00	5.00	..
<i>General Labour Welfare</i>							
4. Labour Welfare Fund Board (State share)	3.00	11.40	11.40	23.00	..	11.40	..
5. Welfare Scheme for Cashew Workers	..	0.20	0.20	1.00	..	0.20	..
6. Welfare Scheme for Coir Workers	..	0.20	0.20	1.00	..	0.20	..
7. Welfare Scheme for Coconut, Palmyrah and Arecanut Tree climbers	..	0.20	25.20	10.00	..	2.00	..
Sub Total 4 to 7	3.00	12.00	37.00	35.00	..	13.80	..
<i>Education and Training</i>							
8. Strengthening of Industrial Training Institutes	19.59	21.00	21.00	47.00	33.00	25.00	16.25
9. New Industrial Training Institute (including women's I. T. I. Trivandrum)	9.99	15.00	15.00	74.00	52.00	20.95	13.60
10. Regional Vocational Training Institute for Women	..	..	..	*5.00	3.25	2.00	1.25
11. C. T. I. Training and Retaining	1.38	1.00	1.00	5.00	..	1.00	..
12. Advanced Courses (Post I. T. I.) Training	0.23	1.00	1.00	5.00	..	1.00	..
13. Scheme for SC & ST	1.29	1.00	1.00	5.00	..	1.00	..
14. Training Scheme for Candidates Sponsored by the Labour Welfare Fund Board	1.08	1.00	1.00	1.00	..	..	..
15. Advanced Vocational Training Scheme	3.30	4.00	4.00	13.00	8.45	4.00	2.60
16. Apprenticeship Training Scheme	2.11	2.00	2.00	15.00	4.00	3.00	..
Sub Total 8 to 16	38.97	46.00	46.00	170.00	100.70	57.95	33.70

\*Land already acquired for Rs. 7 lakhs—charged under new I. T. Is. The present provision is for building.



	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Development of Institutions</i>								
17. Institute of Labour and Employment		1.00	1.00	1.00	4.00	..	1.00	..
<i>Employment Services*</i>								
18. (a) National Employment Scheme (b) Special Component Plan		1.96	3.56	3.56	15.00	..	4.00	..
Establishment of Town/Taluk Employment Exchange		..	0.44	0.44	..	..	..	..
19. Strengthening of Vocational Guidance Programme		..	..	..	1.00	..	0.25	..
20. Strengthening of Employment Market Information Programme		..	..	1.00	3.00	..	1.00	..
21. Establishment of Special Cells for SC/ST and Ex-servicemen at District Head Quarters		..	..	..	3.00	..	1.00	..
22. Establishment of Coaching—Cum Guidance Centres for SC/ST		..	..	..	4.00	..	2.00	..
23. Overseas Development and Employment Promotion Consultant Ltd.		6.29	8.00	8.00	16.00	..	8.00	..
Sub Total 18 to 23		8.25	12.00	12.00	42.00	..	16.25	..
<i>Others</i>								
24. Hostel for Working Women		..	..	17.50+	20.00	..	2.50	..
25. Employment Generation Scheme		367.84	400.00	500.00@	2.00	..	2.00	..
26. Unemployment Assistance Scheme		..	0.001	..	..	..	..	..
27. Rehabilitation of Plantation Limited		10.00	0.001	..	..	..	0.001	..
28. Rehabilitation of Repatriates from Sri Lanka		..	4.003	4.003	..	..	0.004	..
Total—Others		377.84	404.004	554.004	22.00	..	4.505	..
Total—Labour and Labour Welfare		429.86	477.005	652.004	297.00	102.70	100.005	33.70

\*Employment Assistance scheme and "Employment generation scheme" have been transferred to the head Community development.

@To be charged under Community Development sector.

+ Reported by the Department.

The scheme "Rehabilitation of Bonded labour" is transferred to Tribal Welfare Sector.

## Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes

### Welfare of Scheduled Castes and other Backward Classes

The Scheduled Caste population in Kerala has increased from 17.72 lakhs in 1971 to about 22 lakhs at present. During the earlier plan periods special attention was given to educational schemes, as a result of which Kerala has attained a good position in respect of literacy of scheduled castes. The enrolment ratio of scheduled castes in primary classes has almost reached the level of forward communities. But the drop-out rate is high among scheduled castes and scheduled tribes. During the Fifth Plan period the State Government took some specific measures for the rapid economic development of these sections of the society. A new strategy was evolved during the Fifth Plan period to ensure flow of benefits from the general sector to scheduled castes/scheduled tribes. Special Component Plans for 1979-80 and 1980-81 were

prepared to ensure the proper utilisation of funds from the General Sector. Thus the sectoral outlay for welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes is only to supplement the funds earmarked from the general sector. The Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes registered during 1972 is undertaking programmes of economic uplift of scheduled castes and scheduled tribes. The Corporation has schemes like construction of houses, loan assistance for the purchase of agricultural land and starting industrial units etc.

Eventhough there has been substantial stepping up of investment in this sector the pace of progress is not in conformity with the investments. This section of the society has not been able to take full advantage of the various development schemes implemented for their benefit. In the Sixth Plan special emphasis

will be laid on those programmes which help the economic development of scheduled castes. The main objectives are reduction of poverty, provision of basic needs like housing, education and electricity, drinking water and removal of unemployment. Funds earmarked for the welfare of Scheduled Castes, Scheduled Tribes and other Backward Classes sector are essentially to supplement those provided in general sectors. General sector programmes benefiting scheduled castes will be properly planned and implemented in such a way as to suit the needs of these sections. Better co-ordination with all departments implementing general sector schemes will be ensured so as to utilise fully the due share for scheduled castes. Family oriented programmes will be taken up on a large scale to enable the maximum number of scheduled caste families to cross the poverty line within this plan period. Scheduled caste cultivators and beneficiaries of land reform measures will be given adequate support to increase their agricultural production.

More adult education centres are expected to be located in the areas of Harijan concentration. Care will be taken to achieve higher enrolment and lower dropout rate. The special development activities in the Harijan Welfare sector will be continued with added emphasis. Adequate financial support will be given to the Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes so that they can avail themselves of more funds by way of institutional finance. Facilities of modern medical care and child care system in Harijan hamlets will be improved. Drinking water wells and protected water supply will be provided to beneficiaries of housing schemes and in the Harijan hamlets. In order to improve the housing conditions of this community massive house building programmes will be taken up.

The details of schemes proposed to be taken up during the Sixth Plan period are given below:—

#### A. Welfare of Scheduled Castes

##### Education

##### 1. Scholarships and Stipends

(Outlay Rs. 60 lakhs)

This scheme aims at payment of lumpsum grant to scheduled caste students in pre-matric classes during the Sixth Plan period.

##### 2. Boarding Grants

(Outlay Rs. 4.40 lakhs)

This scheme is for the payment of boarding grants at the rate of Rs. 85 per mensem to scheduled caste/scheduled tribe students residing in private subsidised hostels.

##### 3. Special Incentive to Talented Students

(Outlay Rs. 0.70 lakhs)

This plan scheme aims at encouraging the scheduled caste students achieve higher performance level in public examinations. The rates of monthly grants vary from Rs. 100 to Rs. 150 depending on the course of study. The eligibility for special incentive grant will be based on the marks obtained in the public examinations by the Harijan students in each district.

##### 4. Cosmopolitan Hostels

(Outlay Rs. 29 lakhs)

At present there are 16 cosmopolitan hostels run by the Harijan Welfare Department. The outlay provided in the Plan is for opening 5 new hostels during the Plan period.

##### 5. Welfare Hostels

(Outlay Rs. 45 lakhs)

This scheme is intended to provide hostel facilities to scheduled caste students pursuing pre-matric studies. There are at present 7 welfare hostels run by the Harijan Welfare Department. Twelve new welfare hostels will be started during the Sixth Plan period. The plan outlay also includes provision for the construction of hostel buildings and tuition fees of the students.

##### 6. Adult Education

(Outlay Rs. 1 lakh)

District and State level seminars will be conducted under this scheme. Study tours of scheduled castes will also be arranged under the scheme.

##### 7. Girl's Hostel (State Share)

(Outlay Rs. 20 lakhs)

This is a centrally sponsored scheme which is eligible for 50 per cent central assistance. The outlay provided in the plan is for the construction of buildings for girl's hostels.

##### 8. Coaching and Allied Schemes

(Outlay Rs. 10 lakhs)

This is also a centrally sponsored scheme having 50 per cent central assistance. The outlay is for starting one I.A.S. Coaching Centre and two new pre-examination training centres during the Plan period.

##### 9. Pre-matric Scholarships to children of those engaged in unclean occupations

(Outlay Rs. 2.50 lakhs)

The scheme is intended for the payment of scholarships and stipends for studying in pre-matric classes to children of those engaged in unclean occupations. The outlay made in the Plan is to meet the State share of this centrally sponsored scheme.

##### 10. Book Banks to Medical and Engineering Students

(Outlay Rs. 5 lakhs)

This is a centrally sponsored scheme having 50 per cent central assistance. Book banks established in the medical and engineering colleges of the State will be continued during the Plan period. Additional sets of books will also be purchased. It is proposed to extend this scheme to other professional colleges like Agriculture, Fisheries etc.

*Economic Uplift*1. *Subsidy to Technically Trained Hands*

(Outlay Rs. 7 lakhs)

This scheme is intended to assist the scheduled caste candidates who come out of the various training centres run by Harijan Welfare Department. The Plan provision made is to assist 1500 such trainees to set up independent production or service units.

2. *Colonisation*

(Outlay Rs. 150 lakhs)

The Plan provision is mainly intended for establishing five new colonies for settling selected harijan families and for providing assistance for agriculture, industries and allied activities of these families. All basic needs like housing, water supply, link roads sanitation etc., will be provided. Settlers in the colonies will be selected from nearby localities and preference will be given to landless labourers. The provision also includes the requirements for the improvement works to the existing colonies. Nursery schools will be started in the colonies. Common buildings for the major colonies will also be constructed as centres for socio-cultural activities of the Harijans in the locality.

3. *Financial Assistance to Professionally Qualified Persons*

(Outlay Rs. 0.65 lakhs)

The scheme envisages provision of financial assistance to professionally qualified harijans to start independent professional units.

4. *Production Centres*

(Outlay Rs. 25 lakhs)

The outlay earmarked in the Plan is for starting new production/training centres as well as introducing modern trades in the existing training centres. Additional show rooms for the display and sale of goods produced in training centres will also be started during the plan period.

5. *Agricultural Schemes for Scheduled Caste*

(Outlay Rs. 100 lakhs)

This scheme is intended to give assistance to those harijans who are engaged in agriculture and allied activities. Assistance will be extended to the beneficiaries of Land Reforms Act. Assistance will be for land development, purchase of draught animals, and for the supply of agricultural implements and other agriculture inputs. Persons having only house sites will be given financial assistance for raising Kitchen gardens, purchase of 5 coconut seedlings and for the purchase of milch cows and for the construction of cattle shed. The outlay provided is for giving assistance to 2000 families having agricultural land and to 2000 persons having only house sites.

6. *Dairy Development*

(Outlay Rs. 130 lakhs)

The scheme is intended to extend assistance by way of grant to scheduled caste families to purchase milch cows, heifers, construction of cattle sheds and

providing other facilities. This scheme will be implemented through the Animal Husbandry and Development Departments.

7. *Financial Assistance to Harijan Families Engaged in Traditional Occupations*

(Outlay Rs. 180 lakhs)

This scheme aims at assisting harijans engaged in traditional occupations like mat-weaving, bamboo mat weaving, basket making, umbrella-making, tailoring etc. The outlay is for giving financial assistance to 20,000 families to procure raw materials and extending market facilities.

8. *Starting of Industrial Co-operative Societies for Trained Harijans*

(Outlay Rs. 75 lakhs)

This scheme is to organise 12 industrial co-operative societies during the Plan period for those harijans trained in departmental training institutions, Industrial Training Institutes etc. The provision is for the purchase of land, construction of workshop, purchase of machinery and working capital to establish these societies.

*Health, Housing and Others*1. *Inter-Caste Marriage*

(Outlay Rs. 20 lakhs)

The outlay is to provide assistance at the rate of Rs. 2,000 to inter-caste married couples who are put to considerable socio-economic hardships.

2. *Housing*

(Outlay Rs. 375 lakhs)

This scheme is for giving grant to selected Harijans for construction of residential houses. The provision is for the construction of 12,500 houses during the Sixth Plan period.

3. *Wells*

(Outlay Rs. 23 lakhs)

Drinking water wells will be constructed in areas of Harijan concentration.

4. *Training in Midwifery*

(Outlay Rs. 1.50 lakhs)

The outlay proposed will be utilised for imparting training to harijan girls in midwifery. In future this scheme will be implemented by the Department of Health Services.

5. (a) *Eradication of Untouchability*

(Outlay Rs. 13 lakhs)

The outlay is to continue the publicity activities undertaken by the Department for eradicating untouchability

(b) *Setting up of Machinery for the Untouchability*

(Outlay Rs. 15 lakhs)

This is a scheme having 50 per cent central assistance. This scheme envisages setting up of special police squads for the eradication of untouchability.

6. *Strengthening of Administrative and Executive Machinery*

(Outlay Rs. 20 lakhs)

The provision made in the plan is for strengthening the administrative and executive machinery of the Harijan Welfare Department for the effective implementation of the additional programmes proposed in the Plan.

8. *Balawadies-cum-Feeding Centres*

(Outlay Rs. 55 lakhs)

It is proposed to start 100 balawadies/nursery-cum-feeding centres during the Plan period

8. *Harijan Co-operatives*

(Outlay Rs. 0.25 lakh)

The scheme envisages the revitalisation of existing harijan co-operative societies and organisation of new societies. Only a token provision is made for this scheme as it is now implemented by the Co-operative Department and a proposal to transfer this to Harijan Welfare Department is under consideration of Government.

9. *Planning and Statistics Cell*

(Outlay Rs. 7 lakhs)

It is proposed to strengthen the Planning and Statistics Cell in the Department of Harijan Welfare to organise an efficient statistical system to cater to the planning and administrative needs of the Department. Necessary technical and administrative staff will be appointed in the Directorate and at the District Offices. The outlay earmarked also includes provision for the purchase of calculators for speedy processing of statistical data.

10. *Starting of Technological Institute*

(Outlay Rs. 5 lakhs)

It is proposed to start a technological institute for imparting employment oriented training to scheduled castes. The scheme will be implemented on the basis of the detailed project report, now being prepared by the Director of Technical Education. A token provision of Rs. 5 lakhs is provided for this scheme in the Plan.

11. *Training of Scheduled Castes in Trades where there is Dearth of Hands among Registrants in Employment Exchanges.*

(Outlay Rs. 5 lakhs)

The scheme is to organise specific training programmes for the benefit of Harijans in trades in which there is dearth of qualified hands among the registrants in the Employment Exchanges.

12. *Assistance for Tiling and Strengthening of Harijan Houses*

(Outlay Rs. 100 lakhs)

An outlay of Rs. 100 lakhs is earmarked in the Plan for meeting the expenditure on Tiling and Strengthening of Harijan houses in this State.

B. *Welfare of Scheduled Tribes*

According to the Socio-Economic Survey (1977-78) conducted by the Bureau of Economics and Statistics the population of scheduled tribes is 2 lakhs. The Tribal Welfare Department which was formed on 1-7-1975 is the agency to implement the tribal welfare programmes in the State. The main occupations of tribal people are agriculture and collection of minor forest produce. Most of the tribal families possess land, but large extents of tribal land especially in the northern districts have passed into the hands of non-tribal settlers. Government have enacted two important legislations viz., the Kerala Scheduled Tribes (Restriction of Transfer of Lands and Restoration of Alienated Lands) Bill, 1975 and the Bonded Labour System (Abolition) Bill, 1975. According to the former Act any transfer of property possessed by a member of scheduled tribe to persons other than a tribal effected on or after 1-1-1960 shall be deemed to be invalid and the former is entitled to restoration of possession of the land transferred by him. Tribal Sub-Plans were prepared for areas having more than 50 per cent tribal population. Thirty seven percent of tribal population has been covered by the sub plan. Hence the sectoral outlays are mainly intended to those living outside the Sub Plan areas.

It will be necessary to give the highest priority to build up inner strength of the tribal communities, so that they are able to take the benefit of the new programme. The basic task is to speed up the pace of development of the tribal areas and tribal communities, so that they are able to catch up with the remaining areas and communities. The entire tribal population whether living in areas of tribal concentration or outside will be covered by suitable development programmes. As far as Sub Plan programmes are concerned, inter-sectoral priorities for tribal sub plans will be determined with reference to their specific problems. Schemes will be implemented in such a way as to help elimination of exploitation. In the matter of tribal education 100 per cent coverage in enrolment will be achieved in the age group 6-14. The availability of fine drinking water to each tribal hamlet will be ensured. Mid-day meals will be provided to all children in the age-group 6-11 and supplementary feeding programmes for all under nourished in the age group 0-6, pregnant women and nursing mothers. Rural electrification programmes will support irrigation schemes, agricultural programmes, household industries and market centres. With these objectives in view an amount of Rs. 635 lakhs is provided in the Plan for Tribal Development. The scheme-wise details are given below:—

*Education*1. *Tribal Hostels*

(Outlay Rs. 60 lakhs)

It is proposed to start 20 new hostels and for the continuance of 8 hostels already started. The amount required for the construction of hostel buildings will also be met from the provision provided under this scheme.

2. *Balavadies and Creches*

(Outlay Rs. 16 lakhs)

The scheme envisages starting of Balavadies in tribal concentrations in order to provide pre-primary education and for the supply of foods. The provision is for the continuance of the 12 Balavadies now existing and for starting 50 new Balavadies.

3. *Grant in aid to Voluntary Organisations*

(Outlay Rs. 8 lakhs)

The scheme is intended to encourage voluntary organisations to start residential basic schools and dispensaries in tribal areas. They will be given grants subject to a maximum of 50 per cent of their expenditure.

4. *Providing Library, Reading Materials and Radio to Hostels*

(Outlay Rs. 0.90 lakhs)

The scheme is for providing periodicals, books and radio to the hostels under the Tribal Welfare Department.

5. *Special Coaching to Students*

(Outlay Rs. 2.53 lakhs)

It is proposed to appoint part-time teachers for giving special coaching to students in tribal hostels. The rate of honorarium to a teacher is Rs. 100 per month. The outlay is for continuing the system in the existing hostels and introducing the same in the new hostels.

6. *Training in Popular Trades*

(Outlay Rs. 4 lakhs)

Educated tribal youths will be trained in popular trades for the betterment of employment opportunities. The provision is for giving stipends to tribal trainees admitted in the Technological Institute proposed to be started at Ernakulam.

7. *Grants, Stipends etc., to Students in Tutorial Colleges*

(Outlay Rs. 9.20 lakhs)

The provision is to give stipends to tribal students who failed in the S.S.L.C. Examination to attend tutorial institutions and appear again for the examination. Stipends at the rate of Rs. 150 per month for four months, a lumpsum grant of Rs. 100 for the purchase of books, dress etc., and tuition fee of Rs. 180 to the institution will be paid.

8. *Benefit Oriented Camps*

(Outlay Rs. 3.25 lakhs)

The scheme is intended to organise medical camps and campaigns in most backward settlements for health check-up and to make the tribals aware of their rights and privileges in the society. The Plan provision made is for organising 70 camps during the plan period.

9. *Girls' Hostels*

(Outlay Rs. 18 lakhs)

This is a centrally sponsored scheme with 50 per cent central assistance. The provision is to meet the States' share of the scheme.

10. *Research Training and Special Project*

(Outlay Rs. 50 lakhs)

This is also a centrally sponsored scheme having 50 per cent central assistance. The Kerala Institute for Research Training and Development Studies of Scheduled Castes and Scheduled Tribes is engaged in the conduct of studies relating to Tribal and Harijan life and giving training to the officers working in tribal areas. An outlay of Rs. 50 lakhs is set apart in the Plan as State's share for the continuance of the Kerala Institute for Research Training and Development Studies of Scheduled Castes and Scheduled Tribes.

11. *Mini Theatre (Cultural Centres)*

(Outlay Rs. 3 lakhs)

The outlay earmarked is for the construction of cultural centres in tribal concentrations. It is proposed to construct three centres during the Sixth Plan period.

*Economic Uplift*1. *Colonisation*

(Outlay Rs. 51.62 lakhs)

The scheme is intended to establish colonies for rehabilitating tribal families in vested forests or other lands set apart for this purpose. The proposed outlay is for the completion of spill over works of colonies and for establishing 12 new colonies.

2. *Hamlet Development*

(Outlay Rs. 110 lakhs)

Schemes will be drawn up for the development of hamlets on the basis of the project report for each hamlet. The provision is for implementing schemes such as road development, land development, housing, water supply, electrification etc. Spill over works in the five hamlets and the schemes for the development of 50 new hamlets will be undertaken during the Sixth Plan period.

3. *Agriculture and Allied Sectors including grants for the Purchase of Agriculture Implements*

(Outlay Rs. 5.50 lakhs)

The programmes under this scheme include grant for development of land belonging to scheduled tribes, Minor Irrigation works, subsidy to long-term lending for agriculture, heifer distribution, purchase of pump-sets etc. A provision of Rs. 5.50 lakhs is required for this scheme during the Plan period.

4. *Production-cum-Training Centres*

(Outlay Rs. 16.90 lakhs)

The scheme is intended for the establishment of production-cum-training centres by converting the existing training centres. An outlay of Rs. 16.90 lakhs

is provided to establish 15 new tailoring centres, convert 3 training centres into production-cum-training centres and for the continuance of the existing tailoring centre at Nilambur.

5. *Employment to Tribal men in Industry*

(Outlay Rs. 2.10 lakhs)

The scheme is intended for imparting training to tribal youth in tractor and power tiller operations, pump-set operations etc. under Agro-industries Corporation and for apprenticeship in factories.

6. *Andyodaya Programme*

(Outlay Rs. 17 lakhs)

The scheme is to provide assistance to extremely poor tribal families by giving goats and poultry. Each family will be supplied with 10 poultry birds, 4 goats and one duck. Grant for the construction of goat shed and poultry house and for the purchase of feed will also be given. A provision of Rs. 17 lakhs is provided for this scheme in the Plan to give assistance to 1000 families.

7. *Rehabilitation of Bonded Labourers*

(Outlay Rs. 15 lakhs)

This is a centrally sponsored scheme having 50 per cent central assistance. The provision is for meeting the State share of the scheme. The scheme is intended to establish colonies and collective farms for the rehabilitation of released tribal bonded labourers.

*Financial Assistance to Small Entrepreneurs*

(Outlay Rs. 4 lakhs)

The scheme is intended for giving financial assistance to tribal people to run tea shops, provision shops etc. up to a maximum of Rs. 2000. The provision is for giving assistance to 200 persons during the Sixth Plan period.

*Health, Housing and Others*

1. *Housing*

(Outlay Rs. 155 lakhs)

The outlay is for the construction of 1500 houses at the rate of Rs. 8000 per house during the plan period.

2. *Repairs of Existing Houses and Wells*

(Outlay Rs. 10 lakhs)

The scheme is intended for the repair and maintenance of the existing houses and wells of the tribal people. An outlay of Rs. 10 lakhs is provided for this purpose.

3. *Engineering Wing*

(Outlay Rs. 4 lakhs)

In order to avoid the delay in the preparation of estimates for the construction and repair works under the tribal welfare schemes, it is proposed to

appoint one Assistant Engineer each in the Regional Tribal Development Offices. The provision is for meeting the expenditure for the pay and allowances of these Engineers.

4. *Planning and Statistics Cell*

(Outlay Rs. 4 lakhs)

The Scheme is intended to set up a statistical wing in the Tribal Welfare Department. The provision is for appointing technical staff at the headquarters office and at the regional offices.

5. *Construction of Residential Quarters*

(Outlay Rs. 30 lakhs)

Residential accommodation of the employees working at the regional offices and at the field level is a serious problem. This scheme is intended to provide residential quarters to the employees working in the Department. An outlay of Rs. 30 lakhs is provided for this purpose.

*Administration*

(Outlay Rs. 50 lakhs)

The outlay proposed is for meeting the pay and allowances of the staff already sanctioned to strengthen the Tribal Development Department. The provision is also for the purchase of a vehicle for the headquarters office.

*C. Welfare of Other Backward Classes*

1. *Educational Concessions*

(Outlay Rs. 22 lakhs)

The scheme is intended to give educational concessions to the students of other Backward Classes for matriculation studies.

2. *Boarding Grants*

(Outlay Rs. 3 lakhs)

The scheme is to give grants to other Backward Class students residing in subsidised hostels.

*D. Others*

1. *Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes*

(Outlay Rs. 325 lakhs)

The Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes registered in 1972 is undertaking programmes for the economic uplift of Scheduled Castes and Scheduled Tribes. An amount of Rs. 325 lakhs is provided in the Plan to give assistance to the Corporation by way of share capital contribution of the Government.

2. *Commission to Enquire into the Socio-Economic Conditions of Scheduled Castes/Scheduled Tribes*

(Outlay Rs. 10 lakhs)

The Plan outlay made is to meet the expenses of the Commission including that of the socio-economic survey now being conducted by the Commission.

