



GOVERNMENT OF KERALA

ECONOMIC REVIEW 1976

**STATE PLANNING BOARD
TRIVANDRUM**

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CHAPTER 1 GENERAL REVIEW

Trends in National Economy

Overall Situation.

The national economic scene during the year under review presented an optimistic picture viewed especially in the light of trends in production and prices. Production of foodgrains during the agricultural year 1975-76 touched an all-time high of 120 million tonnes as against the previous year's level of 100 million tonnes thanks mainly to very favourable climatic conditions accompanied by improved use of agricultural inputs. However, for the current agricultural year i.e., 1976-77, the production prospects do not appear to be that bright, the present estimate being around 110 million tonnes. On the industrial front there had been a marked improvement, with production registering an overall increase of 10 per cent most of which occurred in the core industries in the public sector. Taking into account the fact that the rate of growth registered during the previous year was only a little higher than 4 per cent, the industrial performance in 1976 may be described as highly satisfactory.

1.2 The year saw a number of steps being taken towards augmentation of public sector investment, fuller utilisation of available industrial capacity, diversification of production in different industries and rehabilitation and modernisation of some major industrial units. New fiscal policies designed to stimulate savings and capital formation, sustained drive against black money and smuggling, marked acceleration in oil exploration and vigorous export promotion had been some of the important measures undertaken to revitalise the economy.

Price Trends

1.3 Though during the year under review, the dreaded inflation was not allowed to cast its ominous shadows on the economy, as months passed by, a mild build up of pressures on the price front was witnessed. Sectional though it was, it should cause some concern, since the commodities that were subjected to such pressures have been mainly price-sensitive items falling within the food and raw material groups. A point to point comparison of the price level shows that the wholesale price index at the end of December 1976 was 6.8 per cent higher as compared with the position a year ago. There were, however, two distinct phases in the price situation. Between December 1975 and March 1976, while the wholesale price index registered a decline of 3.9 per cent, between March and December 1976, there took place a significant price escalation of the order of 11 per cent.

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1.4 The price decline during the first three months of the year was mainly occasioned by the bumper harvest and the sizeable import of foodgrains. 'Food Articles' and 'Industrial Raw Materials' were the two main commodity groups that accounted for this decline, the former by 7.2 per cent and the latter by 6.1 per cent. Since April 1976, however, the price situation witnessed a reversal of the earlier trends. The wholesale commodity price index rose from 282.9 in March 1976 to 314.3 in December 1976, thus recording a rise of a little over 11 per cent. 'Food Articles' and 'Raw Material' groups, which had earlier accounted for the decline in wholesale prices, were the same commodities now responsible for this price increase. The 'Food Articles' group recorded an increase of 12.8 per cent while the Raw Materials' group recorded a sharp rise of 38.5 per cent during March-December, 1976. A further analysis of the price rise reveals that among the food items, coarse grains, pulses, edible oils and sugar accounted for the increase while among raw materials, raw cotton and groundnut have been wholly responsible for the price rise. Since these are highly price-sensitive commodities, measures are called for to improve their availability.

1.5 It is also significant to note in this context that money supply showed a substantial increase during 1975-76. The increase during the year was 11.7 per cent as compared with an increase of only 6.4 per cent in the previous year. According to the Reserve Bank of India, this monetary expansion emanated from several factors such as increase in credit for food procurement, reflationary impact of the budget and step up in credit to commercial sector resulting in an increase in the liquidity of the banking system. The expansion in money supply may, *inter-alia*, be described as one of the main causative factors in the price spurt that was witnessed during the latter half of the year. It is, therefore, important that short-term physical measures aimed at augmenting supplies have to be reinforced with regulatory monetary policies in order to bring about an effective disciplining of the price behaviour.

National Income, Saving and Investment.

1.6 According to quick estimates computed by the Central Statistical Organisation, national income at current prices in 1975-76 stood at Rs. 60,293 crores, which gave a per capita current income of Rs. 1005. The corresponding estimates for 1974-75 were Rs. 58,137 crores and Rs. 989 respectively. In percentage terms, the growth in national income and per capita income

at current prices during 1975-76, were 8.8 per cent and 6.6 per cent respectively over the previous year's levels. However, when these data are reckoned in terms of 1960-61 prices, the estimates of national income and per capita income in 1975-76 would work out to only Rs. 21,952 crores and Rs. 366 respectively. The corresponding estimates for 1974-75 were Rs. 20,183 crores and Rs. 343.

1.7 The main reason for the improvement of national income during 1975-76 was the large rise in production of foodgrains to nearly 120 million tonnes from a level of 100 million tonnes in 1974-75. This contributed to an overall increase of 13.2 per cent in the income originating from the agricultural sector. The other sectors which registered increases were, banking and insurance (13.2 per cent), electricity, gas and water supply (13.1 per cent), railways (11.9 per cent) and mining and quarrying (10.2 per cent).

1.8 Total domestic saving during 1975-76 amounted to Rs. 10,013 crores and domestic investment to Rs. 11,058 crores. This level of performance was much higher than that of 1974-75 the corresponding estimates for that year being Rs. 8,500 crores and Rs. 9,576 crores respectively. As ratios of national income, the rates in 1975-76 would work out to 14.7 per cent for domestic saving and 16.2 per cent for investment as compared to 13.1 per cent and 14.7 per cent respectively in 1974-75.

1.9 The increase in domestic saving between 1974-75 and 1975-76 was mostly due to saving in the household sector in terms of financial as well as physical assets. There was, on the other hand, a sharp fall in the saving of the private corporate sector from Rs. 843 crores in 1974-75 to Rs. 520 crores in 1975-76 mainly accounted by cotton, jute, sugar and shipping industries. The share of public sector in total saving remained more or less the same during the two years.

1.10 The private corporate sector registered a substantial fall in investment as well from Rs. 2,065 crores in 1974-75 to Rs. 1,194 crores in 1975-76. The overall

higher rate of investment in 1975-76 was in the main due to the massive contribution of the public sector largely in the form of stocks of foodgrains.

Food and Agricultural Situation

1.11 The food situation remained comfortable throughout the year. Thanks to a bumper harvest and substantial imports of wheat, the Government could build up a buffer stock of 17 million tonnes by the end of the year. Production of rice increased from 40.3 million tonnes in 1974-75 to 48 million tonnes in 1975-76 and that of wheat from 24.2 million tonnes to 28 million tonnes during the corresponding period. While import of rice was quite negligible during the last two years, import of wheat during 1975-76 was as much as 7.1 million tonnes against the previous year's import of 4.2 million tonnes. The quantity of rice and wheat handled by the public distribution system also increased during 1975-76 to 10.6 million tonnes from 9.5 million tonnes in the previous year.

1.12 Production of other agricultural commodities also showed improvement during the year. Production of pulses has been estimated at over 10 million tonnes. In the case of oil seeds, the estimated production during 1975-76 was 11 million tonnes as against the previous years level of 8.4 million tonnes. In the case of tea and coffee, however, production trends were not satisfactory. While tea production declined marginally from 489 million kgs. in the previous year to 487 million kgs., that of coffee declined from 92 thousand tonnes to 82 thousand tonnes.

Industrial Production

1.13 The performance of the industrial sector during the year may be described as quite encouraging. As against an average growth rate of 4.4 per cent during 1975, the growth rate achieved in 1976 has been reckoned at 10 per cent. This has been made possible largely through effective utilisation of the installed capacities in many of the major industrial units. The output trends in respect of some of the major industries may be seen from Table 1.1

TABLE 1.1
Trends in Output in Selected Industries

Industry	Months covered	Unit	Output			Percentage variations	
			1974	1975	Provisional 1976	1975 over 1974	1976 over 1975
Coal	January-June	Million tonnes	42.46	49.66	54.57	+17.0	+9.9
Steel Ingots	"	Thousand tonnes	3189	3701	4215	+16.1	+13.9
Saleable Steel	"	"	2579	2820	3478	+ 9.2	+23.3
Cement	"	"	6632	7545	9537	+13.8	+26.4
Vanaspathi	"	"	192.0	227.6	288.0	+18.5	+26.5
Petroleum Products	"	"	10101	9867	10815	-2.3	+9.6
Jute Manufactures	"	"	419.2	405.3	551.1	-1.9	+36.9
Cotton Yarn	"	Million Kgs.	488.9	472.6	523.4	-3.3	+10.7
Cotton Cloth	"	Million metres	2033.5	2005.9	2190.6	-1.4	+6.2
Electricity	"	Lakh kwts.	333986	358688	439330	+7.4	+22.5

It would be seen that some of the industries which contributed to the high rate of industrial growth during 1976 were: Saleable steel (23.3 per cent), Cement (26.4 per cent), Vanaspathi (26.5 per cent), Petroleum products (9.6 per cent), Jute manufactures (36.9 per cent) and Electricity (22.5 per cent).

Foreign Trade

1.14 During 1975-76, the developments in the foreign trade sector were quite encouraging. Exports amounted to Rs. 3,942 crores as against Rs. 3,329 crores in the previous year representing an increase of 18 per cent. The rise in exports was spread over a wide front with marine products recording the largest increase of 92 per cent. Other items contributing to the export expansion were iron ore (34 per cent), sugar (39 per cent), leather goods (35 per cent), handicrafts (20 per cent) and spices (16 per cent). The U.S.A. was India's best customer in 1975-76 followed by Japan, the U.S.S.R., the U.K. and Iran. These five markets accounted for more than 50 per cent of India's total export trade in the year.

1.15 On the import front, there was an increase of 14 per cent. Imports during 1975-76 aggregated to Rs. 5,158 crores as against Rs. 4,519 crores the previous Year. The expansion in imports was mainly due to an increase of 75 per cent in foodgrain imports over the previous years' level.

1.16 For the current year 1976-77, exports are expected to touch a level of Rs. 4,800 crores which would imply a growth rate of 22 per cent over the year 1975-76. It may be pointed out that the estimated value of exports for 1976-77 has already touched the target level fixed for the fifth five year plan. The high export performance during 1976-77 has been achieved notwithstanding a substantial fall of Rs. 400 crores in export earnings from sugar. Commodities which performed well were iron and steel, engineering goods and cotton textiles. It may, however, be mentioned that the gains on the export front are likely to be partly neutralised by the larger import bill by the recent increase in crude prices.

1.17 An important aspect that would merit special mention is the new chapter that the country could open by entering the fresh field of turnkey projects. In the face of stiff competition from the advanced countries, India has recently been able to secure some prestigious orders. The Engineering Projects (India) Ltd. has secured a contract for a huge township project in Kuwait. The assignment is worth Rs. 400 crores. Bharat Heavy Electricals Ltd. has also won a contract for a Rs. 100 crores power project in Libya. These orders are indicative of the high level of technology developed by India and its acknowledgement by foreign countries.

1.18 In the field of foreign aid, there was a notable improvement during 1975-76. The aid authorisation went up from Rs. 1,286 crores in 1974-75 to Rs. 2,133

crores in 1975-76. This was mainly due to the large quantum of aid made available by the OPEC group of countries and higher aid authorised by the United Kingdom. The country's foreign exchange reserves showed substantial rise during last year. One of the major contributing factors has been the continued improvement in remittances from abroad. On the whole, the situation in the field of foreign trade and foreign exchange witnessed significant improvement during the year despite a higher import bill on account of the hike in prices of petroleum products.