TABLE 3.46

## Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes—Scheme-wise Outlay

(Rs. in lakhs)

Sl. No.	Name of Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipa- ted Expen- diture	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>A. Welfare of Scheduled Castes:</b>								
<i>Education</i>								
1.	Scholarships and Stipends	7.97	10.00	10.00	60.00	..	11.00	..
2.	Boarding Grants	1.29	0.75	0.75	4.40	..	0.80	..
3.	Special Incentive to Talented Students	0.30	0.10	0.10	0.70	..	0.10	..
4.	Cosmopolitan Hostels	3.18	5.30	6.05	29.00	17.00	6.35	4.00
5.	Welfare Hostels	0.19	6.65	6.65	45.00	22.00	8.00	4.00
6.	Adult Education	0.05	0.05	0.05	1.00	..	0.20	..
7.	Girls' Hostels (State Share)	..	3.75	3.75	20.00	15.00	5.50	2.50
8.	Coaching and Allied Schemes (State share)	..	1.50	1.50	10.00	..	2.00	..
9.	Pre-matric Scholarship to Children of those Engaged in Unclean Occupation	..	0.50	0.50	2.50	..	0.50	..
10.	Book Bank to Medical and Engineering Students	0.43	1.00	1.00	5.00	..	1.00	..
<i>Economic Uplift</i>								
1.	Subsidy to Technically Trained Hands	0.90	1.00	1.00	7.00	..	1.00	..
2.	Colonisation including Common Buildings to Major Colonies	16.04	19.00	24.00	150.00	50.00	28.00	5.50
3.	Financial Assistance to Professionally Qualified Persons	..	0.10	0.10	0.65	..	0.10	..
4.	Production Centres	0.83	3.00	3.00	25.00	..	3.50	..
5.	Dairy Development	..	..	50.00	130.00	..	30.00	..
6.	Financial Assistance to Harijan Families Engaged in Traditional Occupation	..	..	100.00	180.00	..	40.00	..
7.	Starting of Industrial Co-operative societies for Trained Harijans	..	..	30.00	75.00	..	20.00	..
8.	Assistance to Trademen for Setting up of Work-shops	..	..	..	5.00	..	1.00	..
9.	Agriculture Scheme for Scheduled Castes	..	..	..	100.00	..	..	..
<i>Health, Housing and Others</i>								
1.	Intercaste Marriage	7.96	3.00	3.00	20.00	..	4.00	..
2.	Housing	28.58	25.00	75.00	375.00	..	75.00	..
3.	Wells	0.10	1.00	1.00	23.00	..	3.00	..
4.	Training in Midwifery	0.04	1.50	1.50	1.50	..	..	..
5(a)	Eradication of Untouchability	0.42	2.10	2.10	13.00	..	3.00	..
(b)	Setting up of Machinery for the Untouchability (State Share)	0.01	2.00	2.00	15.00	..	3.00	..
6.	Strengthening of Administrative and Executive Machinery	0.06	3.00	3.00	20.00	..	3.00	..
7.	Balawadi-cum-Feeding Centres	4.64	8.40	8.40	55.00	..	10.00	..
8.	Harijan Co-operatives	..	0.05	0.05	0.25	..	0.25	..
9.	Planning and Statistics Cell	0.13	1.00	1.00	7.00	..	1.50	..
10.	Starting of Technological Institute	..	1.00	1.00	5.00	..	1.00	..
11.	Training of Scheduled Castes in Trades where there is Dearth of Hands among Registrants in Employment Exchanges	..	1.00	1.00	5.00	..	1.00	..
12.	Assistance for Tiling and Strengthening of Harijan Houses	..	..	..	100.00	..	..	..
Sub Total		73.12	101.75	337.50	1490.00	104.00	263.80	16.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>B. Welfare of Scheduled Tribes</b>								
<i>Education</i>								
1.	Tribal Hostels	1.52	6.00	6.00	60.00	30.00	9.00	4.50
2.	Balavadies and Creches	0.25	1.00	1.00	16.00	..	2.00	..
3.	Grant-in-aid to Voluntary Organisations	..	1.00	1.00	8.00	..	2.00	..
4.	Providing Library, Reading Materials and Radios to Hostels	0.19	0.30	0.30	0.90	0.90	0.15	0.15
5.	Special Coaching to Students	0.01	0.75	0.75	2.53	..	0.75	..
6.	Training in Popular Trades	..	0.25	0.25	4.00	..	1.00	..
7.	Grants, Stipends etc., to Students in Tutorial Colleges	..	0.75	0.75	9.20	..	2.60	..
8.	Benefit Oriented Camps—Training Campaign	1.24	0.45	0.45	3.25	..	0.70	..
9.	Girls' Hostels (State share)	0.34	2.75	2.75	18.00	18.00	2.00	2.00
10.	Research Training and Special Project	..	9.00	9.00	50.00	..	12.00	..
11.	Mini Theatres (Culture Centres)	..	..	..	3.00	3.00	1.00	1.00
<i>Economic Uplift</i>								
1.	Colonisation	1.42	3.00	3.00	51.62	..	10.00	..
2.	Hamlet Development	3.62	9.00	9.00	110.00	..	15.00	..
3.	Agriculture and Allied Sectors, Including Grants for the Purchase of Agriculture Implements	1.31	3.00	3.00	5.50	..	1.00	..
4.	Production-cum-Training Centres	0.05	0.50	0.50	16.90	..	3.00	..
5.	Employment to Tribals in Industry	0.16	0.25	0.25	2.10	..	0.50	..
6.	Andyodaya Programmes	..	..	..	17.00	..	3.50	..
7.	Financial Assistance to Small Entrepreneurs	..	..	..	4.00	..	1.00	..
<i>Health, Housing and Others</i>								
1.	Housing	4.82	8.00	15.00	155.00	..	20.00	..
2.	Repairs to the Existing Houses and Wells of Tribes	..	..	..	10.00	..	3.00	..
3.	Engineering Wing	..	..	..	4.00	..	1.00	..
4.	Planning and Statistical Cell	..	..	..	4.00	..	1.00	..
5.	Construction of Residential Quarters	..	..	..	30.00	30.00	5.00	5.00
6.	Administration	..	6.75	6.75	50.00	..	9.60	..
Total B—Welfare of Scheduled Tribes		14.93	52.75	59.75	635.00	81.90	106.20	12.65
<b>C. Welfare of Other Backward Classes</b>								
1.	Educational Concessions	3.26	4.00	4.00	22.00	..	4.50	..
2.	Boarding Grants	0.46	0.50	0.50	3.00	..	6.50	..
3.	Rehabilitation of Bonded Labour—State Share	..	..	..	15.00	..	3.00	..
4.	Development Corporation for Christian Converts from Scheduled Castes	0.85	0.003	0.152	0.001	..	0.002	..
Total C		4.57	4.503	4.652	40.001	..	8.002	..
<b>D. Others</b>								
1.	Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes	25.00	30.001	75.202	325.00	325.00	55.003	55.00
2.	Commission to Enquire into the Socio-Economic Conditions of SC/ST.	2.29	1.00	4.40	10.00	..	2.00	..
Total—Others		27.29	31.001	79.602	335.00	325.00	57.003	55.00
Grand Total		119.91	190.004	481.504	2500.001	510.90	435.005	83.65



## Social Welfare

### I. Direction and Administration

#### 1. Strengthening of Administration

(Outlay Rs. 15 lakhs)

In order to decentralise social welfare administration in the State, District Social Welfare Offices with nucleus staff were formed in 1979-80. The staff strength sanctioned to these offices is quite inadequate to cope with the heavy pressure of work in these offices. Further these offices will have to be provided with amenities such as telephones, vehicles etc. To avoid administrative delays and hardships to the beneficiaries of the various social welfare programmes, it is felt necessary to form Taluk Social Welfare Offices. The provision is for continuing the District Social Welfare Offices, already formed, to strengthen these offices with additional staff, telephones and vehicles, and to form Taluk Welfare Offices

#### 2. Inspection Wing and Statistical Unit

(Outlay Rs. 5 lakhs)

The provision is for continuing the Inspection Wing and Statistical Units in the Department of Jails and to marginally strengthen them for streamlining the jail administration.

### II. Education and Welfare of the Handicapped

#### 3. Strengthening of Special Schools for the Handicapped

(Outlay Rs. 3 lakhs)

The welfare of the handicapped population depends very much on the extent to which educational and rehabilitational facilities are made available to them. In both these aspects the State has to do a lot. The educational and rehabilitation facilities now offered to them through special schools are quite inadequate in quantitative and qualitative terms. The provision is for strengthening the special schools with adequate facilities and staff, and to provide basic education facilities to the orthopaedically handicapped at the pre-school level and for imparting training to the special school teachers.

#### 4. School for the Mentally Retarded

(Outlay Rs. 7 lakhs)

There is no school at present for the education of the mentally retarded excepting a very few number of custodial homes run by philanthropic organisations and the Social Welfare Department. The provision is meant for starting a school for the mentally retarded.

#### 5. Pre-matric Scholarships to the Handicapped

(Outlay Rs. 45 lakhs)

The Government of India is implementing a scheme for the payment of Scholarships to handicapped persons undergoing education in standards IX onwards.

The scheme for pre-matric scholarship to the handicapped envisages payment of scholarships to handicapped children studying in Standards I to VIII. The provision is for the same.

#### 6. Assistance to Mentally Retarded Children in Private Institutions

(Outlay Rs. 1.50 lakhs)

There are a few institutions for the mentally retarded children in the private sector. These institutions collect fees for the admission of children. The scheme envisages payment of financial assistance to mentally retarded children from poor families admitted to such institutions. The provision is for continuing the scheme.

#### 7. Production Centres for the Handicapped

(Outlay Rs. 2 lakhs)

This is a scheme for the rehabilitation of the physically handicapped. The scheme envisages payment of financial assistance to voluntary organisations for running/starting production units where physically handicapped persons could be given employment. Non-recurring assistance upto Rs. 10,000 will be paid to voluntary organisations of standing for the purchase of equipment, machinery, tools, etc., for the purpose. The provision is for continuing the scheme.

#### 8. Self Employment Programme for the Disabled

(Outlay Rs. 11 lakhs)

The scheme envisages payment of financial assistance by way of grants (not exceeding Rs. 600) to disabled persons for starting simple trades or business suited to their residual capacities. The provision is for continuing the scheme.

#### 9. Placement of the Handicapped

(Outlay Rs. 7.50 lakhs)

This is a Centrally Sponsored Scheme with 50 per cent Central assistance. The scheme is for the implementation of the programme for the placement of the handicapped. The outlay is meant for the State's share of the scheme.

#### 10. Handicapped Persons Welfare Corporation

(Outlay Rs. 30 lakhs)

The Kerala Handicapped Persons Welfare Corporation was formed in 1979-80. The Corporation has drawn up 5 projects for implementation during 1980-85. These projects are capable of providing continuing employment to 2458 handicapped persons. The total cost of the projects including administration charges comes to Rs. 175 lakhs. The Corporation proposes to raise Rs. 97 lakhs by way of institutional finance and collecting a sum of Rs. 48 lakhs as donations. The balance Rs. 30 lakhs is to be contributed by Government by way of share capital contribution (Rs. 26 lakhs) and assistance for administrative expenses (Rs. 4 lakhs) in the initial stages of its operation. Details of the cost estimates are as provided in Table 3.47.

TABLE 3.47

(Rs. in lakhs)

Name of project	Total Cost	Institutional Finance	Public Contribution	Contribution by Government	No. of Units	Continuing Employment (Nos.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Department Store and Mobile Mini Sales Van	13.00	8.00	..	5.00	2	28
2. One Thousand Sales Cabins Scheme	83.00	35.00	48.00	..	..	1000
3. Artificial Limb Fitting Centres	18.00	12.00	..	6.00	4	20
4. Training-cum-Production Centres	27.00	21.00	..	6.00	3	660
5. Multipurpose workshop for Deaf and Dumb	30.00	21.00	..	9.00	3	7.0
Administration Charges	4.00	..	..	4.00	..	..
<b>Total</b>	<b>175.00</b>	<b>97.00</b>	<b>48.00</b>	<b>30.00</b>	<b>12</b>	<b>2458</b>

Project-wise details are given below:--

(a) *Department Store and Mobile Mini Sales Van*

The Corporation proposes to open 3 units in 3 District headquarters. One such unit has already started functioning in Trivandrum at Kesavadasapuram from 24-4-1980. Two more units are proposed to be opened, one each at Ernakulam and Kozhikode.

(b) *One Thousand Sales Cabins Scheme*

These are ready-made pre-fabricated cabins measuring 5' x 5' pre fabricated with M. S. Angles and wooden reapers and fibre glass roof to have maximum life. The cost of construction of the sales cabins will be collected by way of donations from business firms by providing the outer space of the cabins for their advertisement and by collecting donation towards the funds for the handicapped. The location of the cabin will be so selected to have maximum sales. Only deserving handicapped persons will be eligible for the cabins. The allottee will be free to sell any consumer product in the cabin. The Corporation will act as mediator to obtain working capital loan from Nationalised Banks the guarantee for which will be produced by the beneficiary. The cabin will remain as the property of the Corporation until it is decided otherwise.

(c) *Artificial Limb Fitting Centres*

Considering the difficulties now experienced by the handicapped persons in securing artificial limbs and other equipments the Corporation proposes to establish Artificial Limb Fitting Centres attached to District Hospitals. One such centre has already been opened at Kottayam. (The Corporation has been appointed as the sole authorised selling agent for ALIMCO Products in Kerala). The Corporation aims at selling the equipments at subsidised rates.

(d) *Training-cum-Production Centres*

The scheme is designed to provide employment opportunities to the unemployed handicapped persons. Different categories of small scale industrial units will be brought under one roof. The trades include radio assembling and servicing, television board and wire assembling, cutting and tailoring, printing and binding, handicrafts, plastic novelties, plastic moulding etc. Including the instructors and trainees, not less than 220 handicapped persons will be benefited. As the trades selected are suited to the different categories of handicapped persons, the industrial unit will function as a multi category centre.

(e) *Multi-purpose Workshop for Deaf and Dumb*

This scheme is designed exclusively for the benefit of the deaf and dumb. However, other categories will also be benefited. Initial expenditure towards the cost of machinery has to be met by the Corporation. It is expected that financial assistance in the form of repayable loan will be available from the Banks to the extent of 70 per cent of the total investment. With the help of experienced supervisors and instructors, the selected handicapped persons will be given training and the trainees will continue to work as skilled workers in the respective units. These units are designed as productive and self-supporting.

The provision made is towards share capital contribution to the Corporation (Rs. 26 lakhs) and financial assistance to the Corporation to meet its administrative expenses (Rs. 4 lakhs) in its initial stages.

11. *Assistance for Orthotic and Prosthetic Aids*

(Outlay Rs. 10 lakhs)

The scheme envisages financial assistance, to deserving handicapped persons, for the purchase of aids like wheel chairs, calipers, hearing aid, braille equipments etc. The provision is for continuing the scheme.

12. *Home for the Handicapped (Aged)*

(Outlay Rs. 11 lakhs)

There are at present two Government run Homes for the care and protection of severely handicapped persons. It is proposed to open two more Homes for the Aged Disabled (the blind, the deaf and the orthopaedically handicapped) during the Sixth Plan period. The provision is meant for continuing the existing Homes and for starting two more homes for the handicapped.

13. *Home for Mentally Deficient Children*

(Outlay Rs. 7 lakhs)

At present there are two Government run Homes, one at Trivandrum and the other at Calicut, for giving care, protection and special training to the mentally deficient children. It is proposed to open one more Home for the mentally deficient children. The outlay proposed is for the same.

14. *Programmes to be initiated during the International Year of the Disabled:*(a) *Co-operative for the Disabled*

(Outlay Rs. 6 lakhs)

In the race for employment opportunities the handicapped persons are side tracked. It is, therefore proposed to encourage the handicapped persons to form industrial co-operatives of their own and to provide employment to the members suited to their respective residual capacities. The provision is for giving share capital contribution and other concessions to the co-operative societies of the handicapped.

(b) *Incentives to Private Employers for Employing the Handicapped (Wage Subsidy)*

(Outlay Rs. 3 lakhs)

Providing gainful employment (suited to their residual capacities) to the disabled to reduce their dependence on their respective families or society is the responsibility of a welfare state. Employment opportunities to the handicapped persons in industries and trade can be enhanced if suitable incentives are provided to the employers in the private sector. It is, therefore, proposed to take up a scheme during the Sixth Plan period for the payment of graded wage subsidy for a minimum period of two years to the disabled persons employed in private industries and trade on a regular and permanent basis. The provision is for the above purpose.

(c) *State Awards*

(Outlay Re. 0.50 lakh)

The scheme envisages institution of awards to the outstanding employers in the State who employ considerable number of physically handicapped persons and also to the most efficient handicapped employees with a view to encourage rehabilitation of the disabled. The provision is meant for this State sector scheme.

(d) *Care Home for the Disabled Children*

(Outlay Rs. 3 lakhs)

The scheme envisages opening of 2 Care Homes for the orthopaedically disabled children. The children admitted to these Care Homes will be given facilities for undergoing education in regular schools. The provision is meant for the above purpose.

(e) *Rehabilitation of Mentally Retarded Patients*

(Outlay Rs. 5 lakhs)

A large number of recovered mental patients remain in mental hospitals without proper aftercare service and disowned or abandoned by relatives. These unfortunate humans need care and protection in congenial atmosphere. It is therefore proposed to start a Care Home for recovered mental patients on an experimental basis. These unclaimed mental patients on discharge from hospitals will be admitted in the Care Home where his movements will be watched and his family background analysed and follow up action taken to rehabilitate him. The provision is for starting such a Care Home for recovered mental patients.

(f) *Institute for Research, Education, Training and Rehabilitation of the Mentally Retarded*

(Outlay Rs. 10 lakhs)

It is proposed to start an Institute for Research, Education, Training and Rehabilitation of the Mentally Retarded during the Sixth Plan period. Provision for Research and Development required for the health input is made under the scheme for the "Institute of Mental Health" included under 'Medical and Public Health'.

(g) *Preparation for the International Year of the Disabled*

(Outlay Rs. 2 lakhs)

The year 1981-82 is declared as the "International Year of the Disabled" to focus public attention to the problems faced by the handicapped and to chalk out concrete programmes for their education training and rehabilitation.

As part of the observance of the International Year, it is proposed to produce two documentary films, one on the "Physically Handicapped" and the other on the "Mentally Retarded". The films will be shot in Kerala locations and will be in Malayalam. These will be screened throughout the State in Cinema theatres and through mobile cinema vans to focus public attention on the problems of the handicapped.

Even today, precise data on the number of handicapped persons in the State are not available. Their number is roughly estimated at 1.25 lakhs. There is need for basic details regarding the handicapped persons in the State for drawing up programmes for their education, training and rehabilitation. The 1981 census questionnaire list the totally blind, crippled and dumb persons only which do not include

information on the partially disabled. Therefore a separate enquiry to estimate the total number of handicapped persons of all degrees of handicap is necessary. It is proposed to undertake such an enquiry in 1981-82 along with the N.S.S. or other regular household surveys conducted by the Directorate of Economics and Statistics, to estimate the total number of persons with functional physical handicaps, their demographic and economic particulars, educational status, skills etc.

The provision is for producing two documentary films on the handicapped and for conducting a survey to estimate the total number of handicapped persons in the State with other relevant information.

(d) *Formation of a Board for the Education and Rehabilitation of the Handicapped*

(Outlay Re. 0.50 lakh)

The provision is meant for the formation of a Board for the Education and Rehabilitation of the Handicapped and for the proper coordination and direction of the various programmes for the welfare of handicapped persons.

III. *Family and Child Welfare*

A. *Child Welfare*

15. *Day Care-cum-Creches in the Unorganised Sector*

(Outlay Rs. 15 lakhs)

The scheme envisages starting of Day Care Centres in areas predominantly occupied by fishermen, coir workers quarrying etc., where there are no voluntary organisations to start and run such centres and payment of financial assistance to voluntary organisations for starting creches for the benefit of the children up to 3 years of women workers belonging to these categories. Financial assistance was given for 237 such creches. The provision is for continuing the existing centres and starting new centres besides costing the assistance now being given.

16. *Grant-in-aid to Voluntary Organisations for Pre-School education*

(Outlay Rs. 10 lakhs)

In the Fifth Plan a scheme for payment of non recurring financial assistance to selected nursery schools run by voluntary organisations for the purchase of teaching aids, toys, furniture etc., was introduced. The maximum assistance payable per nursery school is Rs. 1000. The provision is for continuing the scheme during the Sixth Plan.

17. *Integrated Child Development Services*

(Outlay Rs. 148 lakhs)

The State sector I.C.D.S. Project is a continuing scheme. So far 4 I.C.D.S. projects have been started in the State sector. The I.C.D.S. provide a package of services to children and women. The outlay is for continuing the projects already in existence and to start 25 new projects during the plan period.

This will be in addition to the projects sanctioned by Government of India under the 100 per cent centrally sponsored scheme.

18. *Construction of Anganawadis*

(Outlay Rs. 3 lakhs)

The Anganawadi is the focal point for the delivery of the package of services under the I.C.D.S. It is proposed to construct small buildings for a few Model Anganawadis availing of Government of India assistance and contribution from the community. The provision made is for providing State Government's share for the construction of Anganawadi buildings.

19. *Composite Programme for Women and Pre-School Children*

(Outlay Rs. 36 lakhs)

At present there are 1951 Balawadis run by Mahilasamajams. It is proposed to start 1000 more Balawadis during the plan period. The provision is intended for giving grants to Mahilasamajams towards honorarium to Balawadi teachers.

20. *International Year of the Child*

No outlay is earmarked for this scheme.

B. *Women Welfare*

21. *Training to Women in Distress for Rehabilitation*

(Outlay Rs. 5 lakhs)

The scheme envisages payment of financial assistance to poor women for undergoing vocational training in commercial subjects. The outlay is meant for continuing the scheme.

22. *Grant for Self Employment of Women*

(Outlay Rs. 6.25 lakhs)

The scheme is meant for giving financial assistance by way of grants to poor destitute women to start small trade or business. During 1979-80 grants were given to about 2,000 women. The provision is for continuing the scheme during the Sixth Plan Period.

23. *Grants to Womens Organisations for Socio-economic programme*

(Outlay Rs. 13.75 lakhs)

A scheme for the payment of non-recurring grant in-aid to voluntary organisations of women for undertaking viable projects which could give employment to women has been introduced in 1980-81. The assistance is given on the basis of matching contribution by the organisation concerned. The maximum assistance payable to an organisation is Rs. 5,000. The provision is intended for continuing the scheme throughout the plan period.

#### IV. *Welfare of Poor and Destitutes*

##### 24. *Industrial Units in Abalamandirs*

(Outlay Rs. 2 lakhs)

There are 10 Abalamandirs in the State for the care and protection of the poor and destitute women. It is necessary to provide some vocation to the inmates of these institutions. Small work units like tailoring has been introduced successfully in some of these institutions. During the plan period it is proposed to introduce such trades in all the remaining institutions.

There is no social welfare institutions in the newly formed Idukki district. It is proposed to open an Abalamandiram in Idukki district.

The provision is for introducing small trades for the benefit of the inmates of the existing Abalamandirs and also for opening an Abalamandir in Idukki district.

##### 25. *Shelter for Waifs and Strays*

(Outlay Rs. 2 lakhs)

At present there is only one Home (At Alleppey) under Government for the care and protection of orphans and destitute children. It is proposed to open 3 more Homes for the care and protection of orphan children during the plan period. The outlay is for the same.

##### 26. *Grant-in-aid to Orphanages*

(Centrally Sponsored)

(Outlay Rs. 11 lakhs)

This is a Centrally sponsored scheme with 50 per cent central assistance for giving grant-in-aid to orphanages run by voluntary organisations. The provision is towards State's share for continuing the scheme.

##### 27. *Buildings to Social Welfare Institutions*

(Outlay Rs. 5 lakhs)

The Social Welfare Institutions like the Abalamandirs, Rescue Homes etc., are at present housed in rented buildings. These buildings are not secure enough to maintain the inmates. It is necessary to provide suitable buildings to these institutions in a phased manner. The outlay provided is for the construction of buildings for two Institutions during the plan period.

#### V. *Correctional Homes*

##### 28. *Borstal Schools*

(Outlay Rs. 7 lakhs)

There is only one Borstal school in the State at Cannanore. This is for boys and there is no Borstal school for girls. At present a few girls committed under the Borstal School Act are kept in the female blocks attached to the Central Prison, Calicut. Therefore, Government have sanctioned in June 1980

37/3118/MC.

a separate Borstal school at Calicut for girls. Modifications to an existing building in the premises of the Government Children's Home and Special School, Calicut is nearing completion for housing the Borstal school for girls. It is also proposed to start one more Borstal school for boys at Ernakulam. The outlay proposed is towards expenses for the staff and maintenance of the inmates of the Borstal school for girls, expansion of industrial activities and strengthening of staff in the Borstal Schools and for starting a new Borstal school for boys at Ernakulam, including construction of buildings.

##### 29. *Industrial Units in Government Children's Home and Special Schools*

(Outlay Rs. 3 lakhs)

The outlay proposed is for continuing the vocational training centres already started in the Government Children's Home and Special Schools, purchase of required machinery items and accessories for the units already sanctioned and marginally strengthening the instruction staff at the centres.

##### 30. *Implementation of Children's Act*

(Outlay Rs. 3 lakhs)

According to the provisions of the Children's Act and Rules, Government have the obligation to maintain as many Children's Homes and Special Schools as necessary for providing facilities for boarding, lodging and training the children coming under the provisions of the Act; and also to maintain observation Homes for children standing trial in Children's Courts. The Inspector General of Prisons is the Chief Inspector of these institutions. Children's Courts have already been constituted and efforts are under way for conducting sittings of Children's Courts. A special unit has been created in the office of the Inspector General of Prisons for the implementation of the Children's Act.

The following are the proposals for implementation during the Sixth Plan period:

(a) Starting an Observation Home for girls at Trivandrum;

(b) Starting an Observation Home for Girls at Ernakulam;

(c) Starting a Children's Home for Boys at Cannanore;

(d) Starting a Children's Home and Special School for Girls at Ernakulam;

(e) Strengthening the staff in the existing five Government Children's Homes and Special Schools; and

(f) Strengthening the Regional Inspectorate in the Headquarters for implementation of the Children's Act.

The provision made is for the above purposes and also for constructing buildings for the Observation Homes and Government Children's Homes and Special Schools.

31. *Vocational Training to Prisoners for Rehabilitation*

(Outlay Rs. 3 lakhs)

The prisoners are to be given vocational training while in prison for their rehabilitation on release. The facilities provided by the industrial units in the prison at present are quite inadequate for the same. Therefore it is proposed to modernise the industrial units in three major prisons in the State and also to start a new industrial unit in the District Jail, Calicut. These Units are designed to function as production-cum-training centres. The following are the proposals for implementation during the Sixth Plan period:

- (a) Starting an aluminium vessels factory and purchasing wood working machines and tools for the carpentry unit in the Central Prison, Trivandrum;
- (b) Starting a Carpentry Unit at the Central Prison, Viyyur;
- (c) Starting a Hosiery Unit with an additional building to house the workshop at the Central Prison, Cannanore; and
- (d) Starting a Handloom Weaving Unit with a small building to house the unit at the District Jail, Calicut.

The outlay proposed is for the above purposes.

32. *Welfare Officers in Prison*

(Outlay Rs. 4 lakhs)

According to the recommendations of the Central Advisory Board on Correctional Services, Welfare

Officers have to be appointed in the prisons at the rate of one for every 200 prisoners, to serve, among other things, as counsellors to the prisoners. The provision proposed is for continuing the existing posts, upgradation of a few posts and for the creation of additional posts.

VI. *Probation and After Care Service*33. *Strengthening of Probation Services*

(Outlay Rs. 3 lakhs)

The probation service is provided under the provisions of the Probation of Offenders Act. To attend to the work of Juvenile Courts Constituted under the Children's Act, 11 posts of probation officers are to be additionally provided. The Regional Assistant Directors of the Social Welfare Department are now working as Regional Probation Officers also. It is necessary to provide adequate ministerial staff support to these officers for the work connected with the probation service. The outlay provided is intended for continuing the existing probation service and for strengthening it.

34. *After Care Services*

(Outlay Rs. 2 lakhs)

The scheme envisages provision of financial assistance to ex-convicts, and probationers who have served at least 2/3 portion of their supervision period, with good record. The assistance is given for their rehabilitation in some small trades or business. The outlay is provided for the above purpose.

TABLE 3.48

*Social Welfare—Scheme-wise Outlay*

(Rs. in lakhs)

Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Outlay B.E.	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>I. Direction and Administration:</b>							
1 Strengthening of Administration	1.25	2.00	2.00	15.00	3.00	3.00	1.00
2 Inspection Wing and Statistical Unit	0.35	0.80	0.80	5.00	..	1.00	..
Sub Total—Direction and Administration	1.60	2.80	2.80	20.00	3.00	4.00	1.00
<b>II. Education and Welfare of the Handicapped</b>							
3 Strengthening of Special Schools for the Handicapped	..	..	1.00	3.00	..	..	..
4 School for the Mentally Retarded	..	..	0.99	7.00	2.00	1.50	0.50
5 Pre-matric Scholarship to the Handicapped	1.15	3.80	3.80	45.00	..	5.00	..
6 Assistance to Mentally Retarded Children in Private Institutions	..	0.10	0.10	1.50	..	0.15	..
7 Production Centres for the Handicapped	0.71	0.10	0.10	2.00	1.80	0.15	0.27
8 Self-employment Programme for the Disabled	0.15	1.00	1.00	11.00	..	1.50	..
9 Placement of the Handicapped—Centrally Sponsored (State's share)	..	1.50	1.50	7.50	..	1.50	..
10 Handicapped Persons Development Corporation	4.92	5.00	5.00	30.00	10.00	5.00	2.00
11 Assistance for Orthotic and Prosthetic Aids	1.83	2.00	2.00	10.00	..	2.00	..
12 Home for the Handicapped (Aged)	4.61	4.00	4.00	11.00	..	1.75	..

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
13 (a) Home for Mentally Deficient Children	..	0.001	0.001	7.00	..	..	..	..
(b) Agricultural farm for Mentally Handicapped	..	0.001	0.001	..	..	..	..	..
14 Programmes to be Initiated during the International Year of the Disabled	..	..	..	..	..	..	8.00	..
(a) Co-operatives for the Disabled	..	..	..	6.00	..	..	..	..
(b) Incentives to Private Employers for Employing the Handicapped (wage-subsidy)	..	..	..	3.00	..	..	..	..
(c) State Awards	..	..	..	0.50	..	..	..	..
(d) Care Home for Disabled Children	..	..	..	3.00	..	..	..	..
(e) Rehabilitation of Mental Patients	..	..	..	5.00	..	..	..	..
(f) Institute for the Mentally Retarded	..	..	..	10.00	3.00	..	..	..
(g) Preparations for the International Year of the Disabled	..	..	..	2.00	..	..	..	..
(h) Formation of a Board for the Education and Rehabilitation of the Handicapped	..	..	..	0.50	..	..	..	..
Sub Total—Education and Welfare of Handicapped		13.37	16.502	19.492	165.00	16.80	26.55	2.77
<i>III. Family and Child Welfare</i>								
A. Child Welfare								
15 Day Care-cum-Creaches in the Unorganised Sector	2.98	2.00	4.00	15.00	..	3.00	..	..
16 Grant in Aid to Voluntary Organisations for Pre-School Education (Nursery School)	0.15	2.00	..	10.00	..	2.00	..	..
17 Integrated Child Development Service Scheme (State Sector)	..	23.00	23.00	148.00	..	25.00	..	..
18 Construction of Anganwadies	..	0.25	0.25	3.00	2.00	0.30	..	..
19 Composite Programme for Women and Pre-school Children	5.10	5.00	11.70	36.00	..	5.00	..	..
20 International Year of the Child	0.50	..	..	..	..	..	..	..
B. Women Welfare								
21 Training to Women in Distress for Rehabilitation	..	1.00	1.00	5.00	..	1.00	..	..
22 Grants to Women for self-employment	..	1.25	1.25	6.25	..	1.25	..	..
23 Grants to Women's Organisations for Socio-Economic Programmes for Women	0.03	5.00	5.00	13.75	..	2.15	..	..
Sub Total—Family and Child Welfare	8.76	39.50	46.20	237.00	2.00	39.70	..	..
<i>IV. Welfare of Poor and Destitutes</i>								
24 Industrial Units in Abalamandirs	0.55	0.40	0.40	2.00	1.00	0.40	..	..
25 Shelter for Waifs and Strays	..	..	..	2.00	..	..	..	..
26 Grant-in-aid to Orphanages (Centrally Sponsored—State's Share)	2.08	2.00	2.00	11.00	..	2.00	..	..
27 Buildings to Social Welfare Institutions	..	1.00	1.00	5.00	4.25	1.00	..	0.65
Sub Total—Welfare of Poor and Destitutes	2.63	3.40	3.40	20.00	5.25	3.40	..	0.65
Correctional Homes								
28 Borstal Schools	..	..	0.90	7.00	4.00	..	..	..
29 Industrial Units in Balamandirs	0.18	..	1.00	3.00	2.00	..	..	..
30 Implementation of Children's Act	..	..	0.70	3.00	1.50	..	..	..
31 Vocational Training to Prisoners for Rehabilitation	..	..	..	3.00	2.00	..	..	..
32 Welfare Officers in Prison	1.23	0.70	0.70	4.00	..	0.70	..	..
Sub Total—Correctional Services	1.41	0.70	3.30	20.00	9.50	0.70	..	..
<i>VI. Probation and After Care Service</i>								
33 Strengthening of Probation Services	0.86	0.55	0.55	3.00	..	0.55	..	..
34 Assistance for After Care Programme	0.25	0.10	0.10	2.00	..	0.10	..	..
Sub Total—Probation and After Care Service	1.11	0.65	0.65	5.00	..	0.65	..	..
Total—Social Welfare	28.88	71.552*	82.842	467.00	36.55	75.00	4.42	..
		(—)7.00	(—)7.00					

\*The Scheme "Rehabilitation of Bonded Labour" for which a sum of Rs. 7.00 lakhs has been provided in the Budget is transferred to the Tribal Welfare Sector.

**Nutrition:**

The following are the schemes included for implementation during the Sixth Plan period.

1. *Direction and Administration*(i) *Nutrition Bureau*

(Outlay Rs. 2.50 lakhs)

The provision is for meeting the expenditure required for continuing the Nutrition Bureau.

(ii) *Office Building for the Nutrition Division*

(Outlay Rs. 5 lakhs).

The provision is meant for constructing a separate building with modern facilities to accommodate the nutrition laboratory, nutrition museum, nutrition kitchen, class room, library, audio-visual room, office, store, garage etc., of the Nutrition Division of the Health Services Department.

2. *Programmes for Pre-School Children*(i) *Special Nutrition Programme*

(Outlay Rs. 430 lakhs)

Under this programme malnourished pre-school children and nursing and expectant mothers are given supplementary nutrition containing 5 to 6 grams of proteins and 250 to 300 calories per day. This type of supplementary nutrition is given for 300 days in an year in selected centres to selected beneficiaries. The nutrition component of I.C.D.S Programme is also met from the outlay for special nutrition. The outlay provided is for the above programme.

*Tribal Sub Plan*

A provision of Rs. 20 lakhs is set apart for implementation of the Special Nutrition Programme for the benefit of the pre-school children and nursing and expectant mothers of the Tribal sub-plan area.

(ii) *Health Based Nutrition Programme*

(Outlay Rs. 50 lakhs)

The health based nutrition programme for pre-school children and nursing and expectant mothers consist of supervision and evaluation of the nutrition programmes in the State, nutrition education, study of nutritional status of various segments of the population, immunisation and health check-up and implementation of the CARE feeding component of the health based nutrition programme. To cope with the heavy demand for health inputs by various nutrition programmes in operation in the State, it is necessary to strengthen the Nutrition Laboratory of Health Services Department with personnel and equipment and chemicals for biochemical investigation and research; to strengthen the nutrition Kitchen; to build up a Nutrition Library; to produce nutrition education materials and organise a nutrition museum for nutrition education; and to supply anthropometric rod and weighing machines to the 1800 sub-centres for recording the growth charts of the beneficiary children and conduct a study on the impact of supplementary feeding by locally available food stuffs on pre-school children in tribal areas and providing such food stuffs as supplementary food.

The outlay provided is for the above expansion programmes and also for continuing the on-going programmes.

(iii) *Applied Nutrition Programme*

(Outlay Rs. 350 lakhs)

The Applied Nutrition Programme is aimed at improving the nutrition status of the malnourished segments of the population through nutrition education and thereby creating favourable conditions for the production of nutrition rich food stuffs, their scientific preservation and use. In addition to these a supplementary demonstration feeding programme is conducted throughout the ANP and non ANP Blocks in selected centres for the benefit of selected undernourished pre-school children and nursing and expectant mothers. In the feeding centres in ANP Blocks, in addition to cooked CARE food, fruits, vegetables and eggs received from the production component of the Applied Nutrition Programme are also served to the beneficiaries.

By 1979-80, 95 Blocks were brought under the Applied Nutrition Programme. During the Sixth Plan period, it is proposed to bring 25 more Blocks under the programmes at the rate of 5 Blocks every year.

Another important programme under the Applied Nutrition Programme is the production of Kerala Indigenous Food as supplement and substitute to the CARE food materials. It is proposed to increase the production capacity of KIF from 10 tonnes to 40 tonnes per month during the Plan period.

The outlay proposed is for continuing the existing programmes and also for the expansion programmes mentioned above.

(iv) *Special Feeding Programme—One Meal-a-day Programme*

(Outlay Rs. 767.50 lakhs)

Government decided during the International Year of the Child (1979) that every undernourished pre-school child in the State should be covered by the supplementary nutrition programmes. As part of this decision, the 'One meal-a-day' programme was introduced in 1979-80. In 1979-80, the programme covered 5 lakh pre-school children through 5000 feeding centres. The outlay proposed is for continuing the programme during the Sixth Plan period.

3. *Programme for School Children*(i) *School Mid-day Meals Programme*

(Outlay Rs. 95 lakhs)

The Scheme is intended for giving mid-day meals free of cost to all poor and needy children studying in all the L. P. Schools and L. P. Section of U. P. and High Schools (Standard I to IV) in the State with food materials supplied by the CARE. The programme covered 20.6 lakhs beneficiaries in 8990 schools during 1979-80. The number of beneficiaries in 1980-81 is 21.5 lakhs in 9100 schools. From 1980-81 the preparation charges of food have been revised and raised by 33½ per cent due to the increase in cost of condiments



and fuel. Further a new scheme for the supply of rice gruel with a side dish of tapioca. Pulses to the vulnerable sections of school children especially in areas where there is large-scale concentration of scheduled tribe children have been introduced from January 1980. Tribal children studying in 40 selected Primary schools in the three Educational sub-Districts of Manantoddy, Sultan's Battery and Vythiri have been brought under the scheme. In addition to the above the following special projects are proposed to be implemented during the Sixth Plan period with financial assistance from CARE. The expenditure on these projects will be shared by the State Government and the CARE in the ratio of 55:45 as laid down by Government of India.

- (a) Construction of a Central godown of 10,000 tonnes capacity at Cochin for storing CARE food intended for the nutrition programmes.
- (b) Construction of District godowns of 1000 tonnes capacity for storing CARE food.
- (c) Supply of cooking utensils to schools for use of the school mid day meals programme.
- (d) Provision of science laboratory and Nutrition Education Mobile Van.

The outlay provided is for continuing the existing programmes and also for the additional programmes mentioned above.

TABLE 3.49

## Nutrition—Scheme-wise Outlay

(Rs. in lakhs)

Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>1. Direction and Administration</b>							
(i) Nutrition Bureau	0.04	0.50	0.50	2.50	..	0.50	..
(ii) Office Building for Nutrition Division of the Health Service Department	..	..	..	5.00	3.25	..	..
<b>2. Programme for the Pre-School Children</b>							
(i) (a) Special Nutrition Programme	34.17	82.00	82.00	410.00	..	82.00	..
(b) Tribal Sub Plan	1.85	4.00	4.00	20.00	..	4.00	..
(ii) Health Based Nutrition Programme	6.53	10.00	10.00	50.00	..	10.00	3.25
(iii) Applied Nutrition Programme	34.20	67.00	67.00	350.00	..	66.999	..
(iv) Special Feeding Programme—One Meal a day Programme	35.50	160.00	160.00	767.50	..	160.00	..
<b>3. Programmes for School Children</b>							
(i) School-mid-day meals Programme	15.00	16.50	16.50	95.00	8.00	16.50	..
<b>Total—Nutrition</b>	<b>127.29</b>	<b>340.00</b>	<b>340.00</b>	<b>1700.00</b>	<b>11.25</b>	<b>339.999</b>	<b>3.25</b>

## 3.7 Economic Services

## General Economic Services

## 1. Planning Board

The State Planning Board is the main agency in the State to formulate long term, medium term and annual development plans. Various studies are being undertaken to assess the resources of the State as also to appraise the progress of the State's economy. The Planning Board has also undertaken several studies on the different aspects of the State's economy including the financial and material resources potential with a view to helping planning process. The Board also conducts evaluation studies on the implementation of plan schemes and recommends such adjustments as are needed for effective plan implementation.

In order to decentralise the planning process comprehensive district development plans are proposed to be formulated. With this object in view, District

Planning Offices have been set up in all the districts in 1978-79. District Planning Officers with supporting nucleus staff have been posted and the work relating to the preparation of district development plans is in progress. The State Planning Board as well as the District Planning Units has to be suitably strengthened to carry out effectively the task of State-level and District level planning. The following schemes are proposed under this head.

- (i) *Strengthening of the State Planning Board and District Planning Units*

(Outlay Rs. 120 lakhs)

At present the State Planning Board has the following Ten Divisions:

- (a) Agriculture and Allied Services Division
- (b) Project Division
- (c) Industries Division
- (d) Transport Division
- (e) Social Services Division

- (f) District Planning Division
- (g) Evaluation Division
- (h) Economic Division
- (i) Data Bank
- (j) Perspective Planning Division.

The Social Services Division at present, attends to the work relating to the formulation of plans under all the sub heads coming under 'Social and Community Services' like general education, technical education, art and culture, scientific services and research, medical, public health and sanitation, sewerage and water supply, housing, urban development, information and publicity, labour and labour welfare, welfare of scheduled castes, scheduled tribes and other backward classes, social welfare, nutrition etc. This Division has to be suitably bifurcated and strengthened.

The co-ordination and integration of the local level plans with the Annual Plans of the State involves considerable addition to the workload of all Divisions in the Planning Board in general and that of the District Planning Division in particular. It is therefore proposed to strengthen the District Planning Division of the Planning Board.

The District Planning Units have been provided with only nucleus staff at present. In order to formulate realistic and comprehensive district plans after properly assessing the local resources, technical personnel in the field of engineering, agronomy etc. are proposed to be inducted in the District Planning Units.

The State Planning Board is, at present, functioning in three different rented buildings causing much inconvenience in day to day working. It is, therefore, proposed to construct a building for the State Planning Board.

The outlay provided is for reorganisation and strengthening of the State Planning Board, strengthening of District Planning Units and construction of building for the State Planning Board.

- (ii) *Electronic Data Processing Unit in the Planning Board*

(Outlay Rs. 15 lakhs)

At present there is a Data Bank Unit functioning in the Planning Board. This Unit has no facility for storing time series data. The Planning Commission has suggested that data banks with computer facility should be organised in all States as part of the State Planning Machinery. This would enable the Data Bank to store the relevant details of important plan schemes and to continuously watch the progress of implementation of schemes. The Monitoring Unit in the State can also make use of the computer facility and ensure timely completion of plan schemes and projects.

With the introduction of district level planning a large number of competing projects will emanate from different districts. In order to assess the acceptability of the different projects and to arrange them according to priority within the time limit, the computer facility can be made use of. The proposed Computer can also be used for processing the primary data collected from time to time by the State Planning Board and Directorate of Economics and Statistics.

The outlay proposed is for installation of a computer and peripheral equipments, punching machines and storage equipments including magnetic tapes and drums/discs etc.

- (iii) *Preparation of Area Plans and Conduct of Surveys and Studies*

(Outlay Rs. 19 lakhs)

It is proposed to associate consultancy organisation and specialised professional agencies like the Agricultural Refinance and Development Corporation for the preparation of comprehensive development plans for selected Blocks in the State. Further, in certain sectors and areas, in-depth studies are required to be conducted before formulating meaningful development plans, for which it is proposed to make use of specialised consultancy services. It is also proposed to conduct the following surveys and studies

- (a) *Survey on Basic Amenities in Rural Areas*

A survey to assess the level of development of each village under general education, health, drinking water supply and sewerage, rural electrification, rural roads, etc., was conducted in the State in 1973. The results of this survey formed the basis of the Minimum Needs Programme in the Fifth Five Year Plan. A similar survey to assess the social and economic infrastructure facilities available in each village is proposed to be conducted in the State. The results of the survey would facilitate scientific planning under rural roads, education, health, drinking water supply, rural electrification etc.

- (b) *Study on Investments in the Economy*

No systematic study has been conducted to estimate the magnitude of investments by different sectors of the economy. Magnitudes of investments by organised sectors are available in various published records, though with a considerable time-lag, but the estimates of investments of the unorganised sector and especially of the household sector are not available anywhere. Unless realistic magnitudes of investments are available, intersectoral flow of investments cannot be assessed. Firm estimates of the quantum of investments under different sectors is very essential for future planning.

The magnitude of investments by Central and State Governments is available in budgetary documents and other published records. Investments by the Corporate sector, both public and private, can be obtained from published reports and the controlling Government Departments. The quantum of investments by the household sector can be estimated only by conducting a survey. It is, therefore, proposed to conduct a sample survey to estimate the quantum of investments by the unorganised sector in the State.

- (c) *Study on Estimation of Co-efficient of Labour in Major Projects*

Generation of additional employment facilities is one of the major objective of planned economic development. Estimation of the quantum of employment generated as a result of the implementation of plan schemes is very essential for projection of employment potential of future plan programmes. For working out reliable estimates of co-efficients of labour, actual employment generated in different projects in various

sectors is essential. The quantum of employment generated for a fixed amount of investment varies from project to project and from place to place. It also varies in different time periods as a result of price fluctuations.

In order to work out reliable norms of employment generation under various schemes in different sectors, data on employment generated (full time and part-time separately) for construction as well as maintenance phase in typical projects under major irrigation, minor irrigation, roads and bridges, soil conservation programmes, hydro-electric projects, building construction programme etc. have to be collected. It is, therefore, proposed to conduct a detailed survey to estimate the employment content of projects under different heads of development spread over all the districts of the State.

The outlay provided is for payment of consultation fee for preparation of area plans, conducting of special studies etc., and for the conduct of the above surveys.

(iv) *Plan Publicity*

(Outlay Rs. 5 lakhs)

At present Plan Publicity work is carried out by issuing publicity materials relating to plan programmes and by taking part in exhibitions and seminars. The Publicity Unit in the Planning Board is proposed to be strengthened. This unit will be equipped with a cine projector and few model films on developmental activities to propagate ideas regarding scientific planning and plan implementation. It is also proposed to participate in mini exhibitions on planning organised by planning forums of the educational institutions. The outlay proposed is for implementing the above programmes.

(v) *Purchase of vehicles for District Planning Offices*

(Outlay Rs. 10 lakhs)

The Officers of the District Planning Units have to perform tours in the districts for on-the-spot studies and for conducting discussions with Block and panchayat level functionaries. For the efficient functioning of the District Planning Units they will be provided with vehicles. The outlay proposed is for the purpose.

2. *Monitoring and Evaluation*

(i) *Strengthening of the Evaluation Division in the Planning Board*

(Outlay Rs. 5 lakhs)

The Evaluation Division of the State Planning Board proposes to conduct detailed studies, inter-alia, on the following programmes during the Sixth Plan period.

- (a) Selected Major Irrigation Projects—to assess direct and indirect benefits.
- (b) Evaluation study of Minor Irrigation Works
- (c) Evaluation study of programmes implemented for the benefit of Scheduled Caste and Scheduled Tribes
- (d) Evaluation study of Major Agricultural Development Projects like Ela Programme, Coconut Development Programme, Cashew Development Programme etc.
- (e) Dairy Development Projects
- (f) Poultry Development Projects

(g) *Village and Small Scale Industries Programmes*

- (h) Working of selected Public Sector Enterprises Schemes for evaluation would be taken up in consultation with the concerned implementing Departments. The outlay proposed is for strengthening the Evaluation Division to cope with the additional workload in taking up these studies.

(ii) *Strengthening of Monitoring Unit*

(Outlay Rs. 5 lakhs)

The Central Planning and Monitoring Unit attached to the Department of Planning and Economic Affairs attends to the work relating to the monitoring of plan schemes. Monitoring involves watching the progress of the schemes against the time and resource schedule during the implementation stage. Progress of major schemes have to be watched carefully and corrective action taken wherever necessary. The outlay proposed is for continuance of the existing unit and for appointment of additional staff.

(iii) *Manpower Planning Units*

(Outlay Rs. 3 lakhs)

The technical personnel of the Manpower Planning Units Working in the various Development Departments belong to the Directorate of Economics and Statistics. These units conduct studies relating to the supply of and demand for various categories of manpower in the State. Special manpower studies are proposed to be taken up during the Plan period. The outlay proposed is for strengthening the Manpower Planning Units in the Directorate of Economics and Statistics and in other major departments.

3. *Secretariat*

(i) *District Development Councils*

(Outlay Rs. 10 lakhs)

The outlay provided is for meeting the expenditure towards travelling allowance of members of the District Development Councils.