Plan Outlays

1.19 The latest estimate of the aggregate outlay on the 1976-77 annual plans of the Centre and States together has been placed at Rs. 7,852 crores of which the outlay on the Central sector plan would be Rs. 4,090 crores. As a proportion of the total public sector outlay on the fifth five year plan, this would work out to nearly 19 per cent. The aggregate central assistance to the plans of States and Union territories for 1976-77 would amount to Rs. 1,412 crores.

Trends in Kerala's Economy

1.20 The economic developments in the State reflected a steady and buoyant trend during the year under review in keeping with the developments at the national level. The situation on the food front was quite comfortable. Though internal rice production showed only marginal improvement as compared with the previous year's position due to the erratic behaviour of the monsoons, it was possible to augment supplies, thanks to the increase in rice imports into the State from 5.12 lakh tonnes in 1975 to 8.98 lakh tonnes in 1976. The larger imports made it possible to increase the per capita availability of rice from 208 grammes per adult per day in 1975 to 251 grammes in 1976.

Price Situation

1.21 On the price front, the situation could be kept under control though there occurred sectional price increases. While the retail prices in respect of essential items such as rice sold in open market, tapioca, dhal, onion, chillies, fire wood etc. showed decline, those of, some other essential items like coconut oil and other edible oils, coriander, tamarind, coconut etc. showed increases. As far as the wholesale prices of agricultural commodities were concerned, there was an overall increase of 6 per cent as compared with the position in the previous year. The increase was mainly accounted for by oil seeds and condiments and spices.

1.22 The behaviour of the consumer prices as reflected in the cost of living indices showed a declining trend in the State. In eight out of the ten selected

centres, the decline was more than 10 per cent. Improved performance of the agricultural sector in general has been one of the main contributory causes for this decline. Another important factor has been the effective role played by the public distribution system in the State. The distribution net-work expanded considerably in its scope and activities during the year. In addition to the expansion in the number of wholesale and retail shops under the State Civil Supplies Department, increase also took place in the number of wholesale and retail outlets under the State Civil Supplies Corporation. The Corporation also spanned out its activities further during 1976 by taking up the distribution of several essential commodities including coconut oil, chillies, soaps, sugar and note books.

1.23 The latest year for which data on State income are available pertain to the year 1974-75. State income in that year has been computed at Rs. 1,979 crores at current prices. On the basis of the estimated mid year population the per capita income of the State would work out to Rs. 861 as against the all-India figure of Rs. 989 in that year. Compared with the year 1973-74, there was an increase of 12 per cent in State income in 1974-75 at current prices while the increase in per capita income was 9.7 per cent.

1.24 The share of the primary sector in domestic product is higher in Kerala than in India. In 1974-75 nearly 57 per cent of the State income at current prices originated from agriculture and allied activities as against 50 per cent at the national level. On the other hand, the secondary sector which includes industries and mining contributes only 10 per cent of Kerala's State income compared with nearly 20 per cent in the case of the national income. These characteristics would bring out the relative industrial backwardness of the State. The major developments that took place in the different sectors of the State economy are briefly sketched out in the following paragraphs.

Agriculture and Allied Activities

1.25 Despite the erratic behaviour of the monsoons during the year culminating in unprecedented floods during the summer crop season and severe drought conditions during the winter season, the agricultural situation did not show any serious worsening. In fact rice production showed a marginal improvement of 31 thousand tonnes. This has been made possible largely by the application of improved agricultural practices. The major thrust of development effort during the year has been on expansion of the Intensive Paddy Development and Coconut Package Programmes, launching of a Package Programme for pepper and consolidation and strengthening of the pest survey and surveillance programme.

1.26 The Small Farmers Development Programmes (SFDA) currently operating in four districts in the

State continued to function satisfactorily. The identification of participants nearly trebled and enrolment in co-operatives doubled during 1975-76. Livestock development activities under the programme received considerable impetus during the year as also the development of minor irrigation schemes. Substantial increase also took place in credit disbursement, both short term and long term credit.

1.27 The three projects launched during 1974-75 under the Western Ghat Development Programme in the State (two dairy development schemes, one each at Idukki and Attapady and a co-operative farm at Attapady) continued to make further progress during 1975-76. A sum of Rs. 33.30 lakhs was spent on these schemes during the year as against Rs. 24.34 lakhs spent during the previous year.

1.28 The Kuttanad Development Project continued to be the major activity of the Kerala Land Development Corporation. Till 1975-76, 43 schemes could be completed benefitting 1800 acres of land, and involving an investment of Rs. 68 lakhs. Another 66 schemes are under different stages of implementation. The Kerala Land Use Board, besides identifying cultivable waste lands suitable for cashew cultivation in selected taluks of Cannanore, Calicut, Malappuram Plaghat and Trichur, has also commenced work on the preparation of a land use plan for the Idukki district. Great strides were made in the implementation of land reforms during the year. Of the total number of 31.49 lakh applications filed till the end of December 1976 for getting the assignment of right, title and interest of ownership of tenancy holdings, as many as 26.01 lakh cases (82.6 per cent) were disposed of.

1.29 In the field of agricultural credit, the most notable achievement has been the highly successful deposit mobilisation scheme launched by the co-operative institutions which netted a sum of Rs. 26 crores. This should go a long way in meeting the gap in credit requirements of the vulnerable sections of the community. The deposit mobilisation had a favourable impact on the performance of the agricultural credit co-operative societies. Their membership increased by 1.2 lakhs. Besides, there has also taken place an improvement in the financial viability of the working of many of the co-operative institutions.

1.30 In regard to Animal Husbandry and Dairy Development, notable progress has been achieved in regard to cross-breeding for upgrading the existing cattle stock. A total number of 4 lakhs of artificial inseminations were conducted during 1975-76 by the Animal Husbandry Department through Intensive Cattle Development Blocks, Key Village Centres and Veterinary Hospitals. The Dairy Development Department also had its share in the cross-breeding scheme. The Dairy Advisory Service which was started as a

supporting scheme of the cross-breeding programme continued to function during 1975-76. Under this scheme, 238 graduates who had been given training in various aspects of cattle husbandry, fodder production etc. have been posted in the field to work as Dairy Farm Instructors. They have been rendering necessary technical assistance and guidance to farmers in feeding, breeding and management of milch cattle, scientific cattle husbandry practices, fodder production and other related matters.

1.31 With a view to co-ordinating the work of upgrading the quality of cattle stock in the State, an autonomous body called the Kerala Livestock Development and Milk Marketing Board was set up in 1975 with Trivandrum as headquarters. The authorised capital of the Board is Rs. 5 crores. The Board has been made the sole agency for implementing the cross-breeding programme and dairy development programme in the State. All the dairy and chilling plants, the Indo-Swiss Project, the Dhoni Bull Station and the Cattle Feed Factory at Malampuzha have been brought under the control of the Board since 1976.

1.32 The performance of the fisheries sector in 1975-76 showed a mixed trend. While total fish production remained almost static at a level of about 4.5 lakh tonnes, export earnings of sea food moved up during the year to 31,683 tonnes valued at Rs. 67.62 crores, showing an increase of 25 per cent in terms of quantity and 71 per cent in terms of value as compared with the previous year. The Kerala Fisheries Corporation has been making continued effort to become commercially viable. All the uneconomic units have been dispensed with.

1.33 The performance of the co-operatives in the fisheries sector has been none too satisfactory. The primary societies handling mechanised boats mostly worked on loss. A number of Societies have also been placed under liquidation. At the end of 1975-76, the number of fishermen co-operatives declined to 899 from 1057 in 1974-75, while that of credit societies from 189 to 153 and that of produce co-operatives from 849 to 728. Fish marketing societies also declined from 19 to 18 in the corresponding period. As the socio-economic conditions of the traditional fishermen continue to remain poor, Government have appointed a Committee to study their problems and suggest remedial measures for promoting their welfare.

1.34 In regard to the activities in the forest sector the conservation and protection of the State's forest wealth has been the declared State policy. The extent of forest plantations in the State during the year was 1.27 lakh hectares against 1.23 lakh hectares in the previous year. The plantations mainly consisted teak, eucalyptus, softwood, cashew and rubber. The Kerala Forest Development Corporation set up in

1975 with the objective of raising plantations in an area of 44,500 hectares has already formulated a project report for the purpose. The whole programme would involve an investment of Rs. 10 crores spread over a period of 10 years.

Irrigation

1.35 Development of irrigation has assumed importance with the added emphasis on augmenting agricultural production. During 1975-76 it has been possible to extend irrigation support to nearly 12900 hectares of land enabling to crop a gross area of 25100 hectares. Of this, the contribution of major and medium irrigation schemes has been 9,000 hectares, the rest being the contribution of minor irrigation programmes. The seven major ongoing projects made considerable progress during 1975-76. A total expenditure of Rs. 13 crores was incurred on them during the year.

1.36 Development of minor irrigation schemes received great emphasis during the year in view of their quick-yielding nature. A special feature of the programme has been the increasing role of beneficiaries in implementation. The financing pattern envisages 50 per cent contribution by the State Government. Of the remaining 50 percent, as much as 25 per cent is being met in kind by CARE in the form of wheat the balance of 25 per cent representing the contribution by the beneficiaries. As many as 730 minor irrigation works are under various stages of implementation under this programme.

Power

1.37 In the field of electricity, the State Electricity Board was able to commission all the three Units of the first stages of the Idukki Hydro-Electric Project and thereby increase the installed capacity of the States power system from 621.5 MW to 1011.5 MW. The surplus power from Idukki has been contracted to be sold to Tamil Nadu. The work of Idamalayar Project gained momentum during the year. Preliminary work on Idukki III stage has been making good progress. Ten major sub-stations and their associated transmission lines were commissioned during 1976. Development of transmission and distribution net work has been given high emphasis during the year. For undertaking rural electrification, the Electricity Board floated Rural Debentures totalling Rs. 7 crores during the year.

Transport

1.38 In the field of transport and communication, the completion of the Ernakulam - Trivandrum broad-gauge link was an event of major economic significance to the State. The Kerala State Road Transport Corporation took a number of steps to streamline and improve its functioning. The Corporation is expected to make profit during the year for the first time after many years.

Industry

1.39 The impressive industrial progress in India as a whole during 1975-76 and 1976-77 had its favourable impact on Kerala State also. The year 1975-76 was free of any severe industrial strife and hence was characterised by better utilisation of industrial capacity and higher production. There was also increased absorption of institutional funds by the industrial sector. Kerala's lead in the matter of infrastructural facilities like power, transport and communications and banking has placed the State on the threshold of industrialisation.

1.40 Nearly 300 units were added to the registered working factories in the State in 1975. In several industries, especially in those belonging to the public sector, workers participation in management was given due emphasis. Of the seven companies managed by the Kerala State Industrial Enterprises. (a Holding Company), four were running at a loss while three registered a profit in 1975-76. The profit earning companies were Kerala State Drugs and Pharmaceuticals, Kerala Minerals and Metals Ltd., and Travancore Plywood Industries.

1.41 The Kerala State Industrial Development Corporation is the major agency in the promotion of large and medium industries in the State. The Corporation has till now rendered assistance to 34 companies for establishment of new projects and to 13 companies for expansion, diversification and modernisation. Of the 34 new projects, 29 went into production before March 1975. The Corporation has so far set up 12 companies of its own and of these 7 are in production stage. It holds 11 letters of intent for the setting up of new projects.

1.42 Out of the total investment of Rs. 7424 crores in the Central Sector undertakings in India as on 31-3-1975, Kerala's share was Rs. 202 crores. Nearly a third of the Central sector investment in Kerala has been on the Cochin Shipyard project. The Shipyard is designed as a composite one where ships are not only built but also repaired. The first ship from the Shipyard is expected to be launched in 1978. The profits of the Central sector undertakings located in Kerala like the Hindustan Insecticides, the Hindustan Latex Ltd., and the Modern Bakeries (Cochin) were higher in 1975-76 than in 1974-75. The Cochin Refineries which has been experiencing difficulties owing to the high price of crude has been able to reduce its losses considerably during 1975-76. The Velloor Newsprint Project of the Hindustan Paper Corporation registered good progress during the year 1976. Manufacture of newsprint is expected to commence in this unit in 1978.

1.43 Considerable progress has also been made in the efforts to establish a new cement factory, titanium complex and electronics complex. A cement factory

using the lime stone deposits at Walayar is expected to be commissioned in 1978. The Mining and Geology Department has been recently reorganised and strengthened with a view to helping efficient exploration and exploitation of the rich minerals of the State. This venture is also being assisted by the United Nations Development Programme. The electronic development industry in the State is expected to have an annual turnover of Rs. 100 crores by 1984. This industry has a total employment potential of 2 lakhs. The electronic complex consists of a Rs. 5 crores Keltron Components at Cannanore, a Rs. 3.35 crores Keltron Power Devices and Keltron Rectifiers at Trichur and the Dilecto-magnetics unit at Kuttippuram in Malappuram district.

1.44 In the sphere of small scale industries, a massive programme of industrialisation was pursued with vigour. The Small Industries Development Commissionerate set up in 1975 took upon itself the task of accelerating the development of small scale industries in the State. To meet the various responsibilities connected with the small scale industries development programme, the Kerala Financial Corporation has been geared up. Till the end of March 1976, this Corporation had advanced about Rs. 23 crores for all types of industrial units in the State. The large majority of assisted units belonged to the small scale sector. The existing two major corporations in the field, namely, the Kerala State Small Industries Corporation and the Kerala Employment Promotion Corporation have been merged into a single Corporation in order to streamline the working of these organisations.

1.45 Greater attention was paid to traditional industries in the State like Coir, cashew and handloom during 1975-76. The entry of the Government Corporations in these industries helped the workers get more labour amenities including Minimum Wages fixed for the respective industries. The Central Government has sanctioned one intensive development project costing Rs. 185 lakhs and an export-production project costing Rs. 40 lakhs, for the development of hadloom industry in the State.

Export Trade

1.46 The performance of the State on the export front has been quite impressive. Exports of major traditional items fetched foreign exchange to the country to the tune of Rs. 295 crores during 1975-76 as compared with Rs. 280 crores during the previous year. Including other items of exports, the total export earnings of the State during the year may be placed around Rs. 350 crores. The major contributory items were marine products (Rs. 67.62 crores), Pepper (Rs. 32.5 crores) and cashew kernels (Rs. 104.78 crores). Tea and coffee also made significant contributions.

Education

1.47 Kerala spends about 6.5 per cent of the State income on education while the corresponding percentage for the country as a whole is only around 3 per cent. Kerala's ratio is on par with that of the many advanced countries of the World. Cost per pupil of primary education increased from Rs. 117.52 in 1974-75 to Rs. 170.02 in 1975-76 and that in respect of secondary education increased from Rs. 512 to Rs. 638 during the corresponding period.

1.48 During the year, there has been a steady expansion of educational facilities as evidenced by the increasing trend in the number of schools. Total number of schools increased to 11349 during the year from the previous year's number of 11102 while the total enrolment increased by 0.69 lakh to 53.54 lakhs during the year. A recent trend in the field of education has been the increasing number of schools operated by private agencies. These schools which depend on fee collections for their maintenance has been attracting children of well-to-do classes in increasing numbers. This is a development which is likely to exert an unwholesome influence on the standards and efficiency of education in ordinary schools. In the spheres of higher education as well as technical education also there took place increases in the number of students. There has been no slackening of efforts to improve the quality of education, inspite of the large scale diversion of resources to expansion of education. During the year 1976, steps have been taken to rationalise the system of examinations by introducing the system of "group minimum".

Public Health

1.49 Steady progress was recorded in medical and public health activities. The total number of beds available in the State has gone up from 25312 in 1974-75 to 27568 in 1975-76 and the number of beds per lakh of population from 105 to 107 during the same period. The total number of medical and public health institutions in the State which was 881 in 1974-75 increased to 885 during 1975-76.

1.50 The main emphasis of the medical and public health activities has been on prevention of disease and extension of health care facilities to the villages. Steps have also been taken to improve the facilities in the District and Taluk hospitals. The all round improvement in health services has had its impact on the health and longevity of the people. The life expectation in Kerala is 62 years which is the highest in the country. The death rate has reached a low level of 8 per thousand which is comparable with that in some of the most advanced countries. As a result of the relatively high tempo of activity in the field of family planning during the last few years, there has been a sharp fall of the birth rate in the State. The birth rate which was 34.3 per thousand in 1968 came down to 27.8 per thousand in 1975.

Water Supply

1.51 Both urban and rural water supply schemes registered substantial progress during the year. The number of towns having water supply increased from 19 in 1974-75 to 25 in 1975-76. Under rural water supply, 489 schemes were in operation in 1974-75 of which 90 schemes could be completed in 1975-76. This high pace of progress in the water supply programme has largely been the result of the support given by the Life Insurance Corporation of India by way of credit which amounted to Rs. 625 lakhs by the end of 1975-76.

Housing

1.52 Eventhough the State Government has been operating a large number of schemes to solve the housing problem, especially of the rural poor, no other scheme has made such a profound impact as the 'One Lakh Houses Scheme'. The merit of this scheme is confined not merely to meeting one of the basic needs of the rural poor. It was perhaps the first ever successful attempt to execute State-wide development programme with massive popular support and co-operation including monetary contribution. By the end of the year, 57,000 houses have been completed and 33,000 house sites have been distributed under the scheme. In addition to the 'One Lakh Houses Scheme', the State Government has a number of continuing schemes to give financial assistance to the people, particularly those in the lower income group for the construction of houses. The 'Low Income Group Housing Scheme', the 'Middle Income Group Housing Scheme' and the 'Village Housing Project' are some of the important schemes financed by the Government. Under these schemes, as against 15,504 houses sanctioned, as many as 13,394 houses could be completed by the end of 1975-76. The total amount of financial assistance sanctioned upto the end of the year amounted to Rs. 7.22 crores.

1.53 The Housing Board has also been taking up public housing schemes and rental housing schemes (Mainly for police personnel), besides making available financial assistance for construction of houses to the economically weaker sections. During 1976, the Board started a novel scheme under which financial assistance for the construction of 10,000 houses would be given every year to the economically weaker sections of the community.

Rural Development Board

1.54 The activities of the Kerala Rural Development Board progressed well during the year. The Board completed 165 rural water supply schemes, by November, 1976. Another 29 schemes are under different stages of implementation. The Board has been able to obtain L. I. C. assistance for these schemes. As at the end of November, 1976, the expenditure on these schemes amounted to Rs. 488 lakhs. The Board

has also been taking up other remunerative development projects like construction of modern market stalls, shopping centres, community halls etc., in the Panchayat areas. In all, one hundred schemes were completed by the end of March 1976, and another 60 schemes were expected to be completed during the current financial year. The finances for these schemes are raised through debentures floated with the permission of the Reserve Bank of India. A sum of about Rs. 3 crores has so far been raised for these remunerative schemes.

Welfare of Backward Classes

1.55 The tribal population has not been getting a fair share of the benefits flowing from the development outlays in the general sector. A new strategy has, therefore, been evolved to ensure speedy development of the tribal people. Under this new strategy, Tribal sub-plans and integrated tribal development projects have been prepared for major tribal areas. All development activities of Government and Semi-Government Organisations and financing and credit institutions as also special programmes launched by Government are being fully integrated and fitted into this programme so as to ensure all round development of the areas.

1.56 The implementation of the various major tribal welfare schemes was marked by good progress. Scholarships and stipends were given to 12,000 scheduled tribe students. Grants for the construction of new houses were given to 253 tribal families. Three medical units were newly started with a view to improving medical facilities in tribal areas. A new Production-cum-Training Centre was also started during the year.

1.57 In regard to other backward classes also several welfare measures were undertaken during the year. Scholarships and stipends worth Rs. 152 lakhs were given to about 4 lakh students of pre-matric classes. The house construction works taken up under various schemes benefited 614 families. Grants at varying rates were given to 260 technically trained qualified persons for settling themselves in trades in which they were proficient. Two training Centres were started at Trivandrum and Palghat for giving training to 80 scheduled caste girls per year in mid-wifery.

Labour Welfare

1.58 The labour policy of the State Government has always been welfare-oriented. Vigorous steps

have been taken or the implementation of programmes to ensure greater worker participation in industry under the apprenticeship scheme. The State Government has also taken steps for the implementation of the Equal Remuneration Act and the Sales Promotion Employees (Conditions of Service) Act which were enacted by the Central Government in 1976. The Government has already passed the Kerala Labour Welfare Fund Bill. The Kerala Head-load Workers Bill covering the service conditions and welfare of the head-load workers has been referred to a Select Committee.

Science and Technology

1.59 The State Government has been giving due consideration to the need for evolving an appropriate policy towards the development of science and technology. During the fifth plan period the Government has established a series of autonomous, scientific and social research institutions which are concerned with one or more of the areas of science and technology viz., research and development, application, provision of service and creation and diffusion of scientific knowledge. They are: Centre for Development Studies, Kerala State Electronics Development Corporation, Sree Chitra Tirunal Medical Centre, Kerala Forest Research Institute, and Institute for Water Resources and Management.

1.60 Apart from these, at the request of and with a liberal grant from the State Government, the CSIR has established a Regional Research Complex and Poly-Technical Clinic partly located in Trivandrum and partly in Cochin Concerned with the utilisation of regional resources and technical problems of industries in the State. The Research Complex is expected to function in close collaboration with the reorganised State Department of Mining and Geology and the Geological Survey of India. It is the declared policy of the State Government to ensure maximum collaboration between Central and State Institutions working in the same field and between the universities and research institutions. The Government have already declared that the State Committee for Science and Technology shall be responsible for the promotion of administrative autonomy for research institutions.

INCOME AND EMPLOYMENT

State Income

The State income of Kerala in 1974-75 is estimated to be Rs. 1979 crores at current prices and Rs. 705 crores at 1960-61 prices. The difference between the two figures is attributable mainly to the increase in prices during the fourteen years, which works out to 180 per cent. Compared with the year 1973-74 there was an increase of 12 per cent in State income at current prices and 3.4 per cent at 1960-61 prices. Again, the difference between these two percentages, indicates an increase of nearly 8.6 per cent in the overall price level. As against this, in 1973-74 the State income at current and constant prices increased by 24 per cent and 2.4 per cent respectively. This means that the overall increase in prices was higher in 1973-74. Detailed examination of the sector-wise changes shows that the phenomenon is mainly due to the sudden spurt in the prices of the State's agricultural commodities in 1973-74.

Per capita Income

2.2 At current prices, per capita state income rose by 9.7 per cent in 1974-75 compared with the previous year, the corresponding increase in per capita national income being as high as 15.5 per cent. Table 2.1 below gives the relevant figures.