(ii) *Publication of District Plans*

(Outlay Rs. 2 lakhs)

Annual District Plans prepared on the basis of annual plan budgets are published every year in all the districts. The outlay provided is for the publication of district plan documents.

(iii) *Kerala Institute of Management in Government*

(Outlay 100 lakhs)

Institute of Management in Government established at Trivandrum imparts management education and training to the officials of the various Government Departments and other agencies. The Institute has two regional Centres at Calicut and Cochin. The programmes of the Institute comprise management education and training programmes, policy and operations research, consultancy and extension, seminars and conferences etc., for all aspects of State's

economic and social life where management science can play a useful role. The outlay provided is for the construction of buildings for administrative block, lecture halls, library, hostels, staff quarters etc., for the Institute at Trivandrum and for the regional centres at Cochin and Calicut and for the development of various faculties.

(iv) *Implementation of Malayalam as Official Language*

(Outlay Rs. 10 lakhs)

The State Government has decided that by 1982 Malayalam should be used as the official language at all levels of administration. In order to speed up the switchover to Malayalam, more Malayalam typewriters will have to be provided in the various Departments. At present the journal 'Bharana Bhasha' is being published to help the officials acquaint themselves with Malayalam equivalents of technical terms in English. The outlay provided is for the purchase of Malayalam typewriters, continuance of the publication 'Bharana Bhasha', conduct of seminars and discussions, preparation of a glossary etc.

(v) *Project Cell in the Secretariat*

(Outlay Rs. 5 lakhs)

The outlay provided is for setting up a project cell in the Secretariat for scrutiny of important projects.

*Economic Advice and Statistics*

With the added importance envisaged for the decentralisation of planning process, the demand on the statistical system both for its quality and coverage is on the increase. The Directorate of Economics and Statistics is the apex organisation for all statistical activities in the State. It functions as the agency for systematic collection, compilation and analysis of statistics relating to the different sectors of economy. The High Power Statistical Committee and the working group of Central Statistical Organisation and the National Commission on Agriculture have recommended the streamlining of the existing statistical system in order to meet the data requirements for scientific planning for economic development.

The following schemes are proposed for the Plan period 1980-85 under the Directorate of Economics and Statistics:

(i) *Strengthening of the Directorate of Economics and Statistics including Re-organisation of District Statistical Units*

(Outlay Rs. 27.02 lakhs)

(a) *Mechanical Tabulation Unit*

(Outlay Rs. 4.56 lakhs)

The Plan outlay allotted is for the purchase of punch cards and for meeting the maintenance expenditure of the punching machine installed in the Directorate of Economics and Statistics.

(b) *Construction of Index of Industrial Production*

(Outlay Rs. 7.31 lakhs)

This is a continuing scheme to compute and publish quarterly indices of industrial production. The provision is for meeting the expenditure on the staff in the Unit.

(c) *Reorganisation of District Statistical Units*

(Outlay Rs. 9.50 lakhs)

With the recent set up of District Planning machinery the requirements of statistical data at Block level is keenly felt. In order to generate Block level statistics it is proposed to organise the compilation and tabulation of data at the District level. For this purpose it is proposed to strengthen the district statistical offices.

(d) *Strengthening of the State Income Unit*

(Outlay Rs. 2.05 lakhs)

The State Income Division of the Directorate is also proposed to be strengthened. Field staff to collect data required by this Unit in certain unorganised sectors will also be provided. The Plan provision made is for implementing the above proposals.

(e) *Strengthening of Prices Division*

(Outlay Rs. 3.60 lakhs)

The computation of monthly consumer price index, a yard stick to determine the variable D.A. for industrial and other workers, is entrusted with the Prices Division of the Directorate. The Committee on Consumer Price Index Numbers set up by the Government of Kerala and the Working Group on Price Statistics set up by Central Statistical Organisation have in their proposals recommended the re-orientation of the price collection machinery at various levels in order to improve the quality of the consumer price index numbers. The proposal is for strengthening the price collection machinery.

(ii) *Surveys and Studies*

(Outlay Rs. 52.90 lakhs)

(a) *Continuing Surveys*

Provisions are made in the Plan for the continuation of the following schemes:

1. Survey on wage structure.  
(Outlay Rs. 3.77 lakhs)
2. Survey on household consumption  
(Outlay Rs. 2.98 lakhs)
3. Survey on cost of cultivation  
(Outlay Rs. 17.30 lakhs)

(b) *New Surveys**Survey on Construction Activity*

(Outlay Rs. 3.93 lakhs)

The construction industry represents an important segment in the State's economy in terms of its contribution to the State income as well as employment generated. As no systematic effort has been made to collect data on this unorganised sector, it has become difficult to compute estimates of State income. It is therefore proposed to conduct a sample survey on the construction industry in the private sector during the Plan period.

*Survey on movement of Goods Traffic through Check Posts*

(Outlay Rs. 4.92 lakhs)

Data on inter-State movement of goods by road are of vital importance in the context of drawing up programmes on economic development. Data regarding the quantity and value of goods transported to and from Kerala will be collected from the border check posts in the survey proposed to be taken up in the Sixth Plan period by the Directorate.

(iii) *Training of Statistical Personnel*

(Outlay Rs. 6.93 lakhs)

A training unit is proposed to be set up in the Directorate to organise training courses to the personnel engaged in the collection of statistics. The outlay proposed is for meeting the expenditure on the training unit and for meeting the expenditure on deputation of officers for training courses.

(iv) *Purchase of Vehicles for District Statistical Offices*

(Outlay Rs. 9.14 lakhs)

The outlay proposed is for the purchase of one jeep for each district and two vehicles for the use of the officers in the Headquarters.

(v) *Centrally Sponsored Schemes—State Share*

(Outlay Rs. 190.01 lakhs)

(a) *Timely Report of Agricultural Statistics*

(50 Per cent Central Assistance)

The survey envisages collection of data for estimating the various parameters under area and yield statistics for each agricultural year. The Survey is so designed that the entire area of the State will be completely enumerated at the end of six rounds of survey. This survey was started in 1975-76 as a Centrally sponsored scheme. The outlay proposed is for meeting State's share of 50 per cent of the cost of the scheme during 1980-85.

*Other General Economic Services**Regulation of Weights and Measures*

(Outlay Rs. 50.00 lakhs)

The Department of Weights and Measures is the agency authorised to regulate the weights and measures in the State and to enforce the various provisions of the Act and Rules. At present there are 38 Divisional Inspectors and 12 District Inspectors in the State for carrying out the work of verification of weights and measures in the various trading establishments, initial verification of new weights, verification of working standard, for carrying out surprise and routine inspection of trading and other premises etc. The present staff strength is quite insufficient for carrying out the Department's work effectively and efficiently. It is therefore proposed to strengthen the Department. It is also proposed to set up two secondary standard laboratories, one at Trivandrum and another at Ernakulam. Seven motor vehicles and essential items of working standard balances, weights and measures are proposed to be purchased. The outlay provided is for the strengthening of the Department and for purchase of vehicle and equipments and for establishing working standard laboratories.

TABLE 3.50

**Economic Services—Scheme-wise Outlay**

(Rs. in lakhs)

Name of Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved Outlay	Anti- cipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>General Economic Services</i>							
<i>I. Planning Board :</i>							
(i) Strengthening of State Planning Machinery & District Planning Units.	10.12	23.00	20.85	120.00	20.00	23.00	13.00
(ii) Electronic Data Processing Units	..	5.30	5.00	15.00	18.00	95.30	5.30
(iii) Preparation of Area Plans and conducting of Surveys and Studies	..	11.00	1.10	19.00	..	6.00	..
(iv) Plan Publicity	0.31	2.00	1.25	5.00	..	2.00	..
(v) Purchase of vehicles for District Planning Units	..	..	..	10.00	..	5.00	..
Sub-total—Planning Board	10.43	41.30	28.20	169.00	38.00	41.30	18.30

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>II. Monitoring &amp; Evaluation :</b>								
(i) Strengthening of Evaluation Machinery in the State Planning Board	..	1.00	0.77	5.00	..	1.00	..	..
(ii) Strengthening of Monitoring Units	1.43	1.00	1.00	5.00	..	1.00	..	..
(iii) Manpower Planning Unit	0.60	0.50	0.50	3.00	..	0.50	..	..
Sub-Total--Monitoring & Evaluation	2.03	2.50	2.27	13.00	..	2.50	..	..
<b>3. Secretariat :</b>								
(i) District Development Councils	1.44	2.00	2.00	10.00	..	2.00	..	..
(ii) Publication of District Plans	0.02	0.20	0.20	2.00	..	0.20	..	..
(iii) Institute of Management in Government (including construction of Building)	3.81	20.00	30.10	100.00	42.00	10.00	8.00	8.00
(iv) Implementation of Malayalam as Official language	0.96	3.00	1.00	10.00	..	3.00	..	..
(v) Project Cell in the Secretariat :	..	1.00	1.00	5.00	..	1.00	..	..
Sub-total - Secretariat	6.23	26.20	34.30	127.00	42.00	16.20	8.00	8.00
Total--General Economic Services	18.69	70.00	64.77	309.00	80.00	60.00	26.30	26.30
<b>4. Economic Advice and Statistics</b>								
(i) Strengthening of the Directorate of Economics & Statistics including Reorganisation of District Statistical Units.	2.54	4.40	4.40	27.02	..	4.40	..	..
(ii) Surveys & Statistics	2.16	11.95	9.25	32.90	..	10.95	..	..
(iii) Training of Statistical Personnel	0.15	0.50	0.50	6.93	..	0.50	..	..
(iv) Purchase of vehicles for District Statistical Offices	1.03	1.00	1.00	9.14	..	1.00	..	..
(v) Centrally sponsored schemes (State Share)								
(a) Timely Report of Agricultural Statistics	28.15	31.00	31.00	190.01	..	31.00	..	..
(b) Economic Census & Surveys	1.74	2.15	2.15	..	..	2.15	..	..
Total--Economics Advice & Statistics	35.77	51.00	48.30	266.00	..	50.00	..	..
Other General Economic Services Regulation of weights and Measures	4.20	6.00	6.00	50.00	7.00	10.00	3.00	3.00
Total--Economic Services	58.66	127.00	119.07	625.00	87.00	120.00	29.30	29.30

### 3.8 General Services

#### (i) Stationery and Printing

##### 1. Government Presses

(Outlay Rs. 350 lakhs)

The outlay provided is for implementing the following programmes:

#### A. Purchase of Machinery for New Government Presses

#### B. Construction of Buildings for the Government Presses

##### (i) Government Press, Mannanthala

This is a continuing programme. Out of the proposed 6 blocks, construction of 2 blocks has been completed. The proposed outlay is for the construction of the remaining 4 blocks.

##### (ii) Government Press, Cannanore

It is proposed to construct a multi-storied building for accommodating the computing and reading sections, form stores and general stores sections.

##### (iii) Government Press, Vazhoor, Kottayam District

The proposal is for construction of building for the new press to be established at Vazhoor in Kottayam District.

##### (iv) Government Press, Quilon

It is proposed to start Government Presses at all district headquarters under a phased programme. As part of the Government Press, there will be stores for forms and other Government publications. The proposal is for construction of buildings for the press and form stores at Quilon.

##### (v) Government Press, Calicut

As part of the policy of starting Government Presses and form stores at district headquarters it is proposed to establish a Government Press at Calicut. The proposal is to construct building for the Government Press at Calicut.

(vi) *Construction of buildings for shifting the Government Press, Ernakulam*

The Government Press, Ernakulam is now housed in an old and dilapidated building. There is no scope for its expansion and improvement unless it is shifted to a new place. The outlay proposed is for meeting the expenditure towards cost of land and building.

(vii) *Construction of building for a separate Confidential Press at Mannanthala, Trivandrum*

It is proposed to start a new press at Mannanthala for printing confidential publications within the scheduled time. The proposal is for construction of building for the press.

(viii) *Construction of building for a Form Store in the Mannanthala Press Campus*

The present building where the form store is functioning in Trivandrum is very old and dilapidated. It is therefore proposed to construct a building in the Mannanthala Press Campus for the form store.

2. *Kerala Books and Publications Society*

(Outlay Rs. 50 lakhs)

The Kerala Books and Publications Society, established with the technical collaboration of M/s. UNITECHNA, a G.D.R. Company, has started functioning. The construction of building is over and the machinery supplied by the collaborating foreign firm has been installed. It is proposed to purchase a printing/binding machinery and equipments for the text book press. It is also proposed to start a Post-Diploma Course in printing technology under the auspices of the Books and Publications Society utilising the facility of the most modern printing machinery etc., available in the society. The outlay provided is for implementing the above programmes.

(ii) *Public Works*

1. *Public Building Construction Programme*

(Outlay Rs. 1410 lakhs)

The building construction programmes of all non-development departments, that is, those departments which do not directly implement plan schemes are included under this head. Buildings have to be constructed for the following Departments:

- |                       |  |
|-----------------------|--|
| 1. State Legislature  | Legislature Complex  |
| 2. Judiciary          | New Blocks for High Court, Residential quarters for Judges of High Courts; Buildings for Subordinate Courts etc. |
| 3. Revenue-Department | Village offices, Taluk offices and Revenue Division offices  |
| 4. Registration       | Sub Registrars' offices  |
| 5. Sales Tax          | Taluk offices, Checkposts with office-cum-quarters, Weigh-bridges etc.   |

- |                              |   |
|------------------------------|---|
| 6. State Excise              | Buildings for District Offices                                  |
| 7. Treasury                  | Sub Treasuries and District Treasuries                          |
| 8. Police                    | Police Stations and Circle Inspectors' offices                  |
| 9. Public Service Commission | A new Block at Headquarters                                     |
| 10. Jail                     | Shifting of Central Jail from Trivandrum City                   |
| 11. Fire Forces              | Construction of buildings for regional offices                  |
| 12. Electrical Inspectorate  | Construction of buildings for headquarters and regional offices |
| 13. Labour courts            |   |
| 14. Secretariat              | Additional Block  |
| 15. Vikas Bhavan             | do.   |

Several Government Offices are at present house in private buildings, requiring the state exchequer to pay huge amounts by way of rent. Further, as a result of increased tempo of development activities and consequent expansion of development departments, accommodation of Government offices has become an urgent problem requiring immediate solution. It is also proposed to construct a Convention Building at Trivandrum for holding meetings and conferences of national and international importance. At present the absence of such a building is very keenly felt. Construction of buildings for the above departments and the Convention building would be taken up under a phased programme during the Plan period.

2. *Kerala State Construction Corporation*

(Outlay Rs. 80 lakhs)

The Kerala State Construction Corporation is a fully owned Government undertaking for executing works of various organisations and Government Departments. The Corporation has been set up in order to avoid private contractors in the construction of at least major projects. Presently, the Corporation is engaged in the construction of several works costing about Rs. 15 crores. The Corporation requires working capital for running contracts and additional share capital and loan for purchasing machinery. The outlay provided is for payment of share capital contribution and loan to the Corporation.

3. *Kerala State Engineering Works Limited*

(Outlay Rs. 30 lakhs)

The Government Engineering Workshop, Trivandrum has been converted into a public limited company by name Kerala State Engineering Works Limited. The Company will be having a carpentry shop, an automobile unit and a forging unit. The outlay provided is for payment of share capital contribution to the Company.

TABLE No. 3.51

**General Services—Scheme-wise Outlay***(Rs. in lakhs)*

Name of Scheme (1)	1979-80 Actuals (2)	1980-81		1980-85		1981-82	
		Approved outlay (3)	Anticipated Expenditure (4)	Proposed outlay (5)	Capital content (6)	Proposed outlay (7)	Capital content (8)
<i>Stationery and Printing</i>							
1. Government Presses	24.95	55.00	45.00	350.00	350.00	55.00	55.00
2. Kerala Books and Publications Society	16.00	10.00	10.00	50.00	50.00	10.00	10.00
Total—Stationery & Printing	40.95	65.00	55.00	400.00	400.00	65.00	65.00
<i>Public Works</i>							
1. Public Building Construction Programme	189.28	290.00	290.00	1410.00	1410.00	280.00	280.00
2. Construction Corporation of Kerala	10.00	15.00	15.00	80.00	80.00	15.00	15.00
3. Kerala State Engineering Works Limited	5.00	5.00	5.00	30.00	30.00	5.00	5.00
Total—Public Works	204.28	310.00	310.00	1520.00	1520.00	300.00	300.00
Total—General Services	245.23	375.00	365.00	1920.00	1920.00	365.00	365.00



## CHAPTER IV

## MINIMUM NEEDS PROGRAMME

The acute problem of poverty persisting despite nearly three decades of planning prompted Government of India and the Planning Commission to accept eradication of poverty as a major national policy. The National Minimum Needs Programme has been announced as a major step towards alleviating the living conditions of the poorest strata of the society. This programme has been in operation since the inception of the Fifth Plan. The objective of this programme is to provide the minimum requirements in respect of items of social consumption such as elementary education, drinking water, medical care, nutrition, house sites for the landless labourers, rural roads, rural electrification and slum improvement. The strategy adopted is to give priority to the provision of these facilities in the respective sectors of development. Accordingly priority is given to the allocation of funds for the development of the above programmes. All the programmes viz. elementary education, rural health, rural water supply, rural roads, house sites for landless labourers, environmental improvement of urban slums and nutrition introduced in the Fifth Plan will continue during the Sixth Plan 1980-85 also. The Minimum Needs Programme will receive priority in the allocation of resources and will be supplemented by the wider programme in the respective sectors.

As the level of development achieved by Kerala in respect of most of the components under the Minimum Needs Programme is relatively better than in many of the other states in India it has become necessary to resort to marginal deviation from the all India norms adopted for drawing up schemes under this programme. Sufficient allocations have however been provided under the different programmes to maintain the tempo of development already achieved in the State. The aggregate outlay required for all the components of the Minimum Needs Programme over the five years 1980-85 would be Rs. 116.04 crores. The details relating to each of the components of the programme are given in the following paragraphs.

#### 1. Elementary Education

In the national Plan the objective continues to be the universalisation of elementary education. Considering the progress made in the various States and Union Territories the all India Plan for 1980-85 aims at achieving the above object in two stages i.e. 95 per cent of enrolment in the age group 6 to 11 and 50 per cent in the age group 11 to 14 by 1985 and universal enrolment in the age group 6 to 14 by 1990. Kerala has almost achieved the target of providing free education to all the children in the age group 6 to 14 years. Hence a slight deviation from the objective adopted in the national Plan is necessary in the case of Kerala for elementary education. The State's programme is to pay more attention to improvement in the quality of education, provision of furniture and equipment and proper accommodation facilities for the schools. In a State like Kerala where there is heavy rainfall for more than six months of the year, running of schools in insecure

temporary structure is highly risky. A majority of the elementary schools has only temporary thatched sheds. Large investment is needed for school building construction programme. As the State's resources are limited, only nominal amounts could be provided under the Plan for this Programme. An amount of Rs. 16 crores is earmarked for elementary education under the Minimum Needs Programme.

#### 2. Adult Education

A large number of adults and young people in the country is illiterate. The formal system of education has completely by-passed them. They have to be covered fully by the non-formal and adult education system. For them those systems of education are required not merely as a means of securing literacy but also as a channel of practical knowledge pertaining to their development. The all India target in the non-formal education is 100 per cent coverage of the age group 15-35 years by 1990. In Kerala adequate emphasis is laid on this programme which is being implemented by official as well as non-official agencies. A massive programme of Adult Education has been launched under the scheme which includes opening of adult education centres, conduct of training programmes for the resource persons, preparation of resource materials etc. In the State's Sixth Plan an outlay of Rs. 50 lakhs is earmarked for adult education programme under the Minimum Needs Programme.

#### 3. Rural Health

The norms for rural health envisaged in the all India Plan are (i) one community health volunteer for every village or a population of 1000; (ii) one sub-centre for a population of 5000 in plains and 3000 in hilly and tribal areas; (iii) one Primary Health Centre for 30,000 population in the plains and 20,000 in hilly and tribal areas; (iv) one Community Health Centre for population of one lakh or one C.D. Block. Compared to other States in India Kerala is quite advanced in the provision of health services to the rural as well as the urban population. Kerala is perhaps the only state in India which is provided with a Government Medical Institution in every panchayat.

Kerala has already achieved the national target of one hospital bed for every thousand population in spite of its high density and rate of growth of population. The State has almost reached the minimum death rate and leads the other states in the expectation of life at birth. There is, however, considerable inter-regional disparity in the provision of health services within the State itself. The reduction of such inter-regional disparities deserves high priority in the health sector. A policy aimed at removing such disparities will naturally take care of the lack of medical facilities in remote areas.

The development of Primary Health Centres and sub-centres forms an important part of the rural health programme in the State. Strengthening and improvement of P.H. Centres and rural centres and

Community Health worker scheme are all aimed at improving the health of the rural masses. The present norms of one Public Health Centre for every lakh of population and one sub centre for every 10,000 population are to be revised to one Public Health Centre for every 80,000 population and one sub-centre for every 5000 population. A total outlay of Rs. 9.54 crores (Rs. 7.57 crores for allopathy, Rs. 1.37 crores for ayurveda and Rs. 0.60 crores for homoeopathy) is provided in the State Plan under Minimum Needs Programme for rural health.

#### 4. Rural Water Supply

Water supply programme implies supply of pure and safe drinking water to the rural people. The villagers of Kerala generally depend on well water for drinking purposes. As the State gets plenty of rainfall, the wells, as a rule, provide ample drinking water. However in the case of hilly areas and coastal regions there are difficulties in using well water for drinking purposes. In the hilly areas the wells are very deep and would fail during summer season. In the coastal regions the main problem is salinity of water. The provision of pure piped water in both these regions is therefore an urgent need. The State Government could, so far do only very little towards solving this problem.

As a result of the priority assigned to urban water supply in the State, all the cities and most of the towns in Kerala have water supply system. However, a large rural area remains to be covered through water supply schemes. During the five year period 1980-85 a determined effort will be made to cover almost all the problem areas by piped water supply system. As the distinction between the rural and urban areas is not so marked in Kerala as in other parts of the country, many of the so called rural areas share urban characteristics and are in need of protected water supply. A good number of rural water supply schemes are implemented as remunerative schemes with the loan assistance of L.I.C. of India. This process could continue in accordance with the availability of funds from government and financial institutions. In the Sixth Plan a total outlay of Rs. 45 crores is earmarked for rural water supply schemes under the Minimum Needs Programme.

#### 5. Rural Roads

The peculiar lay out of villages in Kerala makes it impossible to apply the minimum needs programme norms formulated by the Planning Commission to Kerala. Most of the villages in Kerala have road links with district or State roads. Some areas in High Ranges and tribal pockets lag far behind the rest of the area in the matter of communication. Provision of all-weather roads is a prerequisite to the development of these villages and thus deserves high priority.

Rural roads comprising village roads and some of the district roads serve as feeders linking villages with each other as well as with the nearest district roads, national highways, schools, market centres, railway stations etc. The object under the Minimum

Needs Programme is to connect all villages having a population of 1500 and above with an all-weather road. As the entire area of the Kerala State is more or less evenly populated, almost all the places are connected either by P.W.D. roads or roads maintained by other agencies like panchayats, C.D. Blocks etc.

For the Sixth Plan period an outlay of Rs. 13 crores is provided to develop and improve on a priority basis the rural roads in which there is already vehicular traffic. The State Public Works Department will improve 1631 km of roads during the Plan period under Minimum Needs Programme.

#### 6. House sites and houses for landless labour households

The commendable progress achieved by the State in enacting and implementing radical land reform measures has resulted in a large number of agricultural labour households acquiring ownership of land to serve as house sites. The provision in the Kerala Land Reforms Act which entitles the Kudi-kidappukar (those who live in hutments put up on a land owned by another person) to acquire ownership of a minimum of ten cents of land around their hutments at nominal cost, has benefited about four lakhs of households, mostly belonging to agricultural labour class. The hutments in which they dwell are too small and insecure to be called houses. Any housing programme intended for these classes will have to be fully financed by the State with a major component of subsidy. An ambitious housing programme for rural workers is proposed to be undertaken by the Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes which can avail, institutional finance also. In addition to provision of houses for landless labourers, the State lays emphasis on other rural housing projects such as co-operative housing scheme for economically weaker sections, village housing projects etc. Altogether a total outlay of Rs. 12 crores is provided for rural housing programmes under Minimum Needs Programme.

#### 7. The Environmental Improvement of Urban Slums

The State shares the problem of urban slums more or less in proportion with the size of its urban population. Past efforts at rehabilitation of the slum dwellers by transplanting them from their original habitats could not succeed because of their reluctance to move to a new locality. It is as an alternative that the improvement of slums has been accepted as a national policy. The components of the environment improvement programme are water supply, sewerage, paving of streets and provision of community latrines. The programme of demolition of slums should go hand in hand with the reconstruction and general environmental improvement of the slum areas. The proposed urban development programme of the State for 1980-85 includes programme for replacing urban slums with multi-storeyed buildings which can accommodate the entire slum dwellers of the area, by flat system. An outlay of Rs. 42 crores is earmarked in the Plan under the Minimum Needs Programme for the environmental improvement of 42 Urban slums.