TABLE 2.1
Per capita Income of Kerala and India

Year	Per capita Income (Rs.)			
	at current prices		at constant prices	
	Kerala	India	Kerala	India
(1)	(2)	(3)	(4)	(5)
1973-74	785	856	309	349
1974-75	861	989	307	345
Percentage change	9.7	15.5	1.9	-1.7

Sector-wise Distribution of Income

2.3 The share of the primary sector in domestic product is higher in Kerala than in India. In 1974-75, nearly 57 per cent of the State income at current prices originated in agriculture and allied activities as against only 50 per cent in the case of national income. On the other hand, the secondary sector which includes industry and mining contributes only about 10 per cent of Kerala's State income compared with nearly 20 per cent of national income. This clearly brings out the relative industrial backwardness of the State. Further details regarding sector-wise contribution of income for Kerala and India are presented in Table 2.2 below:

TABLE 2.2
Sectoral Distribution of Net Domestic Product at Current Prices — Kerala and India

(Per cent)

Sector	Kerala				India			
	1960-61	1968-69	1973-74	1974-75	1960-61	1968-69	1973-74	1974-75
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Primary Sector	56.0	54.0	57.4	56.8	52.2	50.7	52.2	49.9
2. Secondary Sector	15.3	14.6	10.9	10.3	19.1	19.2	18.7	19.8
3. Transport, Communications & Trade	13.3	16.0	16.0	16.2	14.0	15.5	15.4	16.3
4. Finance & Real Estate	3.6	3.5	4.0	3.6	4.2	3.9	3.9	3.8
5. Community & Personal Services	11.8	11.9	11.7	13.1	10.5	10.7	9.8	10.2
6. Total N.D.P.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Rate of Growth

2.4 The average annual rate of growth of Kerala's State income during the Fourth Plan period (1969-74) was 12.2 per cent at current prices compared with the national average 11.5 per cent. However, at constant prices, the growth rate was 3.5 per cent both in national income and Kerala's State income. In 1974-75, 37/1019/MC.

there was no increase in national income at constant prices, although there was a rise of 3.4 per cent in the case of Kerala. This would indicate that the performance of the economy of Kerala during the period of six years from 1969 to 1975 was better than that of the Indian economy. Sector-wise growth rates are given in Table 2.3

TABLE 2.3

Average Rate of Growth per annum (compound) in the Fourth Five Year Plan and in the First Year of the Fifth Five Year Plan—Kerala and India

(Per cent)

Sector	At current prices				At 1960-61 prices			
	Kerala		India		Kerala		India	
	Fourth Plan (1969-74)	1974-75	Fourth Plan (1969-74)	1974-75	Fourth Plan (1969-74)	1974-75	Fourth Plan (1969-74)	1974-75
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Primary Sector	13.6	10.9	12.2	12.3	2.3	3.1	2.6	-3.6
2. Secondary Sector	5.7	5.7	10.8	25.0	5.0	7.1	3.7	2.1
3. Transport, Communication & Trade	12.2	13.8	11.5	24.0	3.2	2.7	3.4	2.3
4. Finance & Real Estate	14.8	2.8	11.6	13.3	6.0	-6.9	3.6	-1.2
5. Community & Personal Services	11.8	24.6	9.3	23.8	5.5	3.2	5.7	5.1
6. Total Net Domestic Product	12.2	12.1	11.5	17.6	3.5	3.4	3.5	0.0
7. Per capita income	9.6	9.7	9.2	15.5	1.2	1.3	1.3	-1.7

District Income

2.5 The Bureau of Economics and Statistics, has for the first time, brought out estimates of Income originating in the different districts of Kerala. The percapita incomes of the districts provide a rough indication of the average income levels. The relevant figures for the years 1970-71 and 1974-75 are given in Table 2.4.

TABLE 2.4

Per capita Income of Districts 1970-71 and 1974-75

District	1970-71		1974-75	
	Per capita income	Rank	Per capita income	Rank
(1)	(2)	(3)	(4)	(5)
1. Trivandrum	555	9	858	6
2. Quilon	637	2	930	4
3. Alleppey	567	6	819	8
4. Kottayam	670	1	1049	1
5. Idukki	621	4	949	3
6. Ernakulam	635	3	906	5
7. Trichur	549	10	756	10
8. Palghat	562	8	1044	2
9. Malappuram	489	11	674	11
10. Kozhikode	615	5	846	7
11. Cannanore	563	7	774	9
KERALA	585		861	

2.6 In 1974-75, Kottayam District had the highest percapita income of Rs. 1049, closely followed by Palghat with Rs. 1044. It may be mentioned that these are the two districts in Kerala whose percapita incomes are above the percapita national income of Rs. 989. Malappuram district is at the bottom of the list with a percapita income of Rs. 674. The next higher place in the order of percapita

income goes to Trichur district with Rs. 756. It is significant to note that these two districts had the lowest two ranks in 1970-71 also. There are substantial variations between the districts as regards the level of percapita income. The difference in percapita income between the richest and the poorest districts was Rs. 181 in 1970-71. This has increased to Rs. 375 more than two times—by 1974-75.

2.7 Details regarding district income and its sectoral composition are presented in Appendix (2).

2.8 It is important to note that with the increased availability of data and frequent changes in the methodology for the computation of income effected by the Central Statistical Organisation, the State Bureau of Economics & Statistics necessarily has to revise the State income estimates. Such revised estimates are presented in this report for the years 1960-61 onwards.

Population

2.9 The population of Kerala as on 1st July 1976 is estimated at 239.50 lakhs consisting of 118.80 lakhs males and 120.70 lakhs females. This has resulted from a rate of growth of population in Kerala which has all along been higher than the all-India average. The average annual rate of increase of population observed for the decade 1961-70 was 2.6% for Kerala and 2.4% for all-India. If this rising trend in growth rate continues then the population of the country will cross the 1000 million mark by the turn of this century.

National Population Policy

2.10 In view of the explosive nature of the demographic situation, the Government of India have come out with a National Population Policy in April 1976.

According to the policy statement issued in this connection "considerable work has been done in our country in the field of family planning, but clearly only the fringe of the problem has so far been touched. In this context, after a thorough and careful consideration of all the factors involved as well as the expression of a wide spectrum of public opinion, Government have decided on a series of fundamental measureswhich it is hoped will enable to achieve the planned target of reducing the birth rate from an estimated 35 per thousand in the beginning of the Fifth Plan (1974) to 25 per thousand at the end of the Sixth Plan (1984). Allowing for the steady decline in

the death rate that will continue due to the improvement in our medical and public health services and the living standards of our people this is expected to bring down the growth rate of population in our country to 1.4% by 1984". The implementation of some of the measures recommended in the policy statement depends, to a large extent, on the magnitudes of the current birth and death rates.

Birth and Death Rates.

2.11 The following table gives the birth and death rates thrown up by the Sample Registration study which is conducted every year all over India.

TABLE 2.5
Birth Rate, Death Rate and Natural Growth rate

Year	Kerala			India		
	Births per 1000 population	Deaths per 1000 population	Natural growth rate (annual %)	Births per 1000 population	Deaths per 1000 population	Natural growth rate (annual %)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1970	32.1	9.2	2.3	36.8	15.7	2.1
1971	31.6	9.1	2.3	36.9	14.9	2.2
1972	31.2	9.2	3.2	36.6	16.9	2.0
1973	29.2	8.5	2.1	34.6	15.5	1.1
1974	27.0	8.0	1.9	34.5	14.5	2.0
1975	27.8*	8.3*	1.9	35.2	14.7	2.0

* Provisional.

Source.—Sample Registration Bulletin, Vol. X No. 2 April 1976—Registrar General of India, Ministry of Home Affairs, New Delhi.

There has been a sharp decline in the birth rate in Kerala in recent years. This indicates that the State's intensive effort for population control has started yielding dividends. The death rate has, however, remained more or less static in recent years. Consequently the natural growth rate—Birth rate minus death rate—has started dwindling. By maintaining this tempo the State will be able to achieve the national target of 1.4% annual rate of growth of population in the beginning of the eighties itself, much before the all-India growth rate getting stabilised at this level.

Age—Specific Fertility Rates

2.12 It is to be noted that the achievement of the State in bringing down the birth rate from 32 per 1000 in 1970 to 28 per 1000 in 1974 is really very impressive. This steep fall in birth rates is reflected in the age-specific fertility rates which are presented in Appendix Table 2.6. It shows that there has been a fall in the fertility rates in all the age groups in 1974 compared to 1971. But the reduction in the rates is substantial in each one of the age groups 20 to 44 years. The implication is that a sizeable number of women in each one of the age groups between 20 and 44 years of age are successfully practising family planning methods.

Mortality

2.13 The values of the longevity or expectation of life at birth for the population of Kerala is 61 years

in 1974 as against 47 years for the all-India population in 1969.

Employment Situation.

2.14 As at the end of the year 1976 there were 7.53 lakhs of work seekers compared with 6.91 lakhs a year ago, the increase being 0.62 lakhs. The rate of increase during 1975 was 17.5 per cent. But it was only 8.97 per cent in 1976. As on 31st December 1966 there were only 1.57 lakhs of work seekers on the live register. The increase during the 10 years was nearly five times. These figures represent the dimensions of the problem of unemployment in the State, although it is true that increase in the live register figure is partly due to the fact that the rate of registration has gone up in recent years. It may be pointed out in this context that all these 7.53 lakhs of persons who are registered with the employment exchanges need not necessarily be unemployed. The sample survey conducted by the Director General of Employment and Training during the period October 1972 to September 1973 shows that only 65.3 per cent of the registrants were actually unemployed i.e. there were only 4.92 lakhs of unemployed on the live register. It may be noted that all the unemployed persons may not register with the employment exchanges. This is particularly true of the uneducated unemployed. A sample survey conducted by the Bureau of Economics and Statistics shows that

there were 8.19 lakhs of unemployed persons in the State. Besides this there are a large number of unemployed persons about whom recent statistics are not available.

2.15 Table 2.6 shows the distribution of work seekers

according to their levels of education. It is seen that 46 per cent of registrants have educational qualifications below S.S.L.C. During 1976, only 13000 such persons were got additionally registered compared with 57000 during the previous year.

TABLE 2.6
Distribution of Work Seekers in Kerala by Education Levels

Period ending	Below S.S.L.C.	% to total work seekers	S.S.L.C.	Pre-Degree	Graduate	Post Graduate	S.S.L.C. and above	% to total workers	Total work seekers
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
31-12-1966	70946	45.14	79261	2923	3581	445	86210	54.86	157156
31-12-1967	86852	48.39	83615	3558	4822	631	92627	51.61	179479
31-12-1968	92949	45.60	89487	3893	6615	832	109827	54.50	201876
31-12-1969	96153	40.13	124469	6275	11002	1687	143433	59.87	239586
31-12-1970	115504	39.25	151279	7469	17703	1994	178450	60.75	293754
31-12-1971	166305	45.27	167814	10168	20841	2223	201076	54.73	367381
31-12-1972	194848	42.93	218880	16437	20396	3333	259066	57.07	453914
31-12-1973	239921	45.80	226783	18965	34327	4156	283961	54.20	523882
31-12-1974	274620	46.80	252423	20075	36947	3870	313315	59.20	587935
31-12-1975	331628	47.98	281989	28329	44456	4840	359614	52.02	691242
31-12-1976	344461	45.71	315552	38176	49749	5641	409118	54.29	753579

Source: Directorate of Employment.

2.16 There is a significant increase in the number of educated work seekers (S.S.L.C. and above) during the year. Nearly 50,000 persons with educational qualifications S.S.L.C. and above were additionally registered with the Employment Exchanges. This include 5300 graduates and 800 post-graduates as against 7500 graduates and 1000 post-graduates during 1975. There is a small decrease in the number of these two categories registered in the employment exchanges in 1976. The above figure shows the magnitude of

unemployment among post-graduates. These figures also indicate that very few graduates and post-graduates are able to secure jobs through the employment exchanges because the avenues open to them are meagre.

2.17 The number of Medical graduates, Engineering graduates, Agricultural graduates and Veterinary graduates registered with the employment exchanges has come down a little during the year. The number of such work seekers on the live register is shown in Table 2.7

TABLE 2.7
Number of Professional and Technical Work Seekers

Period Ending	Medical Graduates	Engineering Graduates	Diploma Holders in Engineering	I.T.I. Certificate Holders	Agricultural Graduates	Veterinary Graduates
(1)	(2)	(3)	(4)	(5)	(6)	(7)
31-12-1966	19	417	N.A.	N.A.	N.A.	N.A.
31-12-1967	20	634	N.A.	N.A.	15	N.A.
31-12-1968	48	368	N.A.	N.A.	82	N.A.
31-12-1969	185	1299	N.A.	N.A.	156	N.A.
31-12-1970	281	1832	3547	8980	133	70
31-12-1971	405	2068	3450	9894	128	116
31-12-1972	634	2014	4163	11540	101	52
31-12-1973	902	2135	3836	10003	80	40
31-12-1974	726	1450	3611	16888	Nil.	Nil.
31-12-1975	809	1830	3990	20163	32	117
31-12-1976	696	1732	4009	20747	29	75

Source: Directorate of Employment.
N.A. Not available

2.18 As on 31-12-1976 there were about 696 medical graduates on the live register compared with 809 a year ago. A similar reduction is also seen in the case of the engineering graduates. Diploma holders in engineering are being absorbed every year in numbers almost equal to the Annual out turn. In the case of I.T.I. certificate holders, however, there has been a steady increase. At the end of December 1976 there were over 20,700 I.T.I. certificate holders on the live register. It would appear that this category is facing acute unemployment.

2.19 Agriculture and Veterinary graduates have re-appeared on the live register. By the end of December 1974, there were no agricultural or Veterinary graduates on the live register. They have all been absorbed. At present, however there are 29 graduates in agriculture and 75 graduates in Veterinary Science remaining on the live register.

2.20 It may not be correct to say that all these technically and professionally qualified persons are totally unemployed. The survey by the Director General of Employment referred to above reveals that only 62.9 per cent of them were actually unemployed and 32.2 per cent were employed. They have registered themselves with the employment exchanges for better jobs, presumably because their present jobs are not in keeping with their qualifications. The rest equal to 4.9 per cent were pursuing higher studies.

2.21 On going through the data on employment in the organised sector (both public and private) published by the Directorate of Employment it is seen that there was only a marginal increase in employment in these sectors. As on 30-9-1976 only 9.20 lakhs of persons were employed in such establishments compared to 8.81 lakhs on 31-12-75. It is worthwhile to note that as on 31-12-66, 6.96 lakhs persons were employed in the organised sector. The growth during a decade was nearly 32.2 per cent or nearly 3.2 per cent per annum. The figures are given in Table 2.8.

TABLE 2.8
*Employment in the Public and Private Sector
in Kerala*

Period ending	Public Sector	Private Sector	Total
(1)	(2)	(3)	(4)
31-12-1966	261321	434562	695883
31-12-1967	266366	425851	692217
31-12-1968	279475	438672	718147
31-12-1970	293318	409562	702880
31-12-1971	333257	415105	748352
31-12-1972	343837	423008	766845
31-12-1973	365445	413230	778675
31-12-1974	375943	414477	790420
31-12-1975	418151	462712	880863
30-9-1976	433542	487048	920590

Source: Directorate of Employment.

37/1019/MC.

2.22 Examining the employment position in the public and private sectors separately, it may be seen that from 31-12-66 the public sector accounted for the major share of the increase in employment. Public sector employment rose by 65.90 per cent where as private sector employment showed only a marginal increase of 12 per cent.

2.23 Data on placing through the employment exchanges in Kerala are given in table 2.9.

TABLE 2.9
*Number of Placings Through the Employment Exchanges
in Kerala*

Year	Number of Placing	Monthly average number of employers using the employment exchanges
1966	16904	464
1967	15617	506
1968	15658	492
1969	17864	526
1970	17939	563
1971	16537	563
1972	14574	395
1973	13238	463
1974	19467	528
1975	23878	546
1976	22210	576

During 1976, only 22210 persons have been placed in employment through the services of the exchanges in Kerala. This is lower than the previous year's figure by 1668. It is however, not clear whether these placements have been made against regular vacancies or against purely temporary vacancies. But a substantial number of these placements is likely to be against purely temporary vacancies in Government where regular recruitment is made through the Public Service Commission.

Kerala Employment Promotion Corporation

2.24 The Kerala Employment Promotion Corporation Limited was set up in 1974 with the objective of promoting self-employment among educated persons. The share capital of the corporation increased from Rs. 145.14 lakhs as on 31-3-75 to 189.85 lakhs as on 31-3-76. The entire shares in the company are held by the Government of Kerala. With its limited resources the company continued, to implement its schemes like subscription to share capital in private and public limited companies, advance for providing loans towards margin money, etc., Supply of indigenous machinery/tools/equipments on hire purchase to the self employed is the new scheme taken up for implementation during the year under report. An amount of Rs. 8.35 lakhs was invested in the share base of 4 limited companies and Rs. 1.04 lakhs was spent on payment of margin money

loans to entrepreneurs for starting new industrial units or expanding existing ones. The Corporation could also help 20 unemployed educated persons to become self employed by advancing hire purchase loans to the tune of Rs. 1.53 lakhs ranging from Rs. 2500/- to Rs 15,000/- in each case. This could provide employment to about 50 persons.

2.25 Within a short span of two years the corporation could extend financial assistance by way of share participation, margin money loans and supply of indigenous machinery under hire purchase to the tune of about Rs. 150.50 lakhs to the various S.S.I. Units, Co-operative Societies, Public and Private limited Companies and educated youths. This has helped the

mobilisation of resources of the order of 11 to 12 crores of rupees through nationalised and scheduled banks and other financial institutions for the development of small, medium and even large scale industries in Kerala. The employment opportunities expected to be generated as a result of this effective and well programmed financial aid was about 6000. As the schemes for which assistance has been rendered are now at various stages of implementation, only about 3700 educated unemployed persons have so far been provided with employment.

2.26 It may be mentioned that Government have already ordered the amalgamation of the Corporation with the newly formed 'Kerala State Small Industries Development and Employment Corporation Limited'.

PRICES AND COST OF LIVING

Price Situation

During 1976, the average annual index of wholesale prices in the country registered a decline of 3% as against an increase of 1.4% during the previous year. Thus price trends in India during the year under review has been one of relative stability and confidence which helped to dampen the psychology of scarcity. The high rate of inflation which has been haunting the economy for the past few years has been held at check during the latter half of 1975 when the Government adopted a number of anti-inflationary fiscal and monetary measures. The increase in agricultural production and the strengthening of the public distribution system within the country also helped to impart stability to the price structure.

3.2 Reviewing the price situation during the year 1976 two distinct phases can be discerned viz. (i) a period of price decline till March 1976, (ii) a period of subdued inflation or rising prices from April 1976 onwards.

Price Decline

3.3 The wholesale price index for 'All Commodities' recorded a fall of nearly 4% during the first three months of the calendar year. This decline in index was mainly on account of the two important groups viz. 'Food Articles' and 'Industrial Raw Materials', the former declined by 7.2% and the latter by 6.1% during the period (Table 3.1).

TABLE 3.1
Trends in Index Numbers of Wholesale Prices

(Base 1961-62=100)
(Percentage variation)

Sl. No.	Group/Commodity	Dec. '76 over Dec. 1975	March '76 over Dec. 1975	December 1976 over March '76
(1)	(2)	(3)	(4)	(5)
1.	All Commodities	6.8	-- 3.9	11.1
2.	Food Articles	4.7	-- 7.2	12.8
3.	Industrial raw materials	30.1	-- 6.1	38.5
4.	Machinery & Transport equipment	-- 1.1	0.9	-- 2.0
5.	Manufactures	5.8	0.1	5.6

3.4 The decline in the index of 'Food Articles' is chiefly due to the fall in prices of foodgrains especially in the case of cereals and pulses. The major cause for the fall in the prices of food articles was the bumper

harvest in 1975-76 and the sizeable import of foodgrains. In the 'Industrial Raw materials' group, 'Oil Seeds' witnessed a sharp decline while the prices of raw cotton and raw jute recorded marginal increases.

Period of Rising Prices

3.5 Since April 1976 the price situation witnessed a reversal of the trend of the earlier phase. In other words, there has been a steady rise in prices throughout the rest of the year, except for a seasonal decline in the months of October and November 1976. The 'All Commodities' Price index rose from 282.9 in March 1976 to 314.3 in December 1976, thus recording a rise of 11.1% during the period which was mainly brought about by 'Food Articles' and 'Industrial Raw materials' groups. The 'Food Articles' group recorded an increase of 12.8% while the Industrial Raw Materials group recorded a sharp rise of 38.5% during the period.

3.6 The above phenomenon of rising trend in prices can be mainly attributed to the rise in money supply which is indicative of the aggregate demand in the economy. During 1975-76 money supply within the country rose by 11.7% which is almost twice the rate of increase during the preceding year (6.4%). A sizeable increase in bank credit to commercial sector was primarily responsible for the higher rate of monetary expansion. More than one half of the increase in credit to the commercial sector was on account of food procurement advances which alone amounted to nearly Rs. 1500 crores by November 1976. Thus the rise in money supply is mainly instrumental to the rise in the wholesale price index which began in April 1976 and continues to register an upward trend. The relaxation of controls also might have contributed to this trend.

3.7 Another notable feature of the price behaviour during the year is the shift in the relative terms of trade as between agricultural and non-agricultural commodities. The ratio of index of agricultural prices to index of non-agricultural prices declined from 118.1 in 1974-75 to 102.4 in 1975-76. This was due to the fact that the fall in prices of agricultural commodities was of a greater magnitude (14.3%) as compared to the non agricultural commodities (1.1%) during the year. (Appendix 3.3).

*Consumer Prices**All India*

3.8 In line with the declining trend in wholesale prices in the country the year witnessed a remarkable decline in consumer price index. The consumer

price index for industrial workers (Base 1960=100) declined by 8.2% during 1976 in contrast to a rise of 5.7% recorded during the previous year. This was the steepest decline recorded since 1961. The month-wise index of consumer prices for various centres in India is presented in appendix 3.4 which shows a trend very similar to that of the wholesale prices. The consumer price index declined during the first three months and then increased steadily during the remaining part of the year.

Kerala

3.9 Reviewing the position during the calendar year 1976, the consumer price index numbers for Kerala registered a declining trend. The increase in agricultural production resulting mainly from favourable monsoons and from better output response to larger input application contributed to a substantial measure in the down trend in the behaviour of prices, especially of agricultural commodities.