8. *Nutrition*

Kerala being one of the States with a large food deficit, the nutrition level of the population is considerably low. Mal-nutrition among the children, pregnant women and nursing mothers deserves special attention in the Plan Programmes. The policy has been to provide supplementary diet to these sections. This policy has to continue as provision of balanced food to all people cannot be achieved in the near future. The most important nutrition programme under operation in the State is the CARE feeding programme for the primary school children. Besides this there are a number of other programmes like supply of food for pre-school children which includes items like Special

Nutrition Programme and Applied Nutrition Programme. Expectant and nursing mothers also receive free food material from the CARE. The Special Nutrition Programme will be extended to cover a larger number of children and mothers during 1980-85 subject to availability of food materials and funds by way of foreign aid and central allotments. An outlay of Rs.14 crores is set apart under Minimum Needs Programme for nutrition schemes in the Sixth Plan.

Table 4.1 gives the allocation of funds and physical targets under the various MNP components

TABLE 4.1  
Minimum Needs Programme—Kerala (1980-85)

Sl. No.	Item	Unit	Target for 1980-85		
			Physical (Quantity/No.)	Financial (Rs. lakhs)	
1.	Elementary Education	Nos.'000 (a) Classes 1 to 5 (b) Classes 6 to 8	30 } 100 }	1600.00	
2.	Adult Education			50.00	
3.	Rural Health	No. of Primary Health Centres No. of Sub Centres No. of Rural Hospitals	37 } 1792 } 150 }	954.00	
4.	Rural Water Supply	No. of villages covered by piped water supply No. of wells	292 } 100 }	4500.00	
5.	Rural Roads	Length of Road (Km.)	1631	1300.00	
6.	House sites for landless labour households	No. of Rural house sites	49447	1200.00	
7.	Environmental improvements of urban slums	Centres covered	42	600.00	
8.	Nutrition	Beneficiaries under Special Nutrition Programme		1400.00	
Total					11604.00

## SPECIAL COMPONENT PLAN FOR SCHEDULED CASTES

Scheduled Castes constitute 8.6 per cent of Kerala's total population. Their number has increased from 17.7 lakhs to about 22 lakhs during the period 1971 to 1981. The proportion of Scheduled Castes in the poverty population of the State is much larger than the proportion of 8 to 9 per cent in the total population. A rough estimate shows that nearly 90 per cent of scheduled caste families are below the poverty line. The scheduled castes in the State are characterised by extremely low income, poor asset ownership, general dependence on agricultural labour, subsistence farming and various other low income occupations.

5.2 In the successive five year plans emphasis has been laid on the development of scheduled castes through special programmes. But the fruits of various developmental programmes have by and large bypassed this category of people owing mainly to their economic, social and educational backwardness. Till a few years back the emphasis on Plan schemes which are related to the scheduled castes has been on education. This has contributed a notable increase in the enrolment of scheduled caste students in schools and colleges. As a consequence the literacy of scheduled castes is much higher in Kerala compared to the rest of India. Though notable progress in the matter of education among the scheduled castes is discernible, it is also found that dropouts and stagnation are high among scheduled castes.

5.3 In the earlier Plans little attention was given to economic development of scheduled castes. Education, in which the scheduled castes in the State have shown some advancement is of course the basic input for economic development. Emphasis will therefore be continued to be laid on development of education which will provide the inner strength for the community to face new situations. In the Sixth Plan emphasis will be given to those programmes which will help the economic development of Scheduled Castes.

5.4 A review of the achievements in the earlier Plans show that scheduled castes did not receive the benefits due to them from the general sector programmes. In the Fifth Plan a new strategy was evolved to ensure flow of benefits from general sectors to scheduled castes. The development departments were instructed to allocate at least ten per cent of the development outlays to schemes benefiting scheduled castes and scheduled tribes. State Government also emphasised the need for identification of schemes which would be of particular benefit to scheduled castes, under general sector programmes. During the year 1979-80 schemes suited for Scheduled Castes were listed out and a Special Component Plan for scheduled castes was prepared for Rs. 9.39 crores. An amount of Rs. 8.71 crores was spent during the year for the benefit of scheduled castes alone. After reviewing the performance of the general sector programmes for 1979-80 the State Government recommended certain special schemes for the benefit of scheduled castes and scheduled tribes. These schemes included extension of electricity to harijan colonies, water supply to harijan colonies/settlements, supply of E. S. P. type latrines to all families in harijan colonies, construction of roads, minor irrigation works,

supply of coconut seedlings and granting interest-free loans up to Rs. 10,000 to each harijan entrepreneur in small scale industry and traditional industry. During the financial year 1980-81 Government earmarked schemes worth Rs. 19.42 crores from the general sector exclusively for the benefit of scheduled castes. This is about 7 per cent of the total annual plan size.

5.5 In the Sixth Five Year Plan period efforts will be made to take special note of the developmental needs of the scheduled castes and formulate appropriate developmental programmes. The State's Plan programmes have been so drawn up as to benefit scheduled castes in the occupational categories such as agricultural labourers, small cultivators, fishermen, handloom weavers and other artisans, those engaged in unclean occupations etc. The Sixth Plan for the State will have a total outlay of Rs. 1550 crores. Out of this the divisible outlay is only Rs. 680 crores. Schemes with an outlay of Rs. 110.56 crores were identified as flow to special component plan for scheduled castes from the general sector. The proportion of this outlay together with the outlay of centrally sponsored schemes to the total outlay is almost in proportion to the population of Scheduled Castes in the State. Special family oriented and composite programmes are included in the Plan to benefit agricultural labourers and those engaged in agriculture and allied activities. Among the scheduled caste population 66 per cent are agricultural labourers, two per cent are cultivators and 9.5 per cent are engaged in livestock, forestry, fishing etc. Agricultural labourers get employment only during peak agricultural seasons, roughly about 100 days during the course of an year. Hence their income from agriculture is meagre and quite inadequate. The land reform measures adopted by the Government have contributed substantially to improve the conditions of scheduled castes and scheduled tribes. The Sixth Plan aims to benefit all the above sections to get employment during off-agriculture seasons and thus generate additional regular income to enable them cross the poverty line. Benefits to scheduled castes from special programmes like N. R. E. P., C. A. D. and I. R. D. will also be ensured. Flow of funds for the benefit of scheduled castes from these programmes are also shown in the special component Plan. Sufficient outlay is also provided in the Plan to assist the Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes by way of share capital contribution. The programmes of the Corporation will be made effective to provide full support to the development of Scheduled Castes.

5.6 The Plan programmes drawn up in the Sixth Plan for the Bamboo Corporation will be beneficial for scheduled castes and scheduled tribes. The Harijan Welfare Department which is the agency for implementing development schemes exclusively for scheduled castes has identified the beneficiary families and colonies in respect of the programmes like agricultural assistance, extension of electric lines, provision of water supply, construction of roads and handed them over to the concerned departments for implementation

5.7 All the harijan colonies and settlements will be electrified and will be provided with protected water supply during the Sixth Plan period itself. By getting basic services like education, health, drinking water, electricity, rural roads, houses etc., scheduled castes will be well on the way to acquire equality with other sections of the community and to go along the mainstream of socio-economic progress. It is estimated

that out of the 4.4 lakhs scheduled caste families in the State about 3.9 lakhs are below the poverty line. The Sixth Plan will help to bring 2 lakhs scheduled castes families in Kerala above poverty line during the Plan period. Tables 5.1 and 5.2 give the scheme-wise details of total outlay and flow of funds to scheduled caste and scheduled tribes during the Plan period 1980-85.

TABLE 5.1  
Sixth Plan 1980-85  
Special Component Plan for Scheduled Castes—1980-85 and 1981-82

Sl. No.	Outlay	(Rs. in Crores)	
		1980-85	1981-82
1	Total	1550	275
2	Divisible	680	120.26
3	Special Component Plan for Scheduled Castes	110.56	20.17
4	Percentage of Special Component Plan Outlay to Total outlay	7.13	7.34
5	Percentage of Special Component Plan Outlay to Divisible outlay	16.26	16.77

TABLE 5.2  
Sixth Plan 1980-85  
Flow of funds for the Benefit of Scheduled Castes and Scheduled Tribes from General Sector

Sl. No.	Head of Development	Total outlay	(Rs. in lakhs)		
			Flow of funds for the benefit of Scheduled Castes and Scheduled Tribes	Flow of funds for the benefit of Scheduled Castes	Flow of funds for the benefit of Scheduled Tribes
1	Agriculture	9994.00	838.20	721.00	117.20
2	Land Reforms	3070.00	95.00	95.00	..
3	Minor Irrigation	4000.00	300.00	200.00	100.00
4	Soil and Water Conservation	1029.00	173.00	133.00	40.00
5	Special Area Programme for Rural Development	3485.00	1215.00	1150.00	65.00
6	Animal Husbandry	1517.00	141.00	90.00	51.00
7	Dairy Development	721.00	48.00	35.00	13.00
8	Fisheries	2000.00	58.00	48.00	10.00
9	Forests	1862.00	228.00	18.00	210.00
10	Community Development and Panchayats	4140.00	596.00	536.00	60.00
11	Co-operation	2200.00	285.00	220.00	65.00
12	Power	31273.00	1864.00	1650.00	214.00
13	Village and Small Scale Industries	4980.00	415.00	390.00	25.00
14	Roads and Bridges	6600.00	750.00	550.00	200.00
15	General Education	4120.00	139.00	49.00	90.00
16	Technical Education	700.00	8.00	7.00	1.00
17	Medical, Public Health and Sanitation	3655.00	243.00	190.00	53.00
18	Sewerage and Water Supply	9050.00	1339.00	1121.00	218.00
19	Housing	4800.00	900.00	810.00	90.00
20	Urban Development	1900.00	355.00	355.00	..
21	Information and Publicity	90.00	1.25	1.00	0.25
22	Labour and Labour Welfare	297.00	18.50	14.00	4.50
23	Social Welfare	467.00	63.00	58.00	5.00
24	Nutrition	1700.00	906.00	815.00	91.00
25	Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes	2500.00	2450.00	1800.00	650.00
26	Others (Non-divisible)*	48890.00	..	..	..
	Total	155040.00	13428.95	11056.00	2372.95

\* Sectors like Mining, Port, Transport, Major Irrigation, Major Industries etc.

## CHAPTER VI

## RESOURCES FOR THE PLAN

In financing the State sector outlay on the Plan, the two broad components are State's own resources and Central assistance. The State's own resources would include the current budgetary surpluses on revenue and capital accounts, share of the State Government and State enterprises out of open market borrowings, negotiated loans from all-India financial institutions, share of small savings, State Provident Funds, Contribution of public enterprises and additional resources raised through revision of taxes and tariffs. Withdrawal from any past cash reserves of the State Government to meet the plan resource gap is also counted as State's own resources. The resource position that emerged after discussions with the Planning Commission before finalisation of the Sixth Plan is summarised in Table 6.1.

TABLE 6.1

Sl.No.	Pattern of Plan Financing	Estimated Resources— 1980-1985 (Rs. crores)
(1)	(2)	(3)
1.	Balance from Current Revenues at 1979-80 Rates of Taxation	329.16
2.	Contribution of Public Enterprises at 1979-80 Rates of Fares and Tariffs	
	(a) State Electricity Board	(—)103.70
	(b) Road Transport Corporation	(—) 41.17
3.	Loans from the Market by the State Government (Net)	117.56
4.	Share of Small Savings	47.02
5.	State Provident Fund, etc.	147.27
6.	Miscellaneous Capital Receipts	(—)119.47
7.	Additional Resource Mobilisation: 1980-81 Measures (By Enterprises) 1981-85 Measures (By State)	125.91 135.00*
8.	Negotiated Loans (Gross):	
	(i) <i>State Government</i>	
	Loans from LIC for Housing etc.	16.15
	For Water Supply	21.02
	Loans from R.B.I.	8.85
	(ii) <i>State Enterprises</i>	
	Loans from LIC	44.26
	Loans from R.E.C.	8.72
9.	Market Borrowings by Kerala State Electricity Board	52.25
	” ” Others	25.00
10.	Withdrawals from Cash Balance	65.22
	Total States' Own Resources	879.05
	Central Assistance (tentatively indicated)	430.00
	Total Resources	1309.05

\*To be finalised after further discussions.

6.2 It would be seen that the total resources for the five year period 1980-85 would add upto only Rs. 1309 crores including the Central assistance component of Rs. 430 crores. There would thus be a gap of Rs. 241 crores between the projected plan outlay and the aggregate resources as computed by the Planning Commission. Ways of covering this gap would have to be discussed with the Planning Commission. Four specific items in the Scheme of plan financing would need comment. They are (i) Current budgetary surpluses, (ii) Additional resource mobilisation, (iii) Market borrowings and (iv) Central Assistance.

(i) *Current Budgetary Surpluses*

6.3 This has been computed at 1979-80 price level. Past experience has proved that estimates under this have been undergoing substantial changes in the course of the plan period mainly because of the price escalations and their impact on costs of administration. Granting of D.A. instalments from time to time has become unavoidable consequent on the increase in the cost of living index. There are also other aspects such as changes in central fiscal policies which can affect the budgetary position of the State. For instance the Central Government has been seriously considering a proposal to substitute sales taxes on certain items by additional excise duties. Apart from weakening the fiscal structure of the State, such policies would amount to making serious inroads into the fiscal autonomy of the State as guaranteed by the Constitution. Our experience with the limited experiment in respect of three items of Sugar, Textiles and Tobacco in respect of which the Centre is now levying additional excise duties in lieu of State's sales taxes has been far from happy. Such measures would reduce the productivity of State taxes which in turn would bring down the State's budgetary surpluses available for financing the Plan.

(ii) *Additional Resource Mobilisation*

6.4 The Planning Commission have fixed a five year target of Rs. 260 crores to be raised by additional taxation over the Sixth Plan period. This is a very high target for a State like Kerala which has been exploiting efficiently its existing tax resources. However, in the interest of finding sufficient funds for the plan, the State Government has agreed to make maximum effort to mobilise additional resources of the order suggested by the Planning Commission. In the very first year of the Plan (1980-81) the State Government made substantial revisions of the electricity tariffs and bus fares in the State which in a full year would yield Rs. 21 crores. During the Sixth Plan, the total additional resources that would be mobilised through these two measures would amount to Rs. 126 crores. Further revisions of electricity tariffs and bus fares are under contemplation of the State Government.

6.5 It may be observed in this context that additional resources in a State like Kerala which has a high per capita tax burden would have to be achieved mainly through exploitation of areas other than taxation.

If taxes are raised too high, they would become self-defeating. New areas would have to be considered for raising larger resources for the plan. In this context, it may be noted that 45 per cent of our budget is now devoted for development of social services such as education and health. The direct financial returns from these expenditures are practicably negligible. It should be possible to tap these areas to find additional resources for the plan. Scope in respect of other measures such as betterment levy in urban areas, toll taxes on new bridges on national highways, separate irrigation charges for cash crops, etc., could also be examined. Apart from all this, greater efficiency in tax collections under the existing tax legislations and toning up of the working of the major State enterprises could also yield additional revenues. There is another aspect also to be considered while discussing resource mobilisation viz. economy in expenditures. Economy in expenditure is as important as raising more resources as the latter would be infructuous without the former. Economy does not mean just reduction in expenditures. It is to be looked upon more as a positive virtue and should consist in augmenting productivity of given level of expenditure.

### (iii) Share of Open Market Borrowings

6.6 In the national plan, there is a provision of Rs. 19,500 crores for market borrowings. Out of this, Kerala's share has been fixed at Rs. 195 crores which is only just one per cent of the total borrowings visualised during the plan period. Compared with the population ratio of 4 per cent this percentage is too low. The State government had pointed out to the Planning Commission and the Government of India that in sharing market borrowings, objective criteria would have to be adopted not only in the distribution of the total amount between the Centre and the States, but also in the inter se distribution-between the States. Out of a total share of Rs. 19,500 crores, the States have been allocated only Rs. 4,500 crores which is about 22 per cent. It may be pointed out that as far as the total governmental expenditures are concerned, the expenditures of the State Governments are a little higher than the Centre's expenditures. It would be only fair, therefore that the aggregate market borrowings are shared atleast equally between the Centre and the State. Secondly, while allocating State-wise shares, considerations such as the fiscal requirements of States, their special problems such as unemployment, backwardness, etc. should also be taken into account. However, the Planning Commission has not adopted any such yardsticks for determining the *inter se* share of the State in market borrowings. Out of Rs. 4500 crores allocated to all the States, Rs. 1000 crores have been allocated only to six States on the consideration that their per capita income as computed by the Central Statistical Organisation is below the all States' average. Since, according to the Central Statistical organisations' calculations, Kerala's per capita income happens to be above the average, the State has been denied any share out of this earmarked amount of Rs. 1000 crores. This has adversely affected the financial interest of the State Government. It would therefore, appear that States like Kerala have been given neither the considerations given to the advanced states nor the special treatment meted out to the backward states in the matter of sharing the national financial resources. The State Government has pointed out these facts to the Planning Commission and the

Government of India. Kerala is also contributing about 8 to 10 per cent every year to the country's foreign exchange earnings both by way of export earnings and foreign remittances. The main beneficiaries of this are the Central government and a few industrialised States which import machinery and other capital equipments on a large scale. Such considerations are also relevant while deciding upon the share of market borrowing of a particular State.

### (iv) Central Assistance

6.7 A major problem that has been facing the State in recent times is the declining share of central assistance for financing the State sector plan outlay. During the First Five Year Plan, Kerala got 4 per cent of the total central assistance set apart for the States. This increased to 5 per cent in the Fourth Plan. However, in the subsequent five year plans, this ratio declined sharply. It became 4.4 per cent in the Fifth Plan and 3.2 per cent in the original Sixth Plan (1978-83). In the revised Sixth Plan 1980-85 the ratio is as low as 2.8 per cent.

6.8 The total central assistance for States as indicated in the Planning Commission's document is Rs. 15,350 crores. Of this Rs. 2,805 crores is proposed to be allocated as follows:

	(Rs. crores)
Hill areas	560
Tribal areas	470
North-Eastern Council	325
External aided projects	1450

6.9 Of the balance of Central assistance of Rs. 12,545 crores, Rs. 3,245 crores has been allocated to 8 special category States namely Assam, Himachal Pradesh, Jammu and Kashmir, Manipur, Meghalaya, Nagaland, Sikkim and Tripura and the remaining amount of Rs. 9,300 crores has been distributed among the 14 non-special category states including Kerala. Of this Rs. 7700 crores has been distributed on the basis of the modified Gadgil formula and the remaining Rs. 1600 crores on the basis of the formula called the IATP i.e. Income Adjusted Total Population.

6.10 The original Gadgil formula, was based on the following criteria of distribution:

- (i) 60 per cent on the basis of population,
- (ii) 10 per cent on the basis of per capita income.
- (iii) 10 per cent on the basis of tax effort
- (iv) 10 per cent on the basis of expenditure on ongoing irrigation and power projects
- (v) 10 per cent for special problems

The 10 per cent allocation for per capita income is distributed only to States whose per capita income is below the national average. Kerala continued to get a share of this till the Fifth Plan period. The calculations of per capita income by the Central Statistical Organisation for the subsequent years showed that Kerala's per capita income was about 18 rupees higher than the all States' average. The State is thus not being given any share out of this allocation though the States' per capita income was only marginally

higher. But the loss that the State would suffer in the Sixth Plan has now become substantial because of two changes made in the Gadgil formula. Firstly the 10 per cent allocation for ongoing irrigation and power projects has been done away with. The State was entitled to a share out of this which has now been lost. Secondly, this 10 per cent allocation has now been added to the 10 per cent allocation for per capita income which consequently gets a weightage of 20 per cent in the revised formula. Kerala does not get any share out of this allocation also. As a result of this change, the State's entitlement to Central assistance has been considerably reduced.

6.11 The Planning Commission has also not been fair in allocating amounts for special problems under the Gadgil formula. Kerala's unemployment problem is so serious that unless it is tackled with expedition it can lead to an explosive situation. The State has the highest rate of unemployment—25 per cent of the labour force as against the corresponding ratio of 8 per cent for the country as a whole. In fact, in the Fifth Plan, the State was allocated as much as Rs. 60 crores for special problems out of a total allocation of Rs. 430 crores for all States i.e. about 15 per cent. In the latest plan, the Planning Commission had originally allocated only Rs. 48 crores as the State's allotment for special problems. This was Rs. 10 crores less as compared with the allocation in the original 1978-83 Sixth Plan. After State Government's discussion with the Planning Commission, the amount has been restored to Rs. 58 crores. Even this is too inadequate in the context of Kerala's special problems. All the

aforementioned factors have been responsible for the State's low share of Central assistance for the current five year plan.

#### *Share of Institutional Finance*

6.12 While discussing the question of resources for the plan it is also necessary to consider the scope for mobilising resources by way of credit from all India Financial Institutions. Large amounts of resources are now controlled by the all India Financial Institutions like the Industrial Finance Corporation, Industrial Development Bank of India, Industrial Credit and Investment Corporation, Life Insurance Corporation etc. These Institutions have been playing a major role in financing development projects in different States. However, past performance of these institutions would show that only the advanced States have been the major beneficiaries. States like Kerala which are industrially backward have not been able to get adequate credit from these institutions. Kerala's share has been around 3.3 per cent so far. It should, however, be emphasised in this context that to bring about a greater flow of institutional funds into the State, it would be necessary to put in a great deal of effort in preparing and formulating sound and viable projects which could attract institutional finance. Project formulation is thus of crucial importance in attracting sufficient institutional funds for our development programmes. The development departments would, therefore, have to gear up the working of their project cells.



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**APPENDIX**

**STATISTICAL STATEMENTS**

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## LIST OF STATISTICAL STATEMENTS

	<i>Page No.</i>
Statement 1. Heads of Development—State Sector Outlay	237
Statement 2. Sector-wise Physical Targets	240
Statement 3. Minimum Needs Programme—Outlays and Expenditure	253
Statement 4. Minimum Needs Programme—Physical Targets	257
Statement 5. Centrally Sponsored Schemes—Outlays	259
Statement 6. Special Component Plan for Scheduled Castes—Financial Outlays and Expenditure	267
Statement 7. Special Component Plan for Scheduled Castes—Physical Targets	269
Statement 8. Tribal Sub-Plan —Financial Outlays	270
Statement 9. Tribal Sub Plan—Physical Targets	271



## HEADS OF DEVELOPMENT—STATE SECTOR OUTLAY

(Rs. in lakhs)

Head/Sub Head of Development	1979-80 Actuals	1980-81		1980-85		1981-82	
		Approved Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>I. AGRICULTURE AND ALLIED SERVICES</b>							
Research and Education	80.00	110.00	110.00	1300.00	390.00	180.00	90.00
Crop Husbandry	680.76	1010.00	887.19	8694.00	1397.80	1169.90	197.11
Land Reforms	617.20	600.00	519.50	3070.00	..	600.00	..
Minor Irrigation	568.13	600.00	613.47	4000.00	3410.00	665.00	594.00
Soil and Water Conservation	172.99	180.00	176.69	1029.00	210.00	180.00	12.00
Command Area Development	0.34	80.00	19.28	725.00	75.00	120.00	15.00
Food	1.06	25.00	13.00	500.00	250.00	25.00	..
Animal Husbandry	153.57	200.00	305.00	1517.00	174.75	310.00	46.50
Dairy Development	147.27	170.00	152.00	721.00	190.50	180.00	72.60
Fisheries	344.61	400.00	406.20	2000.00	1238.50	463.10	307.65
Forests	196.15	285.00	285.75	1862.00	998.00	285.00	138.00
Investment in Agricultural Financial Institutions	109.88	150.00	150.00	1100.00	1100.00	150.00	150.00
Marketing	2.73	10.00	10.50	125.00	..	13.00	..
Storage and Warehousing	10.00	12.00	12.00	70.00	70.00	15.00	15.00
Community Development and Panchayats	284.33	200.00	1287.00	4140.00	500.00	920.00	100.00
Special Programme for Rural Development	266.37	220.00	301.34	2510.00	..	430.00	..
Development of Backward Areas including Hill Areas	45.16	50.00	50.00	250.00	..	50.00	..
<b>TOTAL—I—AGRICULTURE AND ALLIED SERVICES</b>	<b>3680.55</b>	<b>4302.00</b>	<b>5298.92</b>	<b>33613.00</b>	<b>10004.55</b>	<b>5756.00</b>	<b>1737.86</b>
<b>II. CO-OPERATION</b>							
Credit Co-operatives	146.56	186.65	763.38	892.95	330.00	163.00	40.00
Marketing	21.24	17.10	19.10	320.00	150.00	66.00	40.00
Processing Co-operatives	4.66	5.00	3.00	60.00	60.00	15.00	15.00
Consumer Co-operatives	49.14	29.60	58.30	295.35	179.00	45.00	26.00
Others	53.78	81.65	151.63	631.70	132.00	116.00	23.55
<b>TOTAL—II—CO-OPERATION</b>	<b>275.38</b>	<b>320.00</b>	<b>995.41</b>	<b>2200.00</b>	<b>851.00</b>	<b>405.00</b>	<b>144.55</b>

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>III. IRRIGATION, FLOOD CONTROL AND POWER</b>							
<i>Irrigation</i>							
(a) Water Development (Survey, Investigation & Research)	37.46	40.00	42.00	355.00	355.00	40.00	40.00
(b) Irrigation Projects	3684.75	4190.00	3792.00	25250.00	25250.00	4460.00	4460.00
Sub Total (a+b)	3722.21	4230.00	3834.00	25605.00	25605.00	4500.00	4500.00
Flood Control and Anti-sea Erosion Projects	341.66	250.00	250.00	2500.00	2500.00	250.00	250.00
<i>Power</i>							
(a) Power Development (Survey, Investigation and Research)	72.00	100.00	100.00	435.00	435.00	75.00	75.00
(b) Power Projects (Generation)	834.00	1626.00	1626.00	9166.00	9166.00	1253.00	1253.00
(c) Transmission	1381.00	1460.00	1460.00	8000.00	8000.00	1500.00	1500.00
(d) General (Including Distribution and Rural Electrification)	1844.00	1821.00	1821.00	13672.00	13672.00	2172.00	2172.00
Sub Total (a+b+c+d)	4131.00	5007.00	5007.00	31273.0	31273.00	5000.00	5000.00
<b>TOTAL III—IRRIGATION, FLOOD CONTROL, ANTI SEA EROSION AND POWER</b>	<b>8194.87</b>	<b>9487.00</b>	<b>9091.00</b>	<b>59378.00</b>	<b>59378.00</b>	<b>9750.00</b>	<b>9750.00</b>
<b>IV. INDUSTRY AND MINERALS</b>							
Village and Small Industries	1874.59	645.01	692.35	4980.00	1533.75	850.01	224.33
Medium and Large Industries	2480.83	2260.01	2225.00	10820.50	10820.50	2360.02	2360.02
Mining	11.59	25.00	21.70	150.00	32.50	30.00	11.50
<b>TOTAL IV—INDUSTRY AND MINERALS</b>	<b>4367.01</b>	<b>2930.02</b>	<b>2939.05</b>	<b>15950.50</b>	<b>12386.75</b>	<b>3240.03</b>	<b>2595.85</b>
<b>V. TRANSPORT AND COMMUNICATIONS</b>							
Ports, Light Houses and Shipping	129.23	100.00	130.44	825.00	741.50	100.00	84.00
Roads and Bridges	1224.99	1100.00	1347.00	6600.00	6550.00	1350.00	1338.00
Road Transport	300.00	250.00	250.00	2000.00	2000.00	250.00	250.00
Water Transport	52.31	80.00	68.00	575.00	575.00	80.00	79.00
Tourism	90.49	95.00	99.36	675.00	552.00	125.00	102.05
<b>TOTAL V—TRANSPORT AND COMMUNICATIONS</b>	<b>1797.02</b>	<b>1625.00</b>	<b>1894.80</b>	<b>10675.00</b>	<b>10418.50</b>	<b>1905.00</b>	<b>1853.05</b>

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>VI. SOCIAL AND COMMUNITY SERVICES</b>								
<i>Education</i>								
(a) General Education		1017.57	830.00	866.33	4120.00	1208.00	900.00	258.50
(b) Art and Culture		21.67	36.00	43.00	200.00	59.25	45.00	13.75
(c) Technical Education		105.68	190.00	187.07	700.00	130.00	190.00	36.50
Sub Total (a+b+c)		1144.92	1056.00	1096.40	5020.00	1397.25	1135.00	308.75
Scientific Services and Research		327.21	300.00	340.00	1200.00	570.00	340.00	134.50
Medical, Public Health and Sanitation (Excluding ESI)		435.94	632.62	681.40	3625.00	1394.00	745.70	291.30
Employees State Insurance Scheme		2.75+	3.38+	3.38+	30.00	..	4.30+	..
		19.25₹	23.66₹	23.66₹			30.10₹	
Sewerage and Water Supply		1112.60	1249.00	1281.14	9050.00	5677.00	1450.00	908.54
Housing (Excluding Police Housing)		835.57	786.00	1299.01	4650.00	2733.00	975.00	580.50
Police Housing		64.88	50.00	50.00	150.00	97.50	40.00	26.00
Urban Development		248.67	297.00	297.00	1900.00	1138.00	300.00	180.00
Information and Publicity		28.86	13.00	16.00	90.00	13.00	13.00	1.50
Labour and Labour Welfare		429.86	477.01	652.00	297.00	102.70	100.00	33.70
Welfare of Scheduled Castes/Scheduled Tribes and other Backward Classes		119.91	190.00	481.50	2500.00	510.90	435.00	83.65
Social Welfare		28.88	71.55	82.84	467.00	36.55	75.00	4.42
Nutrition		127.29	340.00	340.00	1700.00	11.25	340.00	3.25
<b>TOTAL VI—SOCIAL AND COMMUNITY SERVICES</b>		<b>4907.34+</b>	<b>5465.56+</b>	<b>6620.67+</b>	<b>30679.00</b>	<b>13111.15</b>	<b>5953.01+</b>	<b>2421.61</b>
		<b>19.25₹</b>	<b>23.66₹</b>	<b>23.66₹</b>			<b>30.10₹</b>	
<b>VII. ECONOMIC SERVICES</b>								
General Economic Services		18.69	70.00	64.77	309.00	80.00	60.00	26.30
Economic Advice and Statistics		35.77	51.00	48.30	266.00	..	50.00	..
Other General Economic Services (Regulation of Weights and Measures)		4.20	6.00	6.00	50.00	7.00	10.00	3.00
<b>TOTAL VII—ECONOMIC SERVICES</b>		<b>58.66</b>	<b>127.00</b>	<b>119.07</b>	<b>625.00</b>	<b>87.00</b>	<b>120.00</b>	<b>29.30</b>
<b>VIII. GENERAL SERVICES</b>								
Stationery and Printing		40.95	65.00	55.00	400.00	400.00	65.00	65.00
Public Works		204.28	310.00	310.00	1520.00	1520.00	300.00	300.00
<b>TOTAL VIII—GENERAL SERVICES</b>		<b>245.23</b>	<b>375.00</b>	<b>365.00</b>	<b>1920.00</b>	<b>1920.00</b>	<b>365.00</b>	<b>365.00</b>
<b>GRAND TOTAL</b>		<b>23526.06+</b>	<b>24631.58+</b>	<b>27323.92+</b>	<b>155040.50</b>	<b>108736.95</b>	<b>27494.01+</b>	<b>19031.72</b>
		<b>19.25₹</b>	<b>23.66₹</b>	<b>23.66₹</b>			<b>30.10₹</b>	

₹ — Share of E.S.I. Corporation.

## STATEMENT 2

## SECTOR-WISE PHYSICAL TARGETS

Sl. No.	Item	Unit	Five Year Plan 1980-85		1980-81		1981-82	Remarks
			1979-80 Base year level	1984-85 Terminal year target	Target	Anticipated achievement	Proposed target	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Agriculture and Allied Services</b>								
	Crop Husbandry							
	1. Production of Foodgrains							
	(a) Rice	'000 Tonnes	1282.61	1600.00	1350.00	2327.00	1387.00	
	(b) Pulses	"	19.13	50.00	30.00	24.73	30.00	
	(c) Jowar, Ragi and small Millets	"	3.65	4.00	4.00	3.65	4.00	
	Total—Foodgrains	"	1305.39	1654.00	1384.00	1355.38	1421.00	
	2. Commercial Crops							
	(a) Cotton	'000 Bales	1.23	1.25	..	1.23	1.24	
	(b) Sugarcane (Cane)	'000 Tonnes	374.90	475.00	400.00	375.00	400.00	
	(c) Oilseeds							
	1. Major Oilseeds							
	(i) Groundnut	"	13.29	21.50	15.00	14.30	15.30	
	(ii) Sesamum	"	4.48	5.00	4.50	4.48	5.00	
	2. Others—Coconut	Million nuts	3075	3333	3150	3090	3140	
	3. Chemical Fertilisers							
	(a) Nitrogenous (N)	'000 Tonnes	46.340	79	52.775	51.437	57	
	(b) Phosphatic (P)	"	25.402	43	28.201	28.196	31	
	(c) Potassic (K)	"	33.872	58	36.500	37.600	42	
	Total	"	105.614	180	117.476	117.233	130	
	4. Plant Protection							
		'000 Tonnes of technical grade material	893	1600	1345	1312	1470	
	5. Area under the Distribution of Pesticides							
		'000 Hectares	946	2000	1600	1600	1700	
	6. Area under High Yielding Varieties Paddy							
		"	300	600	450	360	420	
	7. Soil Conservation Area covered							
		'000 Hectares (Cumulative)	60.873	78.392	64.370	63.058	67	
	8. Cropped Area							
	(a) Net	'000 Hectares	2201	2261	2236	2206	2216	
	(b) Gross	"	2924	3142	3045	2950	2981	



9. Storage						
Owned Capacity with—						
(i)	State Warehousing Corporation '000 Tonnes (Cumulative)	58.378	116.378	76.378	61.378	67.378
(ii)	Co-operatives	142.650	195.000	154.000	154.000	163.000
(iii)	Central Warehousing Corporation	39.160	62.940	..	..	..
(iv)	State Government	37.620	..	..	..	..
(v)	Others	271.904	..	..	..	..

### Land Reforms

A. Ceiling on Surplus Land							
(i)	Area Declared Surplus	Hectares (Cumulative)	50640	66000	53640	53640	57240
(ii)	Area Taken Possession of	"	33624	66000	39624	39624	45624
(iii)	Area Allotted	"	22108	56000	27108	27108	34608
B. Consolidation of Holdings		..	..	..	..	..	..
C. Resurvey of State, Preparation of Land Records for the Implementation of Land Reforms and Resurvey of the areas where the Records are in Bad Condition		Sq. kms.	13925	25925	1500	1338	2000

In addition to this an area of 6522 hectares is set apart for public purpose

241

### Minor Irrigation

Surface (gross)	'000 Hectares	142.116	196.641	11.650	11.650	12.370
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### Command Area Development

	No. of Blocks (cumulative)	..	27	27	27	27
(a) Field Channels	Area covered '000 hectares (Cumulative)	..	45	5	..	15
(b) Field Drainage		..	2.40	0.40	..	0.90
(c) Land Levelling		..			..	

### Animal Husbandry

I. Animal Husbandry and Dairy Products						
(i)	Milk	'000 tonnes	872.7	1162.9	870.0	924.3
(ii)	Eggs	Million Nos.	954	1160	1010	960
						1005

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>II. Animal Husbandry Programmes</b>								
(i)	ICD Projects	No. (Cumulative)	3	4	3	3	4	
(ii)	Frozen Semen (bull) Stations	"	3	3	3	3	3	
(iii)	Inseminations Performed with Exotic Bull Semen	Lakhs (Cumulative)	9.63	14.48	10.58	10.68	11.23	
(iv)	Establishment of Sheep Breeding Farms	No. (Cumulative)	1	1	1	1	1	
(v)	Veterinary Hospitals	"	369	373	370	393	388	
(vi)	Veterinary Dispensaries	"	153	139	142	139	139	
(vii)	Veterinary Polyclinics	"	15	45	25	25	30	
(viii)	Mobile Farm Aid Units	"	7	38	14	14	20	
<b>Dairy Development</b>								
1.	No. of Frozen Semen Bull Stations	Nos.	3	3	..	..	..	
2.	Production of Frozen Semen	Lakh dozes	6	12.5	..	6.0	10.0	
3.	Regional Semen Banks	Nos.	4	6	..	1	1	
4.	Cattle Breeding Centres supplied with Frozen Semen	"	650	1300	..	120	150	
5.	Fodder Seed Farm	"	..	1	..	1	..	
6.	Fodder Seeds to be Produced and Produced from Certified Seed Producers	Tonnes	3.0	60.0	..	10.0	30.0	
7.	No. of Inseminations Proposed with Exotic Bull Semen Annually	In lakhs	9.63	14.48	10.58	10.68	11.23	
8.	Milk	In '000 tonnes	872.7	1162.9	870.0	924.3	978.3	
9.	Fluid Milk Plants	Nos.	7	14	7	7	8	
10.	Milk Powder Factories	"	..	2	..	..	..	
11.	Dairy Co-operatives/Union	"	9	3*	9	9	3	
12.	Dairy Co-operative Societies (Primary)	"	935	2200	..	1025	1200	
<b>Fisheries</b>								
1.	Fish Production	'000 tonnes (Cumulative)						
(a)	Inland	"	25.00	40.00	28.00	28.00	30.00	
(b)	Marine	"	328.51	498.00	400.00	400.00	420.00	
Total—Fish production			353.51	538.00	428.00	428.00	450.00	
2.	Fish Seed Farms							
(a)	Government	No.	2	10	4	4	6	
(b)	Private and Others	"	N.A.	N.A.	N.A.	N.A.	N.A.	

3.	Nursery Area						
(a)	Government	Ha.	7.00	12.00	8.00	8.00	9.00
(b)	Private and Others	"	N.A.	N.A.	N.A.	N.A.	N.A.
4.(1)	Fish Seed production within the State						
(a)	Fry (Million)		5.30	35.01	7.00	7.00	9.00
(b)	Fingerlings (cumulative)		0.50	2.00	0.75	0.75	1.00
(2)	Fish Seed Procured from Outside the State						
(a)	Fry	"	0.002	0.01	0.002	0.002	0.004
(b)	Fingerlings	"	0.022	0.20	0.022	0.022	0.040
5.	Mechanised Boats	No.	3019	3250	3079	3079	3130
6.	Deep Sea Fishing Vessels	"	16	35	18	18	20

### Forests

(a)	Plantations of Quick Growing Species	'000 ha.	33.544	38.544	34.144	34.144	35.144
(b)	Economic & Commercial Plantations	'000 ha.	106.807	129.647	110.329	110.329	115.149
(c)	Farm Plantations	'000 Nos.	..	7500.000	1500.000	1500.000	3000.000
(d)	Communications						
(i)	New Roads	Kms.	1160.00	1610.00	1290.00	1290.00	1390.00
(ii)	Improvement of Existing Roads	Kms.	..	4000.00	10.00	10.00	110.00

### Integrated Rural Development

No. of Blocks (Cumulative)	..	144	144	144	144
No. of families (Cumulative)	..	432000	86400	86400	172800

### Co-operation

1.	Short Term Loans issued during the Year	Rs. (crores)	102.61	170.00	96.00	105.00	112.00
2.	Medium Term Loans	"	35.36	50.00	36.00	36.00	38.00
3.	Long Term Loans	"	12.44	36.00	26.12	26.12	28.67
4.	Retail Sale of Fertilizers	"	17.51	40.00	18.00	18.00	30.00
5.	Agricultural Produce Marketed	"	65.52	120.00	75.00	75.00	85.00
6.	Retail Sales of Consumer Goods by Urban Consumers CS	"	18.32	30.00	18.00	18.00	20.00
7.	Retail Sales of Consumer Goods by Co-operatives in Rural Areas	"	58.50	150.00	95.00	95.00	110.00
8.	Co-operative Storage	Lakh tonnes	1.43	1.95	1.54	1.54	1.63
9.	Processing Units						
(i)	Organised	Numbers	38	78	45	45	53
(ii)	Installed	"	24	68	32	32	40

\*The existing 9 District Unions will be reorganised into three regional unions.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Major and Medium Irrigation</b>								
	(i) Potential Created	'000 Hectares	300.458	508.258	20.700	14.851	37.200	
	(ii) Utilisation	"	279.506	487.306	20.700	14.851	37.200	
<b>Flood Control</b>								
	1. Area Provided with Protection	'000 ha.	15.723	22.067	1.052	1.052	1.052	
<b>Power</b>								
	(i) Installed Capacity (Cumulative)	MW	1011.5	1526.5	1011.5	1011.5	1011.5	
	(ii) Electricity Generated	MU	5118.6	5682.0	4965	4965	5231	
	(iii) Electricity Sold	MU	4438.04	5050	4470	..	4522	
	(iv) Transmission Lines (220 KV & above)	Circuit Kms.	853.77	1210.77	36.00	36.00	Nil.	
	(v) Rural Electrification (Cumulative)							
	(a) Villages Electrified	Nos.	1268	1268	..	..	..	
	(b) Pumpsets Energised	"	78296	138296	12000	12000	12000	
	(c) Tube Wells Energised	"	..	..	..	..	..	
<b>Village and Small Scale Industries</b>								
	1. Small Scale Industries							
	(a) Units Functioning	Nos. '000 (Cumulative)	15.08	33.48	19.68	19.48	22.98	
	(b) Persons Employed	Nos. '000 (Cumulative)	80.00	185.00	102.20	101.00	122.00	
	2. Industrial Estates/Areas							
	(a) Estates/Areas Functioning	Nos. (Cumulative)	113.00	..	..	..	..	17 conventional type and 106 Mini Industrial Estates. The Programme of conventional type Industrial estates has been discontinued since the establishment of Mini Industrial Estates.

(b)	No. of Units	Nos. '000 (Cumulative)	0.66	..	..	..	..	It is proposed to start development areas and development plots in all districts
(c)	Production	(Rs. lakhs)	..	..	..	..	..	
(d)	Employment	Nos. '000 (Cumulative)	3.93	..	..	..	..	
3.	Handloom Industry							
(a)	Production	Metres in lakhs	890	1550	1150	950	1240	
(b)	Employment	Nos. '000	250	353	262	260	283	
4.	Powerloom Industry							
(a)	Production	Metres in lakhs	45	130	50	50	90	
(b)	Employment	Nos. '000	1.70	4.90	1.85	1.85	3.37	
5.	Coir Industry							
(a)	Production of Yarn	'000 tons (Cumulative)	15.62	38.80	18.74	18.74	22.48	
(b)	Production of Other Items	"	1.69	4.19	2.03	2.03	2.43	
(c)	Employment	'000 Nos. (Cumulative)	65.83	163.00	78.99	78.99	94.77	
6.	Handicrafts							
(a)	Production	Rs. in lakhs	1000.00	1400.00	1100.00	1100.00	1175.00	
(b)	Employment	Nos. '000	75.00	90.00	78.00	78.00	82.00	
7.	Village Industries							
(a)	Within the Purview of KVIC							
1.	Production	Rs. in lakhs	292.34	800.00	300.00	250.00	300.00	
2.	Employment	'000 Nos. (Cumulative)	21.99	36.99	24.99	24.49	27.50	
(b)	Outside the purview of Khadi & Village Industries Commission							
1.	Production	Rs. in lakhs	1014.83	5000.00	750.00	700.00	900.00	
2.	Employment	No. '000 (Cumulative)	101.41	351.41	123.41	122.51	126.41	
8.	District Industries Centre							
1.	No. of Units Assisted	Nos.	3063	3500.00	3500.00	3098.00	3500.00	
2.	No. of Artisans Assisted	Nos. '000	8.7	8.5	8.5	4.8	8.5	1980-81 achievement provisional
3.	Financial Assistance Rendered to Industrial Units	Rs. in lakhs	1109.50	5500.00	5420.20	5420.20	5500.00	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Road Development</b>								
	Rural Roads							
	(a) Length	Km.	8997	10528	350	..	350	..
	(b) Total No. of Villages in the State	No.	1334	..	..	..	..	..
	(c) Villages connected							
	(i) With a population of 1500 and above	No.	\	Almost all the villages are connected by roads maintained either by Public Works Department or other agencies like C.D. Blocks, Panchayats etc.				
	(ii) With a population Between 1000-1500	No.						
	(iii) With a population Below 1000	No.						
1.	State Highways							
	(a) Surfaced	Km	2024	Improvements				
	(b) Unsurfaced	"	4	200	50	..	50	..
	(c) Total	"	2028					
2.	Major District Roads							
	(a) Surfaced	"	4931	Improvements				
	(b) Unsurfaced	"	613	300	80	..	80	..
	(c) Total	"	5544					
3.	Other District Roads							
	(a) Surfaced	"	5051	Improvements		New Construction		
	(b) Unsurfaced	"	1998					
	(c) Total	"	7049	1531	350	..	350	..
4.	Village Roads							
	(a) Surfaced	"	489	..	..	..	..	..
	(b) Unsurfaced	"	1459					
	(c) Total	"	1948					
5.	Total Roads							
	(a) Surfaced	"	12495					
	(b) Unsurfaced	"	4074					
	(c) Total	"	16569					
<b>Education</b>								
	A. Elementary Education							
	I. Classes I-V (Age Group 6-10)							
	(i) Enrolment	'000						
	(a) Boys	"	1664	1679	1647	1650	1655	..
	(b) Girls	"	1564	1579	1582	1555	1560	..
	(c) Total	"	3228	3258	3229	3205	3215	..
	(ii) Percentage to Age Group							
	(a) Boys		108.0	110.0	108.0	..	108.5	..
	(b) Girls		105.0	106.0	105.0	..	105.0	..
	(c) Total		106.0	108.0	106.0	..	106.3	..

II. Classes VI to VIII (Age Group 11-14)

(i) Enrolment								
(a)	Boys	'000	839	894	850	820	840	..
(b)	Girls	"	752	797	760	750	770	..
(c)	Total	"	1591	1691	1610	1570	1610	..
(ii) Percentage to Age Group								
(a)	Boys	"	94.8	100	94.8	..	96.00	..
(b)	Girls	"	88.7	91.0	88.7	..	89.00	..
(c)	Total	"	92.1	95.0	92.1	..	93.00	..
B. Secondary Education								
Classes IX—X								
Enrolment								
(a)	Boys	"	391	436	407	408	420	..
(b)	Girls	"	370	405	380	392	402	..
(c)	Total	"	761	841	787	800	822	..
C. Enrolment in Non-formal (part-time/ continuation) classes								
		No. of centres	425	425	425	425	425	..
D. Adult Education								
(a)	No. of participants (Age Group 15-35)	'000	450	1350	600	600	750	..
(b)	No. of centres opened under Voluntary Agencies	"	15000	45000	20000	20000	25000	..
E. Teachers								
(i)	Primary Classes I-V	"	75.0	77.0	75.8	75.5	75.8	..
(ii)	Middle Classes VI-VIII	"	58.0	63.0	58.5	58.5	54.5	..
(iii)	Secondary Classes IX-X	"	42.0	48.0	48.0	42.5	44.0	..

Health and Family Welfare

1. Hospitals and Dispensaries								
(a)	Urban	Nos.	} 558	708	618	588	638	..
(b)	Rural	(Cumulative)						
2. Beds								
(a)	Urban Hospitals and Dispen- saries	"	} 29947	38447	34447	32447	35450	..
(b)	Rural Hospitals and Dispen- saries and others	"						
(c)	Bed Population Ratio	Nos. (per 1000)						
3. Primary Health Centres								
(a)	Main Centres	Nos. (Cumulative)	163	200	163	163	169	..
(b)	Sub Centres	"	1808	3600	1948	1878	2008	..
4. Training of Auxiliary Nurse-Midwives								
(i)	Institutes	"	2	2	2	2	2	..
(ii)	Annual Intake	"	280	430	430	430	430	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	Control of Diseases							
(a)	T. B. Clinics	No. (cumulative)	21	25	22	22	23	..
(b)	Leprosy Control Units	Do.	3	5	4	4	5	..
(c)	Filaria Units	Do.	31	67	36	36	46	..
(d)	T. B. Isolation Beds	Do.	318	450	338	338	388	..
6.	Meternity and Child Welfare Centres	Do.	1808	3600	1948	1878	2078	Sub Centres under Primary Health Centres
7.	Doctor Population Ratio	No. (per 1000 population)	0.41	1.00	..	..	..	..
8.	Training and Employment of Multi-Purpose Workers							
(a)	District Covered	No. (cumulative)	2	11	2	2	3	..
(b)	Trainees Trained	Do.	447	3470	447	447	1000	..
9.	No. of Voluntary Sterilisation done							
(a)	Tubectomy	No. (1000) }	90.09	540.00	175.00	130.00	175.00	..
(b)	Vasectomy	do. }						
(c)	No. of IUD Insertions	do. }	12.09	85.00	30.00	18.00	30.00	..
(d)	Conventional Contraceptives							
(i)	Free Supply	1000 Pks. }	75.00	400.00	75.00	75.00	75.00	..
(ii)	Commercial Supply	do. }						
10.	M.C.H. Benefits							
(a)	Immunisation of Infants and Pre-School Children with D.P.T.	No. of Age Group	1514529	5,00,000	..	75,000	1,00,000	..
(b)	Immunisation of School going Children with DPT	do.	8,75,352	50,00,000	..	10,00,000	40,00,000	..
(c)	Prophylaxis against Nutritional Amemia among							
(i)	Mothers	Nos.	22,69,771	5,00,000	1,00,000	1,00,000	1,00,000	..
(ii)	Children	do.	18,33,450	5,00,000	1,00,000	1,00,000	1,00,000	..
11.	Family Welfare							
(a)	Rural F.W. Centres	Nos. (cumulative)	1322	3600	1462	1392	1592	..
(b)	District F.W.C. Bureaus	..	11	12	..	..	12	..
(c)	Urban F.W. Centres	..	34	34	34	34	34	..
(d)	Post Partum Centres	..	16	47	16	16	26	..