3.10 The consumer price index (cost of living index) numbers for agricultural and industrial workers in Kerala during the year under review witnessed a fall in all the selected centres in the State (Table 3.2). The decline in the consumer price index was more than 10% in eight out of the ten selected centres.

TABLE 3.2
Average Annual Index of Consumer Prices
in Selected Centres in Kerala

Centre	Average annual index		Variation %
	1975	1976	
(1)	(2)	(3)	(4)
1. Trivandrum	184.5	164.1	-11.1
2. Quilon	186.6	166.5	-10.8
3. Punalur	188.8	165.0	-12.6
4. Alleppey	183.7	164.2	-10.6
5. Kottayam	179.8	158.3	-12.0
6. Munnar	197.3	195.2	-1.1
7. Ernakulam	181.0	161.4	-10.8
8. Chahakudy	175.5	163.9	-6.6
9. Trichur	181.8	163.3	-10.2
10. Kozhikode	186.1	165.8	-10.9

Note:—As comparable figures were not available in respect of the 5 new centres added since August 1975, the analysis is confined to only 10 centres.

3.11 The monthly consumer price index numbers for different centres in the State are given in Appendix 3.5. It is significant to note that the monthly consumer price index in the State recorded a slow but steady decline during the course of the year despite the buoyancy observed in the All India consumer price index since March 1976, thanks to the extensive net work of public distribution system in the State.

Retail Prices of Essential Commodities

3.12 The retail prices of essential commodities showed a mixed trend during the year. Out of the 39 essential commodities of daily consumption listed, 21 items recorded fall in prices, 2 remained stationary and 16 witnessed rise in prices (Appendix 3.6). The decline in the cost of living index during the year under review can be attributed to the fall in prices of certain essential commodities especially that of rice which witnessed a decline of more than 22% in December 1976 as compared to the position a year ago (Table 3.3).

TABLE 3.3
Statement showing the State Average of Retail Prices of
Essential Commodities (Rupees.)

Sl. No.	Commodity	Unit	26-12-1975	31-12-1976	Percentage variation
(1)	(2)	(3)	(4)	(5)	(6)
1.	Rice (open market)	Kg.	3.06	2.38	-22.2
2.	Dhall	"	3.03	2.92	-3.6
3.	Red gram	"	2.56	2.19	-14.5
4.	Green gram	"	2.41	2.52	4.6
5.	Black gram	"	2.64	2.86	8.3
6.	Coconut oil	"	9.02	14.89	65.1
7.	Corriander	"	7.16	10.17	42.0
8.	Chillies	"	17.97	9.11	-49.3
9.	Onion	"	1.31	1.14	-13.0
10.	Tamarind	"	2.73	3.76	37.7
11.	Coconut (with out husk)	100	80.80	115.95	43.5
12.	Tapioca	Kg.	0.57	0.50	-12.3
13.	Tea (Brooke Bond Al Dust)	"	17.28	17.15	-0.8
14.	Coffee Powder (Brooke bond, family brand)	"	16.77	16.70	-0.4
15.	Milk (Cow's)	Litre	2.32	2.32	Nil
16.	Firewood (local split)	Qtl.	18.10	17.80	-1.7
17.	Mundu (Kora)	Each	6.22	6.49	4.3

Other commodities which recorded large decline in prices were chillies (49%), red gram (14%) onion (13%) and tapioca (12%). The commodities which have witnessed large rise in prices are coconut oil (65%), coconut (44%) and corriander (42%). It is significant to note that the better availability of the essential commodities and the timely entry of the State Civil Supplies Corporation in their distribution has eased the situation to a large measure.

Wholesale price Index of Agricultural Commodities

3.13 The wholesale price index of agricultural commodities in Kerala (base 1952-53=100) registered an increase of 6% during 1976 as against a decline of 6.2% in 1975. The uptrend in the wholesale price index during the year under review can be mainly attributed to the spurt in prices of 'condiments and spices' (45.9%) and 'oil seeds' (9.6%).

TABLE 3.4
Wholesale Price Index of Agricultural Commodities
Kerala
(Base 1952-53=100)

Sl. No.	Groups	Index for			Percentage variation	
		1974	1975	1976	In 1975 over 1974	In 1976 over 1975
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Foodgrains (Rice)	297	319	319	+ 7.4	Nil
2.	Molasses	282	416	423	+47.5	+ 1.7
3.	Condiments and spices	222	218	318	- 1.8	+45.9
4.	Fruits & Vegetables	402	385	380	- 4.2	- 1.3
5.	Food Crops	302	317	332	+ 5.0	+ 4.7
6.	Oil Seeds	617	479	525	-22.4	+ 9.6
7.	Plantation Crops	215	247	236	+14.9	- 4.5
8.	Non food crops	496	409	438	-17.5	+ 7.1
	All crops	373	350	371	- 6.2	+ 6.0

3.14 The price indices of 'food crops' and 'non food crops' recorded an increase by 4.7% and 7.1% respectively during the year. In respect of condiments and spices the index witnessed an uptrend throughout the year, the price index which stood at 209.9 in January 1976 touched the peak of 504.2 in July 1976, registering an increase of over 140% (Appendix 3.7). However, the index gradually moved down and reached the level of 299.0 in December 1976. Similarly in the case of 'Oil seeds', the price index witnessed an increase from September 1976 onwards. The index which was 480.1 in January 1976 rose to 555.5 in September and reached the level of 699.0 in December 1976 recording an increase of 45.6% over the year.

Parity Index

3.15 The index number of parity between prices received and prices paid by farmers indicates the level of their prosperity. During the year under review the prices received by farmers showed a marginal increase by 2 points as against a decline of 19 points during the previous year. In respect of prices paid by farmers, the year witnessed a fall in index by 18 points as compared to a rise of 37 points in the preceding year. Thus during the year 1976 the index of parity which stood at 95 in 1975 rose to 99 points in 1976. The two components of prices paid index, viz. index of domestic expenditure and index of farm cultivation cost showed divergent trends during the year. While the index for domestic expenditure declined by 45 points, the index for farm cultivation cost witnessed a rise of 15 points. The fall in domestic expenditure is the result of the general decline in the consumer price index detailed earlier.

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3.16 The index of cultivation cost went up by 15 points during the year despite the marginal decline in fertilizer prices. This was probably because of the rise in wages. The marginal increase in the index of prices received (2 points) is mainly due to higher prices of coconut which prevailed during the year. On the whole, the parity index indicates that the terms of trade has remained unfavourable to the farmers during 1976 although their economic position has improved when compared to the position a year ago. The index number of parity between prices received and prices paid by the farmers during the last few years are given in Table 3.6.

TABLE 3.5
Index Number of Parity between Prices Received and Paid by
Farmers—Kerala

Year	Index number of				
	Prices received by farmers	Domestic expenditure	Farm cultivation cost	Prices paid by farmers	Parity
(1)	(2)	(3)	(4)	(5)	(6)
1966	184	172	196	183	101
1967	210	186	222	203	103
1968	315	199	246	222	97
1969	212	209	259	232	92
1970	250	217	270	242	103
1971	227	218	278	246	92
1972	222	232	296	262	85
1973	308	280	336	307	100
1974	423	368	414	390	109
1975	404	401	454	427	95
1976	406	356	469	409	99

Food Situation

3.17 The food situation in the State remained comfortable during the year. The per capita availability of foodgrains in the State registered an increase of twelve gms. per day. What is more significant has been the increased availability of rice by a quarter more than that of the previous year (Appendix 3.9). Eventhough the availability of rice from internal production remained at the previous year's level of 148 gms. per capita per day, the import of rice on State account nearly doubled. At the same time import of wheat on State account was reduced by half. Though the State was treated as a separate zone with respect to rice, the relatively free flow of rice on private account has eased its availability further and consequently a decline in the price of rice was registered. The increased availability of rice reduced the demand for wheat and in turn, the absorption of wheat through the public distribution system declined. The import of wheat on State account correspondingly declined (Appendix 3.10). When the quantum of the rice distributed through the public distribution system increased by 70 per cent from 5.31 lakh tonnes to 9.04 lakh tonnes, the quantum

of wheat distributed fell by 45 per cent from 4.90 lakh tonnes to 2.20 lakh tonnes. (Appendix 3.11). Despite the favourable conditions with respect to the availability of foodgrains, the total availability of food declined from 490 gms. to 480 gms. per capita per day on account of the significant fall in the production of tapioca.

3.18 The net work of the public distribution system and its scope of activities expanded further. Ration cards were issued to nearly two and a half lakh families additionally taking the benefit of public distribution system to 38.73 lakh families in the State. There has been marginal expansion in the net work of wholesale and retail shops (Appendix 3.12). The quantity of coarse cloth lifted declined by more than half from 30.63 to 14.50 million sq. metres. The quantity of sugar distributed also showed a decline of nearly 12 per cent while that of kerosene increased by 10 per cent. The per capita availability of sugar distributed through the public distribution system declined from 41 kg. to 36 kg. per annum.

Civil Supplies Corporation

3.19 The Kerala State Civil Supplies Corporation was constituted in 1974 to be an effective instrument at the command of the Government to enter the essential

commodities market in a decisive way and thus influence the general price level. It took some time for the Corporation to come into grips with the situation. In addition to the existing channels of public distribution (the wholesale and retail ration dealers are functioning as agents of the Corporation) the Corporation has been able to build up its own net work of wholesale and retail outlets. During 1976 the Corporation spanned out its activities further by taking up the distribution of several essential commodities including coconut oil, chillies, soaps, sugar and notebooks. The quantity of various articles distributed and their values are presented in Appendix 3.13.

Procurement of Paddy

3.20 There has been no major change over the previous year in the paddy procurement policy pursued by the Government. The quantity of paddy procured during 1975-76 showed a marginal decline from 59.60 to 59.20 thousand tonnes (Appendix 3.14). Procurement as a percentage of total production in the State declined from 2.93% to 2.89%. Considering the steep fall in the farm prices of paddy, normally the quantity procured should have shown an improvement. But even the depressed farm price was higher than the levy price for paddy. Hence farmers were attracted to sell paddy in the open market.

CHAPTER 4
AGRICULTURE

Crop Production

Despite the vagaries of nature, the agricultural situation in the State during the year under review did not show any deterioration. Production of rice which was 13.65 lakh tonnes in 1975-76 had registered a marginal improvement of 31,000 tonnes over the previous year's level, while there was not much of improvement in the production of plantation crops. On the price front, while paddy prices showed a steep fall, most of the commercial crops, excepting rubber, registered higher prices. Coconut prices nearly doubled by the end of 1976. Pepper too fetched very high prices. In the case of rubber, however, there took place a substantial price slump. On the whole, the price parity index of the farmers showed an improvement of 4 points from 95 in 1975 to 99 in 1976—a level which indicates that although the economic position of the farmers improved when compared to the position a year ago, the terms of trade still remained unfavourable to them. The salient aspects of trends in different areas of agricultural activities are set out in the ensuing paragraphs.

4.2 Occurrence of unprecedented floods during the virippu season and sudden tapering of the north east monsoon culminating in severe drought conditions during the mundakan season have had their deleterious effects on crop production during the agricultural year 1975-76. To make matters worse, prices of some of the farm commodities, mainly paddy, showed substantial fall. Despite these overwhelmingly unfavourable

conditions crop production in the State did show improvement *albeit* marginal, thanks mainly to the relatively low pest incidence which was the result of the effective pest surveillance measures undertaken by the State Government and the adoption of improved agricultural practices.