**Sewerage & Water Supply**

87/318/MC

<b>A. Urban Water Supply</b>							
Corporation Towns (Town-wise)							
(i) Augmentation of Water Supply	Mld	185	270	Work to be continued.			
(ii) Population Covered	lakhs	11.8	15.8				
Other Towns							
<b>(a) Original Schemes</b>							
(i) Towns Covered	Nos. cumulative	31	39	32	32	33 including Peppara Dam	
(ii) Population Covered	Lakhs	14.59	20.30	14.79	14.79	15.00	
<b>(b) Augmentation Schemes</b>							
(i) Towns Covered	Nos.	9*	9+2**	..	..	..	6
(ii) Population Covered	Lakhs	@					
<b>B. Urban Sanitation</b>							
<b>1. Sewerage Schemes</b>							
(i) Corporations Towns (Town-wise) Augmentation Capacity	Mld.	40£	156	3 schemes in progress	work to be continued.		
(ii) Population Covered	Lakhs						
Other Towns							
<b>(a) Original Schemes:</b>							
(i) Towns Covered	Nos.	..	2	2 in progress	..	1	
(ii) Population Covered	Lakhs	..	2.50	..	..	0.15	
<b>2. Drainage Schemes</b>							
Original Schemes							
(i) Towns Covered	Nos.	..	1	Work in progress	..	1	
(ii) Population Covered	Lakhs	..	4.0	..	..	4.0 ..	
<b>C. Rural Water Supply</b>							
<b>(1) First Priority Problem Villages. (ie. Villages Identified in 1972 survey)</b>							

\*Schemes in progress.

\*\*9 Continuing schemes and 2 new schemes, out of which 5 schemes are expected to be completed.

@ The population has already covered and the augmentation will improve the present unsatisfactory level of water supply.

£2 Cities partially covered.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(a) Piped Water Supply								
(i) Villages Covered	Nos.	C	C	529	..	529	565	
		504	630					
(ii) Population Covered	Lakhs	38.15	43.50	40.55	40.55	41.80	..	
(b) Open Draw Wells								
(i) Villages Covered	..	..	..	..	..	..	..	
(ii) Population Covered	..	..	..	..	..	..	..	
2. Other Rural Water Supply Programmes								
(a) Piped Water Supply								
(i) Villages Covered	Nos.	C	C	115	115	120	..	
		110	150					
(ii) Population Covered	Lakhs	9.32	10.82	9.47	9.47	9.80	..	
<b>Housing</b>								
<b>A. Rural Housing</b>								
1. Rural House Sites Scheme (M.N.P.)	Nos.	3000	17450	6200	6200	9400	..	
	(cumulative)							
2. Rural House/Hut Construction Scheme (M.N.P.)	"	1125	36122	7925	7925	8925	..	
3. Village Housing Projects Scheme	"	934	1212	990	990	1045	..	
<b>B. Urban Housing</b>								
1. Subsidised Industrial Housing Schemes	"	..	533	..	..	33	..	
2. Low Income Group Housing Scheme	"	183	415	285	285	381	..	
3. Middle Income Group Housing Scheme	"	174	233	216	216	245	..	
4. High Income Group Housing Scheme	"	N.A.	142	..	50	107	..	
5. Rental Housing Scheme	"	N.A.	2000	..	340	473	..	
6. Land acquisition and Area Development (Area Development)	"	..	..	..	..	..	..	
7. Slum clearance/Improvement	"	168	301	..	..	197	..	
8. Housing Building Advance to Government Servants (Units Constructed)	"	N.A.	..	..	..	..	..	
9. Police Housing								
(i) Baracks for Men	Nos	3050	3650	3200	3200	3350	..	
(ii) Housing Units	"	6930	7425	7030	7030	7130	..	
10. Others								
(i) Co-operative Housing Scheme for Economically Weaker Sections	Nos	17654	69180	22654	22600	34654	..	

**Urban Development**

1.	Financial Assistance to Local Bodies:							
(a)	Remunerative Schemes							
(i)	Shops and Market Centres	Nos.	..	..	..	..	..	..
		(cumulative)	..	..	..	..	..	..
(ii)	Other remunerative Schemes		..	..	..	..	..	..
(b)	Non-Remunerative Schemes							
(i)	Construction of Roads	Kms.	..	..	..	..	..	..
(ii)	Construction of Parks	Sq. Mtr.	..	..	..	..	..	..
(iii)	Beautification Schemes	Nos.	..	..	..	..	..	..
2.	Town and Regional Planning							
(i)	Master Plan Prepared	Nos.	12	21	2	2	2	..
		(cumulative)						
(ii)	Regional Plans Prepared	"	1	5	..	..	1	..
3.	Environmental Improvement of Slums:							
	Slum clearance/Improvement of Slum	Nos.	5	58	12	12	15	..

**Labour and Labour Welfare****A. Craftsman Training**

1.	No. of Industrial Training Institute (I.T.Is.)	Nos.	15	18	16	16	17	..
		(cumulative)						
2.	Intake Capacity	"	8652	11340	8780	8780	9164	..
3.	No. of Persons Undergoing Training	"	8652	11340	8780	8780	9164	..
4.	Out-turn	"	8652	10132	8682	8652	8780	..

**B. Apprenticeships Training**

1.	Training Places Located	"	5686	10000	6000	6000	7500	..
2.	Apprentices Trained	"	4438	10000	6000	6000	7500	..

C.	1.	No. of Employment Exchanges	"	22	37	..	7	4	..
	2.	Welfare of ST/SC and Other Backward Classes	Units (Nos.)	1	8	..	..	5	..

**D. Labour Welfare**

1.	No. of Labour Welfare Centres	"	..	15	3	3	6	..
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**Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes****A. Pre-Matric Education Incentives**

(i)	Scholarships/Stipends	Nos.	..	5.20	2.20	1.80	2.00	..
		lakhs						
(ii)	Other Incentives like Boarding Grants, Books/Stationery and Uniforms	No. of students	..	1500	500	200	225	..
(iii)	Ashram Schools	Nos.	79	106	84	86	90	..
		(cumulative)						

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	2. Economic Aid							
	(i) For Agriculture	No. of families	1200	17500	700	2000	3000	..
	(ii) For Animal Husbandry	do.	9984	85000	2000	15000	35000	..
	(iii) For Cottage Industry	do.	3175	38175	..	5000	15000	..
	3. (i) House Sites	No. of families (cumulative)	9984	23984	10984	12504	15024	..
	(ii) Drinking Water Wells	..	519	574	539	532	54	..
	<b>Social Welfare</b>							
	1. Child Welfare Schemes under I Y G							
	(a) I.C.D.S.	Project (cumulative)	4	29	9	9	14	..
	(b) Balawadis	Nos. (cumulative)	1600	2500	1951	1951	2201	..
	(c) Creches	..	1600	1850	..	..	1725	..
	2. Women Welfare							
	(a) Training-cum-Production Centres	Beneficiaries women (cumulative)	..	2000	200	200	500	..
	(b) Hostels for Working Women	Nos. (cumulative)	..	..	..	..	..	..
	(c) Grant for Women for Self Employment	..	2000	12000	4000	4000	6000	..
	3. Welfare of the Handicapped							
	(a) Programmes for the Blind Schools for the Blind	..	8	..	..	..	..	..
	(b) Programmes for the Deaf Schools for the Deaf	..	6	..	..	..	..	..
	(c) Programmes for the Orthopaedically Handicapped	Individual (cumulative)	10	330	55	55	110	..
	(d) Programmes for the Mentally Retarded	Nos. (cumulative)						
	(i) Homes	..	2	3	..	..	..	..
	(ii) Schools	..	..	..	..	..	..	..
	(iii) Care Home for Recovered Mental Patients	..	..	1	..	..	..	..
	(iv) Institute for Mentally Retarded	..	..	1	..	..	..	..

## MINIMUM NEEDS PROGRAMME—OUTLAYS AND EXPENDITURE

(Rs. lakhs)

Sl. No.	Name of the Programme	1979-80 Actuals	1980-81		Proposed Outlay 1980-85		Proposed Outlay 1981-82	
			Approved Outlay	Anticipated Expenditure	Total	Capital Content	Total	Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Rural Roads</i>								
1.	Public Works Department including Roads Benefiting Scheduled Caste/Scheduled Tribes	381.59	372.88	377.41	1300.00	1300.00	373.00	373.00
<i>Elementary Education</i>								
1.	Additional Enrolment—Departmental Lower Primary Schools—Teacher Cost	39.09	20.00	20.00	100.00	..	20.00	..
2.	Opening of New Departmental Lower Primary Schools—Buildings	27.06	30.00	30.00	150.00	150.00	30.00	30.00
3.	Supply of Furniture to New Departmental Lower Primary Schools	5.04	5.00	5.00	35.00	..	6.00	..
4.	Additional Enrolment—Departmental Upper Primary Schools—Teacher Cost	46.55	20.00	20.00	100.00	..	20.00	..
5.	Opening of New Departmental Upper Primary Schools—Buildings	42.78	30.00	30.00	120.00	120.00	30.00	30.00
6.	Purchase of Furniture for New Departmental Upper Primary Schools	5.00	5.00	5.00	50.00	35.00	6.00	..
7.	Supply of Furniture to Existing Departmental Lower Primary Schools	5.31	5.00	5.00	45.00	..	6.00	..
8.	Supply of Furniture to Existing Departmental Upper Primary Schools	5.00	5.00	5.00	45.00	..	6.00	..
9.	Improvement of Facilities in Primary Schools	6.27	5.75	5.75	35.00	..	6.00	..
10.	Strengthening of Primary Schools	0.33	5.00	5.00	75.00	..	10.00	..
11.	Replacement and Addition to Departmental School Buildings	..	9.00	5.00	100.00	100.00	10.00	10.00
12.	Minimum Site and Buildings for Schools run in Rented Buildings	..	25.00	25.00	100.00	100.00	25.00	25.00
13.	Appointment of Primary School Teachers from among Scheduled Castes/Scheduled Tribes	5.41	2.00	2.00	10.00	..	2.00	..
14.	Additional Enrolment—Non-Government—Lower Primary Schools—Teacher Cost	59.62	30.00	30.00	165.00	..	30.00	..
15.	Additional Enrolment—Non-Government—Upper Primary Schools—Teacher Cost	120.91	30.00	30.00	175.00	..	30.00	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16. Tribal Sub Plan		3.85	18.00	18.00	90.00	70.00	15.00	11.00
17. Work Experience Programme in Primary Schools		..	..	..	10.00	..	5.00	..
18. Removal of Backwardness including Education of Girls		3.57	3.00	3.00	15.00	..	3.00	..
19. Pre-primary Education—Building for pre-Primary Institution		..	1.00	1.00	15.00	3.00	3.00	1.00
Sub Total—Elementary Education		375.79	248.75	244.75	1420.00	578.00	263.00	107.00
Secondary—Additional enrolment—Departmental Secondary Schools—Teacher Cost		107.65	30.00	40.00	180.00	..	30.00	..
Sub-Total—Education		483.44	278.75	284.75	1600.00	578.00	293.00	107.00
Adult Education		6.10	25.00	25.00	50.00	..	10.00	..

### Rural Health

#### A. Allopathy

##### 1. Public Health Centres

(a) Strengthening of Public Health Centres and Sub-Centres and Opening New Public Health Centres		17.43	64.50	64.50	350.00	120.00	60.50	25.00
(b) Special Component Plan for Scheduled Castes		..	..	..	55.00	18.00	5.00	2.50
2. (a) Rural Dispensaries, Government Dispensaries in Backward Areas		33.39	25.00	25.00	90.00	25.00	15.00	5.00
(b) Special Component Plan for Scheduled Castes		..	..	..	60.00	15.00	10.00	2.50
3. (a) Drugs for Existing Sub-Centres and Institutions		15.85	20.00	20.00	105.00	..	17.00	..
(b) Special Component Plan for Scheduled Castes		..	..	..	15.00	..	3.00	..
4. Mobile Medical Units for Tribal Block—Attappady		0.49	2.50	2.50	15.00	..	2.50	..
5. Community Health Workers Scheme (State Share)		1.63	5.50	5.50	61.00	..	13.00	..
Sub-Total—Allopathy		68.79	117.50	117.50	757.00	178.00	126.00	35.00

### Other Systems of Medicine

#### B. Ayurveda

1. (a) Opening of New Dispensaries		4.16	8.00	7.77	40.00	8.00	9.00	3.00
(b) Special Component Plan for Scheduled Castes		..	..	..	18.00	3.50	3.00	1.00

2. Upgrading Dispensaries into Hospitals	1.21	4.00	4.78	14.00	..	4.00	..
3. (a) Opening New Ayurvedic Hospitals in Rural Areas	..	4.00	4.20	20.00	4.00	3.00	1.00
(b) Special Component Plan for Scheduled Castes	..	..	..	9.00	2.00	1.00	0.50
4. Construction of Buildings to Ayurveda Hospitals, Dispensaries and Increasing Bed Strength	7.59	3.50	1.89	18.00	18.00	3.50	3.50
5. Construction of Nurses' Quarters to Hospitals in Rural Areas	..	5.00	5.00	13.00	13.00	5.00	5.00
6. Starting of Mobile Dispensaries	0.59	1.00	1.61	5.00	..	1.00	..
<b>Sub-Total—Ayurveda</b>	<b>13.55</b>	<b>25.50</b>	<b>25.25</b>	<b>137.00</b>	<b>48.50</b>	<b>29.50</b>	<b>14.00</b>

*C Homoeopathy*

1. (a) Rural Dispensaries	4.32	7.25	5.89	40.00	20.00	6.00	3.00
(b) Special Component Plan for Scheduled Castes	..	..	..	20.00	10.00	2.00	1.00
<b>Sub-Total—Homoeopathy</b>	<b>4.32</b>	<b>7.25</b>	<b>5.89</b>	<b>60.00</b>	<b>30.00</b>	<b>8.00</b>	<b>4.00</b>
<b>Total—Rural Health</b>	<b>86.66</b>	<b>150.251</b>	<b>148.64</b>	<b>954.00</b>	<b>256.50</b>	<b>163.50</b>	<b>53.00</b>

*Rural Water Supply*

(a) Piped Water Supply	350.23	465.00	381.74	4350.00	2835.00	646.00	637.76
(b) Open Dug Wells	40.26	30.00	30.00	150.00	..	30.00	..
<b>Total—Rural Water Supply</b>	<b>390.46</b>	<b>495.00</b>	<b>411.74</b>	<b>4500.00</b>	<b>2835.00</b>	<b>676.00</b>	<b>637.76</b>

*Rural Housing*

1. Settlement of Agricultural Labourers in Government Poramboke Lands	4.23	5.00	5.00	25.00	16.00	4.999	3.00
2. Construction of Houses for Rural Workers	11.36	10.00	68.00	350.00	227.50	10.00	6.50
3. Assistance to Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes Housing Programme	57.87	75.00	75.00	400.00	260.00	75.00	49.00
4. Provision of House Sites for Landless Workers in Rural Workers	70.57	80.00	80.00	425.00	..	80.00	..
<b>Total—Rural Housing</b>	<b>144.03</b>	<b>170.00</b>	<b>228.00</b>	<b>1200.00</b>	<b>503.50</b>	<b>169.999</b>	<b>58.50</b>

*Environmental Improvement of Slums*

Slum Improvement in Municipal/City Corporation Areas	10.00	15.00	65.00	600.00	390.00	65.00	43.00
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Nutrition</i>								
(i)	Direction and Administration—Nutrition Bureau	0.04	0.50	0.50	2.50	..	0.50	..
(ii)	Programme for Pre-school Children							
1.	Special Nutrition Programme	34.17	82.00	82.00	410.00	..	82.00	..
2.	Tribal Sub Plan	1.85	4.00	4.00	20.00	..	4.00	..
3.	Health Based Nutrition Programme	6.53	10.00	10.00	55.00	3.25	10.00	3.25
4.	Applied Nutrition Programme	34.20	67.00	67.00	350.00	..	66.999	..
5.	Special Feeding Programme—One Meal a Day Programme	35.50	160.00	160.00	467.50*	..	16.00	..
(iii)	Programme for School Children—School Mid-day Meals Programme	15.00	16.50	16.50	95.00	8.00	16.50	..
Total—Nutrition		127.29	340.00	340.00	1400.00	11.25	339.999	3.25
Grand Total—Minimum Needs Programme		1508.40	1769.881	1793.54	11604.00	5801.25	2024.498	1033.51

\*Out of the total provision of Rs. 767.50 lakhs Rs. 467.50 lakhs is under MNP.



## MINIMUM NEEDS PROGRAMME--PHYSICAL TARGETS

37/3118/MC

Head of Development	Unit	Five year plan 1980-85		1980-81		1981-82	Remarks
		1979-80 Base year level	1984-85 Terminal year target	Target	Anticipated achievement	Proposed target	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>1. Rural Roads</b>							
(a) Length Public Works Department	Kms.	1948	3579	2548	2548	3248	
(b) Village Connected:	(Cumulative)						
(i) With a population of 1500 and above	No. }	Almost all the villages are connected by roads maintained either by Public Works Department or by other agencies like Community Development Blocks, Panchayats, Forest Department etc.					
(ii) With a population between 1000-1500	" }						
(iii) With a population below 1000	" }						
<b>2. Elementary Education</b>							
(a) Class I to V (Age-group 6-11 years) enrolment	'000s	3228	3258	3229	3205	3215	
(b) Class VI -VIII (Age-group 11-14 years) enrolment	"	1591	1691	1610	1570	1610	
<b>3. Rural Health</b>							
(a) Primary Health Centres	No.	163	200	..	..	169	
(b) Subsidiary Health Centres	"	..	..	..	..	..	
(c) Sub Centres	"	1808	3600	1948	1878	2008	
(d) Rural Hospitals (Total Hospitals)	"	558	708	618	..	638	
<b>4. Rural Water Supply</b>							
(a) No. of Problem Villages	No.	935*	900†	930†	:30†	925	*Out of which 505 villages are partially covered. †More villages to be partially covered.
(b) Villages Covered	No.	504	630	529	529	565	
(c) Population Covered	Lakhs	38.15	43000	40.55	40.55	41.80	
(d) No. of Villages Covered by							
(i) Piped Water Supply	No.	614	780‡	644	644	695‡	‡ Includes Problem Villages
(ii) Wells	"	800	880	825	825	845	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>5. Rural Housing</b>							
(a) Rural House-sites	No. (Cumulative)	3000	17450	6200	6200	9800	
(b) Rural House-sites-cum-hut construction	"	1125	36122	7925	7925	8925	
(c) Village Housing Projects	"	934	1212	990	990	1045	
<b>6. Environmental Improvement of Slums</b>							
(a) Cities covered	No.	8	50	12	12	15	
(b) Beneficiaries under Special Nutrition Programme	"	25400	150000	24000	24000	30000	
<b>7. Nutrition</b>							
(a) (i) Beneficiaries under Special Nutrition Programme	000's	69	200	120	120	160	
(ii) Tribal Sub Plan	"	6	10	6	6	7	
(b) Beneficiaries under Mid-day Meals Programme	"	2060 1812*	2150 1885*	2100 1825*	2100 1825*	2110 1830*	*Effective Beneficiaries.
(c) Beneficiaries under Applied Nutrition Programme	000's	628	850	689	689	736	
(d) One meal-a-day Programme	000's	500	500	500	500	500	
(e) Beneficiaries under Health Nutrition Programme	000's	130	150	140	130	140	

## STATEMENT 5

## CENTRALLY SPONSORED SCHEMES—OUTLAYS

Sl. No.	Name of Scheme	1980-81 Approved Outlay	1981-82 Approved Outlay	1980-85 Outlay	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
<i>A. Schemes having 100 per cent Central Assistance</i>					
<i>Agriculture</i>					
1.	Community Nursery Programme for Rice	5.00	7.00	37.00	
2.	Control of Mahali Disease on Arecanut	1.00	..	1.00	
3.	Kerala Agricultural University				
(a)	Fully Financed ICAR Schemes	..	15.00	100.00	
(b)	National Agricultural Research Project	..	150.00	500.00	
	Sub Total	6.00	172.00	638.00	
<i>Soil and Water Conservation</i>					
1.	Soil Conservation in the Watersheds of Malampuzha, Sabarigiri, Neriamangalam, Idukki and Neyyar	..	50.00	200.00	
2.	Establishment of Sediment Monitoring Stations	..	50.00	400.00	
	Sub Total	..	100.00	600.00	
<i>Special Area Programme for Rural Development</i>					
1.	Accelerated Development of Western Ghats*	225.00	242.00	1400.00	
<i>Animal Husbandry</i>					
1.	A.I.C.R.P. on Epidemiological Studies on Foot and Mouth Diseases	0.80	0.80	4.60	I.C.A.R. Scheme with 75 per cent assistance.
<i>Dairy Development</i>					
1.	Progeny Testing Schemes for Selection of Breeding Bulls	7.40	7.50	43.00	*Assistance from Indian Dairy Corporation
2.	Operation Flood II*	90.00	380.00	2000.00	
	Sub Total	97.40	387.50	2043.00	
<i>Community Development and Panchayats</i>					
1.	Functional Literacy Programme	12.00	15.00	100.00	
2.	(a) Promotion and Strengthening of Yuvak Mandals	0.90	1.50	6.00	
	(b) Promotion and Strengthening of Yuvak Mandals—Special Component Plan for Scheduled Castes and Scheduled Tribes	0.10	0.10	0.60	
	Sub Total	13.00	16.60	106.60	

\*Special Assistance outside State Plan.