4.3 Production index moved up from 159.8 to 160.8 (See Table-4.1) It is significant, as well as an illustration of the resilience of the farm economy of the State that this modest improvement has been brought about by the increase in productivity as the area index declined from 131.8 to 131.6 while the productivity index improved from 121.2 to 122.2. Food grains production has largely contributed towards maintaining the production levels as the index number of this group moved up from 127.8 to 130.8. The contribution to the increase in production has been mainly by rice and pulses as practically there was no improvement in the production of plantation crops.

Farm Commodity Prices

4.4 Behaviour of farm price of commodities reflected a mixed trend. Prices of most of the food crops, especially paddy, registered a decline. Farm price of paddy attained a peak towards the end of the previous agriculture year in June 1975 (See Table 4.2). It started declining since then and continued to fall throughout the rest of the year. The sharp decline in the price of paddy could be attributed to the relative abundance

TABLE 4.1
Index Number of Area, Production and Productivity of Crops in Kerala

Crops	Base Year: Average of 1959-60 to 1961-62								
	Area			Production			Productivity		
	Average of 5 years 1969-70 to 1973-74	1974-75	1975-76*	Average of 5 years 1969-70 to 1973-74	1974-75	1975-76*	Average of 5 years 1969-70 to 1973-74	1974-75	1975-76*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
All Crops (A+B)	128.3	131.8	131.6	152.1	159.8	160.8	118.6	121.2	122.2
A. Food Crops (I+2)	121.4	123.8	123.2	161.9	171.0	172.3	133.4	138.1	139.9
1. Foodgrains (i + ii)	112.5	112.4	112.4	124.8	127.8	130.8	110.9	113.7	116.4
(i) Cereals	113.9	114.0	114.5	125.3	128.4	131.4	110.0	112.6	114.8
(ii) Pulses	88.6	85.2	76.7	76.1	72.8	76.7	85.9	85.4	100.0
2. Non-Foodgrains	135.0	140.1	139.6	196.2	211.1	202.7	145.3	150.7	145.2
B. Non-Food crops (i+ii+iii)	140.9	146.3	146.8	126.9	142.6	143.1	97.2	97.5	97.5
(i) Oil seeds	143.2	147.2	147.6	119.0	113.8	114.4	83.1	77.3	77.5
(ii) Plantation crops	144.1	154.2	155.3	224.7	284.8	284.5	155.9	184.7	183.2
(iii) Other non-food crops	90.4	92.8	92.8	97.9	101.2	102.5	108.1	109.1	110.5

* Provisional

Cereals: Rice, Jowar, Ragi

Non-foodgrains; Banana Tapioca, Sugarcane, Pepper, Ginger, Turmeric, Cardamom, Arecanut & Cashewnut

Oil seeds: Groundnut, Sesamum & Coconut

Plantation crops: Tea, Coffee & Rubber

Commercial Crops: Lemongrass, Cotton & Tobacco

in the availability of food grains in general at the national level nearly (120 million tonnes) and better management of the available supplies. The break-through in rice production achieved at the national level during 1975-76 has greater relevance to the State as it contributed considerably to the relative ease on the food front.

4.5 A price reduction to the extent of 15—20% for most of the fertilisers was announced in October 1975. But the rice farmers in Kerala could not avail of this opportunity since the 'mundakan' crop had already reached advanced stages of cultivation by then. Continuance of this situation is likely to compel many farmers

to revert to traditional technology which involves relatively low risk and entails less cost per hectare, as compared with the sophisticated new technology which is more prone to high risk and cost.

4.6 It is significant to note that despite the steep fall in paddy prices, tapioca prices continued to rule at the same level. The average price of tapioca for the years 1975 and 1976 remained more or less the same. (See Table 4.2) One possible explanation for this apparently strange behaviour could be that the decline in the paddy prices has not been sufficient enough to substitute tapioca with rice by people for whom tapioca is still a

TABLE 4.2
Farm Commodity Prices in Rupees

Commodity Unit Month/Year	Paddy *Para		Tapioca Quintal		Coconut 100 Nos.		Rubber Quintal		Pepper Quintal		Ginger Quintal	
	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976	1975	1976
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
January	17.36	12.37	36.81	40.71	962.40	722.10	905.00	703.00	1005.28	1070.59	584.06	..
February	17.61	12.07	37.27	41.03	896.30	712.20	875.00	683.75	991.02	1070.87	558.92	639.63
March	19.46	12.21	38.17	41.01	833.00	715.40	825.00	660.00	969.67	1185.70	553.24	742.04
April	20.42	11.97	39.10	40.78	811.00	744.90	836.25	655.00	1026.31	1264.36	593.03	962.00
May	19.90	11.24	39.41	39.80	736.90	695.90	794.00	593.75	1025.76	1287.58	601.39	1036.19
June	20.02	12.07	39.58	38.95	654.60	679.90	808.75	580.00	1060.19	1422.32	603.53	1448.53
July	18.08	12.65	39.74	39.09	544.00	734.00	797.50	632.00	1074.26	1498.94	576.96	1489.89
August	15.69	11.91	40.04	38.08	657.70	739.20	770.00	603.75	1072.36	1465.51	673.75	1500.00
September	14.71	10.83	41.55	36.67	595.10	879.30	763.13	573.75	1115.94	1488.01	864.11	1623.39
October	13.98	10.06	41.77	36.11	632.00	973.50	708.00	542.00	1166.84	1544.48	807.66	1625.00
November	13.86	10.19	41.03	35.42	718.00	1068.20	722.50	596.25	1172.45	1570.21	848.97	1279.09
December	13.32	..	41.31	..	719.80	..	721.25	574.00	1112.94	..	739.00	..
Average	17.03	11.60	39.65	38.88	722.57	787.69	793.87	616.44	1066.09	1351.69	667.05	1234.60

* Standard para

Source: Bureau of Economics & Statistics.

staple diet. This group met their basic rice needs from the public distribution system and continued to meet the rest of the food needs from tapioca.

4.7 Most of the commercial crops with the exception of rubber, registered better price prospects. Coconut price remained at the trough by the beginning of the agriculture year 1975-76. Since then, the price level picked up and nearly doubled by the end of 1976. The recovery in coconut price could largely be attributed to the shortage experienced in the availability of edible oils resulting from a fall in groundnut production and consequent increase in price. The beginning of the agricultural year 1975-76 saw increase in the price of pepper which continued and attained unprecedented levels reaching an all time high in recent times. Comparable has been the trend with respect to ginger prices. Amidst the favourable price trends for most of the commercial crops, the price of rubber not only did not show any improvement; but continued to decline affecting the rubber farmers adversely. The enforcement of controlled prices on raw cashewnut much below the prevailing open market prices affected adversely the cashew farmers in the State.

Climate

4.8 Among the climatic factors rainfall is the most crucial in influencing the output of farm commodities. It is the rainfall pattern which precedes the reference period that influences production. The sudden tapering of the North East Monsoon of 1974 and continued drought situation during the summer months (See table 4.3) have seriously affected the production prospects of most of the garden crops. During 1975 the State received over 15 per cent more rainfall than the normal with a precipitation of 3528 mm. against a normal rainfall of 3003 mm. The State was favoured with better pre-monsoon showers; but this advantage was offset by excessive rainfall during the monsoon months resulting in flood conditions. Such excessive rainfall conditions continued unabated during the early North East Monsoon period also. The production of all those crops like paddy which are grown in the valleys suffered on account of the excessive water conditions. Subsequently, the North East monsoon tapered off suddenly resulting in severe drought conditions, particularly for the crops grown on garden lands and hill tops. It is likely that the production of these crops might decline during the agricultural year 1976-77.

TABLE 4.3
Average Monthly Rainfall in Kerala
(Rainfall in milli-meters)

Month	Normal	1975	1976
January	18	6	..
February	17	24	1
March	41	66	20
April	109	130	127
May	238	170	81
June	676	823	192
July	704	522	607
August	426	666	N.R.
September	238	462	N.R.
October	302	402	N.R.
November	185	234	N.R.
December	49	23	N.R.
Total	3003	3528	..

Source.—Bureau of Economics and Statistics.
N.R. Not reported

Land Use

4.9 Over 56 per cent of the geographical area has been categorised as net sown area in the State (See Table 4.4). Together with the area under forests the productive utilisation of land resources in the state accounted for nearly 85 per cent of the land surface. Nearly nine per cent of the land could not be put to any productive use as they fell under the categories of 'land put to non agricultural uses' and 'barren and uncultivable land'. There found to have still some scope for putting land resource to better use to the extent of five per cent of the geographical area since nearly three per cent accounted for 'cultivable waste and a little over 2 per cent 'land under miscellaneous tree crops'. The State has attained a relatively higher intensity of land use as nearly a third of the net sown area is cropped more than once. The intensity of cropping has attained a relatively high level of nearly 139%. The total cropped area has crossed the 30 lakh hectare mark.

Area and Production

4.10 There has been an increase in gross cropped area under paddy, coconut, rubber and to a lesser extent of cashew. (See Table 4.5) At the same time there has been a decline, though marginal, in area put under tapioca and tea.

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TABLE 4.4
Land Use Pattern in Kerala
(area in hectares)

Sl.No.	Classification of land	1975-76 (Provisional figures)	Per cent
1.	Total geographical area	3885497	100.00
2.	Forest	1081509	27.83
3.	Land put to non-agricultural uses	259230	6.67
4.	Barren and uncultivable land	78494	2.02
5.	Permanent pastures and other grazing land	19915	0.51
6.	Land under miscellaneous tree crops not included in net area sown	84250	2.17
7.	Cultivable waste	113414	2.92
8.	Fallow land other than current fallow	22954	0.59
9.	Current fallow	36559	0.94
10.	Net area sown	2189172	56.35
11.	Area sown more than once	851408	21.91
12.	Total cropped area	3040580	78.25

Note.—The provisional estimates are based on the quick estimates framed from timely reporting survey-1975-76.

Source. Bureau of Economics and Statistics.

TABLE 4.5
Area under Principal Crops
(area in thousand hectares)

Sl. No.	Crops	1974-75	* 1975-76	Changes over the year	
				Actual	Percentage
1.	Rice	881.5	885.0	+3.5	+0.40
2.	Sugarcane	9.5	9.4	-0.1	-1.05
3.	Banana and other plantains	47.1	47.2	+0.1	+0.21
4.	Areca nut	93.0	92.7	-0.3	-0.32
5.	Cashewnut	104.9	105.9	+1.0	+0.95
6.	Coconut	748.2	751.1	+2.9	+0.39
7.	Tapioca	317.9	316.1	-1.8	-0.57
8.	Tea	37.6	36.3	-1.3	-3.46
9.	Coffee	36.6	36.6	..	..
10.	Rubber	202.3	205.4	+3.1	+1.53
11.	Ginger	12.2	12.1	-0.1	-0.82
12.	Cardamom	46.6	46.6	..	..

* Provisional figures

Source.—Bureau of Economics and Statistics.

4.11 As far production is concerned, notable improvements have been registered in respect of rubber, pepper, rice and ginger (See Table 4.6) while production of tea and tapioca showed decline. The yield per hectare of certain crops improved and the decline in some others has been perceptible. (See Table-4.7) The largest increase in yield per hectare has been for ginger (10 per cent). The decline in the yield per hectare of tapioca and tea has been significant, around 8 per cent.

Rice Production.