(1)	(2)	(3)	(4)	(5)	(6)
<i>Co-operation</i>					
1.	Agriculture Credit Stabilisation Fund				
	(a) Subsidy	7.50	7.50	40.00	
	(b) Loan	2.50	2.50	10.00	
2.	Assistance to Cadre Fund of Reorganised Base Level Credit Institutions	0.50	..	0.50	
3.	Development of Consumers Co-operative Centrally Sponsored Schemes				
	(i) Subsidy	3.99	2.75	11.20	
	(ii) Share	14.65	4.65	23.25	
	(iii) Loan	86.21	30.70	95.05	
	Sub Total	115.35	48.10	180.00	
<i>Power</i>					
1.	Idukki—Udumalpet 220 K.V. Line SC	20.00	13.00	63.00	
2.	Cannanore—Mangalore 220 KV Line DC	..	..	152.00	
3.	Trivandrum-Thuckalai 110 KV Line DC	..	..	109.24	
	Sub Total	20.00	13.00	324.24	
<i>Village and Small Scale Industries</i>					
1.	Nucleus Cell for Census	2.50	1.50	5.00	
2.	Interest Subsidy to Engineering Entrepreneurs	1.50	1.00	5.00	
3.	Central Investment Subsidy to Industrial Units in Backward Areas	150.00	..	750.00	
	Sub Total	154.00	2.50	760.00	
<i>Handloom Industry</i>					
1.	Export Production Project of Handloom	0.002	10.00	15.00	
<i>Roads and Bridges</i>					
1.	Roads of Inter-State Importance Improvement of Punalur-Shencottah Road	23.00	40.00	2500.00	
<i>Water Transport</i>					
1.	Badagara-Mahe Canal	..	..	350.00	
<i>General Education</i>					
1.	Adult Education	55.00	75.00	800.00	
2.	Educational Technology Cell	..	2.00	12.00	
3.	Population Education in Secondary Schools*	..	4.00	15.00	
	Sub Total	55.00	81.00	827.00	
<i>Technical Education</i>					
1.	Post Graduate Courses in Engineering College, Trivandrum	..	16.00	100.00	
2.	Post Graduate Courses in Engineering College, Trichur	..	10.00	50.00	
	Sub Total	..	26.00	150.00	

\*Schemes having 75% Central Assistance

(1)	(2)	(3)	(4)	(5)	(6)
<i>Public Health</i>					
1.	Family Welfare Programme	625.00	728.32	5040.00	
2.	Programme for Higher Education, Research and Training (I.S.M.)	15.00	25.60	117.40	
3.	Establishment of I.S.M. Pharmacies	5.00	5.00	25.00	
4.	Regional Cancer Centre, Trivandrum (New Scheme)	..	300.00	1250.00	
5.	Leprosy Control*	4.00	9.20	45.00	*Transferred from Schemes having 50% Central Assistance
6.	National Programme for Prevention and Control of Visual Impairment	48.00	20.00	100.00	do.
	Sub Total	697.00	1088.12	6577.40	
<i>Sewerage and Water Supply</i>					
1.	Investigation Cell and Monitoring Cell for Accelerated Rural Water Supply Scheme	3.00	3.00	15.00	
2.	Accelerated Rural Water Supply Scheme	347.00	400.00	2000.00	
	Sub Total	350.00	403.00	2015.00	
<i>Urban Development</i>					
1.	Project Site Selection Methodology for Locating Industries in Rural Areas	0.001	0.80	5.00	
<i>Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes</i>					
1.	Post Matric Scholarships	41.00	45.00	250.00	
2.	Integrated Area Development Programme (Tribal Area Sub Plan)	40.00	165.00	800.00	
	Sub Total	81.00	210.00	1050.00	
<i>Social Welfare</i>					
1.	Integrated Child Development Scheme	12.00	75.00	600.00	
2.	Functional Literacy Programme for Adult Women	1.50	9.00	60.00	
	Sub Total	13.50	85.00	660.00	
<i>Economic Advice and Statistics</i>					
1.	Economic Census and Surveys *	4.30	4.30	25.00	*Transferred from Schemes having 50% Central Assistance.
2.	Irrigation Statistics	2.00	..	2.00	
	Sub Total	6.30	4.30	27.00	
Total (A) Schemes having 100 per cent Central Assistance		1857.353	2929.72	20232.84	

(1)	(2)	(3)	(4)	(5)	(6)
<i>B. Schemes having 50 per cent Central Assistance</i>					
<i>Agriculture</i>					
1.	Package Programme for Coconut	25.00	35.00	168.14	
2.	Production and Distribution of T x D Seedlings	7.00	4.50	24.00	
3.	Rejuvenation of Disease Affected and Unproductive Coconut Plantation	..	25.00	120.00	
4.	Eradication of Pests and Disease of Crops in Endemic Areas	10.00	10.50	50.00	
5.	Production Programme for Pulses	7.00	11.28	49.62	
6.	Planting of Cashew in Private Sector	31.80	20.00	61.00	
7.	Layout of Cashew Demonstrations	..	6.00	40.44	
8.	Coconut Research—Grant-in-aid	10.00	..	10.00	
<i>New Schemes proposed</i>					
9.	Production and Distribution of Quality Coconut Seedlings	..	100.00	550.00	
10.	Spraying for the Control of Coconut Leaf Disease	..	250.00	1015.00	
11.	Comprehensive Coconut Development Programme	..	230.00	1426.96	
Sub Total		90.80	695.28	3529.06	
<i>Special Agricultural Development Unit (SADU)</i>					
1.	Scheme for Coconut Development	17.80	14.11	69.69	
<i>Land Reforms</i>					
1.	Payment of Grants to Individual Assignees under the Scheme for Payment of Financial Assistance for Development and Cultivation of Land Declared as Surplus as a Result of Imposition of Land Ceiling	6.00	20.00	100.00	
<i>Soil and Water Conservation</i>					
1.	Soil Conservation in the Catchment of River Valley Project, Kundah	30.00	30.00	250.00	
<i>Special Area Programme for Rural Development</i>					
1.	Command Area Development	160.00	240.00	1450.00	
2.	IRDP in all Blocks except in Command Area Development Blocks	..	800.00	4725.00	
3.	IRDP in Command Area Development Blocks	..	50.00	295.00	
4.	District Rural Development Agencies	..	0.002	0.002	
Sub Total		160.00	1090.002	6470.002	
<i>Animal Husbandry</i>					
1.	Rinderpest Eradication	4.00	1.60	10.40	
2.	Control of Foot and Mouth Disease—Vaccination	7.50	8.50	41.50	
3.	Special Livestock Production Programme (subsidy to Calves, Assistance to SF/MF/AL for Poultry, Piggery etc.)	62.00	60.00	242.00	
4.	AICRP on Epidemiological studies of Foot and Mouth Disease	0.80	0.60	4.50	
Sub Total		74.30	70.70	298.40	

(1)	(2)	(3)	(4)	(5)	(6)
<i>Fisheries</i>					
1.	Development of Vizhinjam Fishing Harbour	144.00	144.00	307.00	
2.	Development of Neendakara Harbour	40.00	50.00	185.00	
3.	Development of Fish Landing Centres	14.00	16.00	50.00	
4.	Fish Farmers Development Agency	6.00	6.00	15.00	
	Sub Total	204.00	216.00	557.00	
<i>Forests</i>					
1.	Project Tiger	12.00	12.00	75.00	
2.	Development of National Parks (Eravikulam Sanctuary)	5.00	5.00	15.00	
3.	Conservation of Lion Tailed Monkey	6.00	1.50	4.75	
4.	Forestry Research Schemes	0.002	0.002	0.002	
5.	Soil Invertebrates and Break Down of Tilter in the Tropical Wet Ever Green Moist Deciduous Forests	0.002	0.002	0.002	
	Sub Total	23.002	18.504	94.752	
<i>Community Development and Panchayats</i>					
1.	National Rural Employment Programme. (NREP)	1623.00	1200.00	4800.00	
<i>Small Scale Industries</i>					
1.	District Industries Centres				
(i)	Direction and Administration	55.00	60.00	500.00	
(ii)	Rural Industries Co-operative Societies in Project Areas	2.00	1.00	10.00	
(iii)	Other Development Schemes (Rural Artisans Programme)	22.00	24.00	120.00	
(iv)	Loans for Machinery and Buildings (General)	44.00	12.00	200.00	
(v)	Loans for Machinery and Buildings S.C./S.T.	27.00	3.00	20.00	
	Sub Total	150.00	100.00	850.00	
<i>Handloom Industry</i>					
1.	Managerial Assistance to Primary Handloom Society	6.00	10.00	50.00	
2.	Share Capital Loans to Weavers in Primary Societies	1.00	1.00	10.00	
	Modernisation of Looms	8.00	8.00	30.00	
	Purchase and Distribution of Looms to Loomless Weavers	4.00	4.00	30.00	
3.	Strengthening of Share Capital Base of Apex Society	14.00	14.00	80.00	
6.	Government Participation in the Share Capital of the Primary Weavers Co-operative Society	10.00	10.00	90.00	
7.	Kerala State Handloom Development Corporation	14.00	14.00	60.00	
8.	Subsidy for Rebate on Sale of Handloom Cloth	80.00	180.00	400.00	
<i>New Schemes</i>					
9.	Expansion and Organisation of Industrial (factory type) Co-operatives	..	..	100.00	
0.	Organisation of Handloom Weavers Co-operative Societies for S.C./S.T.	..	..	60.00	
	Sub Total	137.00	241.00	910.00	

(1)	(2)	(3)	(4)	(5)	(6)
<i>Roads and Bridges</i>					
1.	Roads of Economic Importance—Improvement of Trivandrum—Kovalam Road	2.00	4.00	20.00	
<i>Water Transport</i>					
1.	Inland Canal Schemes	60.00	50.00	400.00	
<i>Education</i>					
1.	Appointment of Hindi Teachers in non-Hindi Speaking States	20.00	20.00	100.00	
2.	Integrated Education of the Handicapped	2.50	2.75	9.00	
3.	Experimental Project for Non-formal Education (Age Group 9-14)	—	20.00	135.00	
4.	N. C. E. R. T. Assisted Schemes	..	3.00	10.00	
	Sub Total	22.50	45.75	254.00	
<i>Health</i>					
1.	Re-orientation of Medical Education	40.00	20.00	110.00	
2.	Community Health Workers Scheme	11.00	26.00	122.00	
3.	Control of Communicable Diseases	64.00	55.20	266.00	
4.	N. M. E. P.	26.00	26.00	130.00	
5.	Training and Employment of Multipurpose Workers	10.00	25.00	140.00	
	Sub Total	151.00	152.20	768.00	
<i>Urban Development</i>					
1.	Improvement and Development of Small, Medium and Intermediate Towns	150.00	150.00	800.00	
<i>Labour and Labour Welfare</i>					
1.	Implementation of Agricultural Minimum Wages Act	..	6.00	25.00	
<i>Welfare of Scheduled Castes/Scheduled Tribes</i>					
1.	Girls Hostels	13.00	15.00	76.00	
2.	Coaching and Allied Schemes	3.00	4.00	20.00	
3.	Setting up of Machinery for the Enforcement of Untouchability Offences Act	4.00	6.00	30.00	
4.	Pre-matric Scholarships of Children of those who Engaged in Unclean Occupations	1.00	1.00	5.00	
5.	Research, Training and Special Projects	18.00	24.00	100.00	
6.	Book Banks to Medical and Engineering Students	2.00	2.00	10.00	
7.	Rehabilitation of Bonded Labourers	14.00	6.00	30.00	
	Sub Total	55.00	58.00	271.00	
<i>Social Welfare</i>					
1.	Placement of Handicapped	3.00	3.00	15.00	
2.	Orphanages—Care of Destitute Children	4.00	4.00	20.00	
	Sub Total	7.00	7.00	35.00	



(1)	(2)	(3)	(4)	(5)	(6)
<i>Economic Advice and Statistics</i>					
II.	Timely Reporting Surveys on Agricultural Statistics	62.00	62.00	380.00	
	Total (B)—Schemes having 50 per cent Central Assistance	3025.402	4230.546	20881.904	
<i>C. N. C. D. C. Schemes—Co-operation</i>					
1.	Subsidy to Marketing Federation for T and P Cell	1.00	2.00	10.00	
2.	N. C. D. C. Schemes to Consumer Co-operatives				
	(i) Subsidy	1.90	1.52	7.65	
	(ii) Share	8.50	7.70	38.50	
	(iii) Loan	12.10	8.45	39.10	
3.	Loan for Construction of Godown under the Scheme for Co-operative Storage	30.00	40.35	182.20	
4.	Loan (Margin money) to Kerala State Co-operative Marketing Federation	100.00	75.00	400.00	
5.	Subsidy towards Construction of Godowns by Tribal Co-operatives	..	1.88	15.00	
6.	Loan (Margin Money) to Kerala Rubber Marketing Federation	50.00	30.00	200.00	
7.	Share Capital Contribution to Marketing Co-operatives in Co-operatively Developed States	5.00	5.00	25.00	
8.	Debentures of Land Mortgage Banks	1.00	..	1.00	
9.	Assistance to Co-operative Credit Institutions for Provision of Non Overdue Cover	0.50	..	0.50	
10.	Loans for Revitalisation of Selected Marketing Co-operatives	10.00	10.00	50.00	
11.	RAIDCO—Margin Money	10.00	5.00	10.00	
12.	Loan Assistance to Marketing and Processing Co-operatives for Installation of New Processing Units/Rehabilitation of Existing Units	46.50	30.00	200.00	
13.	CAMPSCO—Margin Money	..	45.00	150.00	
14.	Assistance under N. C. D. C.:—				
	New Schemes (i) Share	2.00	1.00	10.00	
	(ii) Loan	8.00	2.00	25.00	
15.	Assistance to Tribal Co-operatives:—				
	(i) Subsidy	0.50	1.00	12.50	
	(ii) Share	5.00	5.00	50.00	
	(iii) Loan	2.00	2.00	25.00	
16.	Financial Assistance to Poultry Co-operatives				
	(i) Share	2.00	2.00	10.00	
	(ii) Loan	2.00	2.00	10.00	
	Sub Total	298.00	276.90	1471.45	
<i>Handloom Industry</i>					
1.	Construction of Worksheds for Primary Weavers Co-operative Society	37.50	37.50	185.00	
2.	Construction of Godowns	3.00	3.00	15.00	
3.	Others	..	..	2.00	
	Sub Total	40.50	40.50	202.00	
	Total (C)—N. C. D. C. Aided Schemes	338.50	317.40	1603.45	
<i>D. UNICEF aided Schemes</i>					
<i>Special Area Development Programme</i>					
1.	Scheme for Social Inputs in Area Development	..	100.00	500.00	

(1)	(2)	(3)	(4)	(5)	(6)
<i>Community Development</i>					
1.	Assistance to Mahilasamajams and Youth Clubs for Production Programme	6.00	7.00	30.00	
2.	Training Programme	1.00	1.00	5.00	
3.	Purchase and Supply of Garden Tools	2.00	2.50	10.00	
4.	Awards to Mahilamandals	0.75	1.00	5.00	
5.	Purchase of Seeds, Seedlings and Fertilizers	2.00	2.50	15.00	
6.	Composite Programme for Women and Pre-school Children for the Purchase of Toys and Equipments	4.37	..	4.37	
Total (D)—UNICEF Aided Schemes		16.12	14.00	69.37	

## Special Component Plan for Scheduled Castes - Financial Outlays and Expenditure

(Rs. in lakhs)

Sl. No.	Head of Development	1979-80 Percentage of			1980-81 Percentage of				
		S. C. P. Outlay	Total Outlay	Divisible Outlay	S. C. P. Expenditure (Actuals)	S. C. P. Outlay	Total Outlay	Divisible Outlay	S.C.P. Expenditure (Provl)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Agriculture	11.95	1.38	2.00	39.79	56.50	4.21	5.35	76.39
2	Land Reforms	..	..	..	..	11.25	1.88	15.25	3.81
3	Minor Irrigation	41.00	8.66	10.51	9.20	33.50	5.04	5.78	22.44
4	Soil and Water Conservation	20.00	12.58	17.91	44.89	23.00	12.78	15.10	41.67
5	Special Area Programme for Rural Development	..	..	..	..	1.00	0.29	0.29	1.00
6	Animal Husbandry	11.25	6.95	12.92	6.56	14.80	4.84	6.92	33.57
7	Dairy Development	0.25	0.18	0.63	0.32	10.29	5.72	8.29	3.26
8	Fisheries	3.85	1.04	1.30	0.47	5.79	1.26	1.68	0.77
9	Forests	27.73	14.56	19.20	30.53	3.10	1.08	1.73	26.00
10	Community Development and Panchayats	43.00	23.88	41.35	21.50	169.98	12.65	14.37	41.36
11	Co-operation	6.50	2.42	4.53	17.19	20.00	1.49	8.51	18.14
12	Power Development	130.00	3.15	7.05	133.50	100.00	1.99	5.49	46.57
13	Village and Small Scale Industries	15.97	1.95	3.14	31.03	60.77	7.33	11.46	33.74
14	Roads & Bridges	110.00	9.40	13.42	110.32	123.53	8.82	13.25	202.90
15	General Education	9.60	1.83	4.76	1.73	9.80	1.13	2.71	6.28
16	Technical Education	0.10	0.09	0.26	0.21	0.25	0.13	0.29	0.30
17	Medical, Public Health and Sanitation	7.17	1.51	3.45	8.02	17.85	2.43	5.65	13.93
18	Sewerage and Water Supply	93.50	6.19	6.25	80.72	216.00	14.91	15.30	116.20
19	Housing	145.40	16.15	16.20	150.00	150.00	16.92	16.93	69.30
20	Urban Development	10.00	3.57	10.20	10.00	35.00	11.79	19.23	65.00
21	Information and Publicity	0.25	0.87	1.25	0.47	0.15	1.15	3.09	0.25
22	Labour and Labour Welfare	0.80	0.18	0.18	1.28	164.54	9.90	10.16	130.00
23	Social Welfare	0.58	1.48	1.77	2.20	2.20	3.08	3.21	0.55
24	Nutrition	9.40	3.05	4.35	8.00	113.25	33.31	33.96	113.25
25	Outlay for the Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes	130.45	77.80	79.85	163.37	599.75	90.32	90.94	417.10
26	Irrigation	110.00	..	..	..	..	..	..	..
	Total	938.75	4.12	10.00	871.30	1942.30	6.70	14.30	1483.78

Sl. No.	Head of Development	1981-82 Percentage of			Sixth Plan 1980-85 Percentage of		
		S. C. P. Outlay	Total Outlay	Divisible Outlay	S. C. P. Outlay	Total Outlay	Divisible Outlay
(1)	(2)	(11)	(12)	(13)	(14)	(15)	(16)
1	Agriculture	88.30	6.41	10.30	721.00	7.21	12.09
2	Land Reforms	24.00	4.10	25.79	95.00	3.10	15.20
3	Minor Irrigation	50.00	7.52	8.47	200.00	5.00	6.06
4	Soil and Water Conservation	23.00	12.78	15.08	133.00	12.90	23.29
5	Special Area Programme for Rural Development	185.80	30.97	30.97	1150.00	33.00	33.00
6	Animal Husbandry	22.57	7.28	7.94	90.00	5.93	6.41
7	Dairy Development	8.60	4.78	5.92	35.00	4.90	8.60
8	Fisheries	8.90	1.92	3.08	48.00	2.40	4.40
9	Forests	..	..	..	18.00	1.00	1.70
10	Community Development and Panchayats	138.05	15.00	17.28	536.00	12.90	17.58
11	Co-operation	40.00	9.88	11.02	220.00	10.00	17.90
12	Power Development	285.00	5.70	8.11	1650.00	5.28	7.61
13	Village and Small Scale Industries	62.04	7.30	9.35	390.00	7.83	10.30
14	Roads and Bridges	115.00	8.69	21.74	550.00	8.30	14.70
15	General Education	12.00	1.28	5.59	49.00	1.19	2.40
16	Technical Education	0.80	0.42	3.72	7.00	1.00	4.20
17	Medical, Public Health and Sanitation	28.90	3.85	8.10	190.00	5.18	11.90
18	Sewerage and Water Supply	172.00	11.86	28.29	1121.00	12.38	23.40
19	Housing	171.50	16.90	18.34	810.00	17.00	28.00
20	Urban Development	65.00	21.67	84.97	355.00	18.70	59.10
21	Information and Publicity	0.15	1.15	1.71	1.00	1.11	9.50
22	Labour and Labour Welfare	5.30	5.30	10.09	14.00	4.70	11.00
23	Social Welfare	9.40	13.00	15.23	58.00	12.40	19.90
24	Nutrition	176.60	51.94	60.90	815.00	47.90	48.10
25	Outlay for the Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes	323.81	74.44	74.44	1800.00	72.00	73.48
26	Irrigation	..	..	..	..	..	..
Total		2017.22	7.34	16.77	11056.00	7.13	16.26

## STATEMENT 7

## Special Component Plan for Scheduled Castes—Physical Targets

Sl. No.	Head of Development	Unit	1979-80 Achievement	Target Approved	1980-81 Achievement (Provisional)	1981-82 Target proposed	Sixth Plan 1980-85 Target Proposed
1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Agriculture	Number of Families	2500	37629	105582	49000	25000
2	Land Reforms	No. of Beneficiaries	..	..	361	1200	6000
3	Minor Irrigation	No. of Works	29	..	..	130	780
4	Soil and Water Conservation	do.	18	60	60	90	350
5	Special Area Programme for Rural Development						
	(i) Development of Backward Areas	No. of Families	..	..	..	250	1500
	(ii) I. R. D.	do.	2000	..	2000	34560	142350
6	Animal Husbandry	No. of Families/Beneficiaries	1306	22260	39206	28500	88950
	(i) Poultry Distribution	Nos.	9620	9600	9000	28340	100000
	(ii) Distribution of Goats	Nos.	507	7440	1000	1000	7000
	(iii) Distribution of Cross Bred Cows/Heifer	Nos.	53	200	200	340	1500
7	Dairy Development	No. of Families	1150	850	850	9920	52000
8	Fisheries	do.	290	760	760	450	1800
9	Forests	do.	3000	1000	1500	..	2500
10	Community Development and Panchayats	do.	25000	54100	39000	54210	165000
11	Co-operation	(i) No. of Girijan Societies	245	232	232	257	257
		(ii) No. of Families	15000	69000	17114	28500	90650
12	Power Development Colonies/Settlements Electrified	Nos.	191	250	239	290	651
13	Village and Small Scale Industries	No. of Beneficiaries	323	2977	..	4820	39600
	Harijan Entrepreneurs Assisted	No.	233	227	652	325	1500
14	Roads and Bridges	No. of Works	36 completed 44 in progress	80	148 completed 204 in progress	363	650
15	General Education	No. of Beneficiaries	..	5000	4000	4600	25000
16	Technical Education	do.	426	450	496	100	400
17	Medical, Public Health and Sanitation	do.	..	1000	14500	300000	600000
		Hospitals/Dispensaries opened	..	..	5	3	15
18	Sewerage and Water Supply	No. of Colonies/settlements Benefited	29	304	55	250	950
19	E. S. P. Type Latrines	No. of Families	10289	20000	29400	15000	75000
19	Labour and Labour Welfare						
	(i) Employment	No. of Families	..	20100	15000	..	90000
	(ii) Training	Nos.	..	144	150	250	1500
20	Housing	No. of Families	1277	2350	2300	3050	15000
21	Welfare of Scheduled Castes/Scheduled Tribes and Other Backward Classes						
	(i) Education	No. of Beneficiaries	20393	22000	22429	24659	131758
	(ii) Economic Uplift	do.	1500	24550	24550	19102	150000
	(iii) Others	do.	2806	5330	5300	4500	25500
21	Kerala State Development Corporation for S. C. and S. T.	No. of Families	16100	46650	10500	75142	247322

## STATEMENT 8

## Tribal Sub-Plan Financial Outlays

Sl. No.	Head of Development	1979-80		1980-81		1981-82		1980-85	
		State Plan outlay Divisible	Flow to Tribal Sub Plan	State Plan outlay Divisible	Flow to Tribal Sub Plan	State Plan outlay Divisible	Flow to Tribal Sub Plan	State Plan outlay Divisible	Flow to Tribal Sub Plan
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Agriculture	597.70	18.00	1056.43	11.50	857.61	17.56	5965.00	117.20
2	Land Reforms	80.75	..	17.00	..	95.00	..	625.00	..
3	Minor Irrigation	437.57	5.00	580.50	8.10	590.00	9.00	3300.00	100.00
4	Soil and Water Conservation	111.71	10.00	152.50	..	152.50	10.00	571.00	40.00
5	Special Area Programme for Rural Development	270.70	..	350.00	3.00	600.00	23.00	3485.00	65.00
6	Animal Husbandry	87.05	4.00	213.97	29.70	283.25	11.14	1404.00	51.00
7	Dairy Development	39.68	8.00	124.00	3.00	145.20	3.90	407.00	13.00
8	Fisheries	295.71	1.50	344.90	0.50	256.50	5.00	1094.00	10.00
9	Forests	144.04	21.50	179.50	21.50	154.00	22.00	1043.00	210.00
10	Community Development and Panchayats	104.00	2.00	1183.00	19.80	799.00	16.02	3050.00	60.00
11	Co-operation	143.42	8.50	235.60	9.70	362.97	14.50	1230.00	65.00
12	Power Development	1844.00	10.00	182.00	30.00	3515.00	65.00	21672.00	214.00
13	Village and Small Scale Industries	512.84	1.25	529.78	4.45	631.12	5.68	3705.00	25.00
14	Roads and Bridges	819.46	22.00	932.21	54.00	529.00	30.00	3730.00	200.00
15	General Education	201.65	11.55	361.20	18.95	205.90	17.50	2050.00	90.00
16	Technical Education	39.27	0.25	87.62	..	21.50	0.20	167.00	1.00
17	Medical, Public Health and Sanitation	207.75	4.00	316.63	9.35	357.25	13.10	1600.00	53.00
18	Sewerage and Water Supply	1495.80	20.00	1412.00	38.00	608.00	50.00	4781.00	218.00
19	Housing	898.00	8.00	886.00	14.00	935.00	15.50	2900.00	90.00
20	Urban Development	98.00	..	182.00	..	76.50	..	600.00	..
21	Information and Publicity	19.96	0.20	4.85	0.10	8.75	0.10	10.50	0.25
22	Labour and Labour Welfare	434.62	1.00	1619.00	12.20	52.51	0.70	127.00	4.50
23	Social Welfare	32.85	..	68.65	0.64	64.00	1.50	292.00	5.00
24	Nutrition	307.75	2.00	333.50	9.70	290.00	16.40	1692.50	91.00
25	Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes	163.37	14.93	481.50	59.75	435.00	106.20	2450.00	650.00
Total		9387.65	173.68	11834.34	357.94	12025.56	454.00	67951.00	2372.95

## STATEMENT 9

## Tribal Sub-Plan—Physical Targets

Sl. No.	Item	Unit	Five Year Plan 1980-85		1980-81		1981-82 Proposed Target
			1979-80 Base year level	1980-85 Target	Target	Achievement (Provisional)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Agriculture	No. of Families	..	7500	1050	1720	1250
2	Minor Irrigation	No. of Works	..	60	9	9	10
3	Soil and Water Conservation	No. of Works	..	30	..	..	5
4	Special Area Programme for Rural Development	No. of Beneficiaries	..	2850	250	400	450
5	Animal Husbandry	No. of Families	1513	12000	5700	4000	5100
	Distribution of Poultry	Nos.	4610	50000	20000	10000	10000
	Distribution of Goats	"	507	2250	450	450	450
	Distribution of Cows	"	53	750	300	100	200
6	Dairy Development	No. of Families	..	515	100	100	60
7	Fisheries	do.	..	..	50	..	..
8	Forests	No. of Societies	16	..	10	10	5
		No. of Families	420	12500	1370	2100	4060
9	Community Development and Panchayats	No. of Families	..	7000	525	400	1550
10	Co-operation	No. of Societies	41	41	41	41	41
11	Power Development	No. of Colonies Electrified	..	..	..	..	..
		No. of Beneficiaries	1702	175	45	45	50
12	Roads & Bridges	No.	41	325	70	40	55
13	Medical, Public Health and Sanitation	Mobile Medical Units	..	3	3	3	..
14	Sewerage and Water Supply	No. of Works	37	230	80	60	50
15	Housing	No.	210	1500	327	210	300
16	Labour and Labour Welfare	No. of Beneficiaries	..	9500	2000	2000	2500
17	Nutrition	do.	6000	20000	6000	6000	8000

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