4.12 Production of rice in the State registered a marginal improvement of 31,000 tonnes during 1975-76. The increase has been partly due to expansion in area to the extent of 3,500 hectares; but more due to improvement in yield per hectare from 1,513 kg. to 1,542 kg. (See Table 4.8) The distribution of rice area between the seasons remained more or less the same with relatively larger area under Virippu followed by Mundakan and

Punja season in that order. A levelling of production contributions from virippu and mundakan seasons is discernible as the proportion of virippu rice increased from 40% to 43% while that of Mundakan declined from 45% to 43%. Over the years, the yield per hectare of rice during Virippu season has been increasing which continued during the 1975-76 virippu season also. The increase in yield per hectare has been substantial with 8.6% over the previous year, while it declined

TABLE 4.6
Production of Major Crops

Sl. No.	Crops	Unit	Production		Changes over the previous year	
			1974-75	1975-76*	Actual	Percentage
1	Rice	'000 tonnes	1334	1365	+31	+2.32
2	Coconut	Million nuts	3719	3734	+15	+0.40
3	Tapioca	'000 tonnes	5625	5183	-442	-7.86
4	Areca nut	Million nuts	13777	13731	-46	-0.33
5	Pepper	'000 tonnes	27	28	+1	+3.70
6	Tea	"	49	43	-6	-12.24
7	Banana and other plantains	"	357	357	0	0
8	Cashewnut	"	118	119	+1	+0.85
9	Rubber	"	122	126	+4	+3.28
10	Coffee	"	158	N.A.	..	..
11	Ginger	'100 tonnes	260	285	+25	+9.62
12	Cardamom	Tonnes	2050	2050	0	0

* Provisional figures

Source: Bureau of Economics and Statistics.

TABLE 4.7
Average Yield/Hectare of Principal Crops in Kerala

Sl. No.	Crops	Unit	Production		Changes over the previous year	
			1974-75	1975-76*	Actual	Per cent
1	Rice	kg/hect.	1513	1542	+29	+1.92
2	Coconut	Nuts/hect.	4971	4971	..	..
3	Tapioca	kg/hect.	17696	16306	-1390	-7.85
4	Areca nut	Nuts/hect.	148072	148048	-24	-0.02
5	Pepper	kg/hect.	230	235	+5	+2.17
6	Tea	do.	1301	1190	-111	-8.53
7	Banana and other Plantains	do.	7564	7564	..	..
8	Cashewnut	do.	1122	1122	..	..
9	Rubber	do.	601	612	+11	+1.83
10	Coffee	do.	431	N.A.	..	..
11	Ginger	do.	2134	2350	+216	+10.12
12	Cardamom	do.	44	44	..	..

* Figures are provisional

Source: Bureau of Economics and Statistics.

TABLE 4.8
Area Production and yield of Rice

Season	Area ('000 hect.)		Production ('000 tonnes)		Yield in kg/hect.		Change in percent
	1974-75	1975-76	1974-75	1975-76	1974-75	1975-76	
	Virippu (Autumn)	394.9 (44.80)	397.2 (44.88)	535.5 (40.15)	585.1 (42.87)	1356		1473	- 8.6
Mundakan (Winter)	384.8 (43.66)	383.7 (43.36)	602 (45.15)	588.8 (43.14)	1565	1535	-2.0
Punja (Summer)	101.7 (11.54)	104.0 (11.76)	196.2 (14.71)	191.0 (13.99)	1929	1836	-5.0
Total	881.4 (100.00)	884.9 (100.00)	1333.9 (100.00)	1364.9 (100.00)	1513	1542	+1.9

Figures in brackets indicate percentages

Source: Bureau of Economics and Statistics

during other seasons. This phenomenon needs investigation as the yield expectations during Mundakan and Punja seasons are relatively higher on account of the better endowment of agronomic conditions for rice growth, especially sunlight and controlled water.

4.13 A notable achievement in the rice production sector has been the significant expansion of area under high-yielding varieties (HYVs) by over 37 per cent from 168 to 230 thousand hectares. (See Table 4.9) During the year HYVs covered 26 per cent of the total paddy area and for the summer crop alone the coverage was nearly two-third. The largest increase in HYV area has been registered during the summer season over 30,000 hectares. Even during virippu season by the increase in area has been substantial. Increase in area under HYV is an indication of the revival of the confidence of the farmers in these varieties after the set back they suffered consequent to the severe incidence of pests and diseases during the two preceding years. Relatively uncongenial weather conditions to the build-up of pest population and the support given by the pests and diseases survey and surveillance net work enabling the farmers to adopt prophylactic measures were responsible for the optimum generated.

TABLE 4.9
High Yielding Varieties of Rice

Details	Quantity		Proportion of HYVs to the total rice (per cent)	
	1974-75	1975-76	1974-75	1975-76
Area (hectares)				
Virippu (Autumn)	77537	98531	19.62	24.80
Mundakan (Winter)	50988	62173	13.25	16.20
Punja (Summer)	39128	69397	38.45	66.71
Total	167653	230101	19.03	26.00
Production (rice in tonnes)				
Virippu (Autumn)	130572	177541	24.39	30.35
Mundakan (Winter)	83840	99052	13.92	16.82
Punja (Summer)	80390	141480	40.98	74.08
Total	299802	418073	22.10	27.63
Average Yield/Hectare (rice in kg.)				
Virippu (Autumn)	1542	1802	113.72	122.34
Mundakan (Winter)	1644	1593	105.05	103.78
Punja (Summer)	2054	2039	106.48	111.06
Total	1758	1817	116.19	117.83

Source.—Bureau of Economics and Statistics.

4.14 Though over 26% of the rice area was under HYV during 1975-76, their contribution towards production was only less than 18% and the yield per hectare was only higher by 18%. This is an indication that though there has been encouraging responses from farmers to the change over to HYVs, no corresponding increase was seen in the consumption of relevant inputs so as to get reflected in enhanced production. This hypothesis is corroborated by the stagnant and in fact declining consumption of fertilisers in the State. The relatively low incidence of pests and diseases has reduced the risk involved in raising HYVs of rice. The relatively unfavourable cost/price relationship (stagnant if not increasing input costs and sharply declining output prices) might have dissuaded the farmers from using more of the purchased inputs. In a situation of this kind, what is possible to redeem the prospects of HYVs is to reduce the cost of production. Since most of the costs are fixed and the possibility of the State coming to the rescue by subsidising the inputs is slender, farmers have to look for improving the efficiency of the purchased inputs used. The possibility of a mechanism of supporting the input subsidy by the State is not totally discounted. During 1976 the Government of India released over Rs. 20 crores (the total allocation for crop production programme in the entire Fifth Five Year Plan of the State comes to only Rs.20 crores) to the Government of Punjab as bonus for the grains procured and fifty per cent of which could be used for subsidising fertilisers, diesel oil etc. Research efforts also should be directed towards reducing the cost of production of crops.

Development Programmes.

4.15 The major thrust of development effort during the period under review, has been on expansion of the Intensive Paddy Development and Coconut Package programmes, launching of a Package Programme for pepper and consolidation and strengthening of the pest survey and surveillance programme.

4.16 A Summary of the major activities of the Department of Agriculture is presented in Table 4.10. For the past five years fertiliser consumption in the state has

been more or less stagnant and in recent years it is declining. The consumption of nitrogenous fertilisers is nearly stagnant around 32000 tonnes per annum. Partly, this explains why rice production in the State is also stagnant and has not surpassed the 14 lakh tonne mark.

4.17 The strength of the intensive paddy development units has been increased with the establishment of 100 additional units; and the coverage by increasing the area of operation of the existing units. By the end of 1975-76, 78,100 hectares of paddy lands spread over 289 units were brought under this programme. The net work of pest and disease survey and surveillance programme was extended to 15 more units making to a total of 115 units. The capabilities of the system have been improved through strengthening meteorological support. The coverage under the coconut package programme increased from 31,500 hectares to 93,500 hectares spread over 187 units. Substantial

TABLE 4.10
Selected Indicators of Agricultural Development

Programme	Unit	1974-75	1975-76
(1)	(2)	(3)	(4)
1. Fertilizer Consumption	Tonnes	67362	62671
Nitrogen	"	32143	31654
Phosphorous	"	17187	14374
Potash	"	18032	16643
2. Plant Protection			
Seeds treated	Lakh tonnes	2.9	1.23
Liquid fungicides (in terms of technical grade).	Tonnes	15.00	51.50
Liquid insecticides (in terms of technical grade).	"	129.00	135.25
Solid fungicides (,,)	"	292.00	198.30
Solid insecticides (,,)	"	347.00	526.30
Area treated	Lakh hect.	11.17	9.94
Areal spraying	"	Nil.	Nil
Rodent control operation	"	0.65	0.70
3. High Yielding Seeds			
HYV and other improved seeds distributed from seed farms or Government agencies.	Tonnes	2300	2302
Coverage of HYV including natural spread	lakh hect.	1.67	2.50
4. Quality Planting Materials distributed			
Coconut seedlings	Lakh Nos.	5.00	6.20
Arecanut seedlings	"	Nil	Nil
Rooted Pepper	"	4.71	0.12
Cashew layers/seedlings	Nos.	20698	26462
Cashewseedlings	Lakhs Nos.	17.93	22.37
5. Farmers Training Programme			
Farmers trained	Nos.	23610	24120
Training Camps organised	"	1564	1231
6. IPD Programme			
Units organised	"	189	289
Area covered	Hect.	45800	78100

Programme	Unit	1974-75	1975-76
(1)	(2)	(3)	(4)
7. Coconut Package Programme			
Units organised	Nos.	63	187
Area covered	Hect.	31500	93500
Demonstrations organised	Nos.	630	1510
Fertilizer distributed	Tonnes	N 161.629 P 140.186 292.500	470.342 335.386 811.478
Medium Term Loans distributed (through co-operatives).	Rs.'000	1473	5031
Filter points established	Nos.	5	13
Filter Points Connected with pumps	"	5	13
Wells Dug	"	133	1188
Area benefited	Hect.	955	2599
8. Pilot Project for replanting coconut:			
Area covered	"	859.50	1511.60
Seedlings distributed	Nos.	24197	31810
9. Survey and Surveillance programme			
Unit established	"	100	115
Area protected	lakh Hect.	8.75	7.50
10. Short term loans: Amonnt distributed	Rs. lakhs	462.06	195.492
11. Cashew Plantation Scheme:			
Area covered	Hect.	13734	17269
Amount disbursed on subsidy	Rs.'000	994	1132.39
Total investment	"	2259	3259

Source. Department of Agriculture

improvements have been registered in the cultivation practices followed in the package area. Fertilizer consumption increased by 1½ times and credit absorption by nearly 4 times. Considerable strides have been made in increasing the area under irrigation by installing over 1000 filter points benefiting 1500 hectares. The basic frame-work for improving the production of pepper in the State has been initiated through the establishment of 10 package units covering 10,000 hectares. The Pilot Project for replanting coconut has also made substantial progress by nearly doubling the coverage to over 1500 hectares. The tempo of the distribution of quality coconut seedlings continued and modest improvements were made by distributing over 620,000 seedlings which was nearly 120,000 seedlings more than the previous year. It is worth mentioning that steps have been initiated to make available 6 lakh hybrid coconut seedlings per annum from 1977 onwards. The momentum of the cashew development programme was sustained by extending the area under cashew to 13500 hectares additionally in the private sector.

4.18 The Soil and Water Management Project at Karamana pursued the studies which were already under investigation. They included the evolution of cropping patterns for wet lands, water requirements for rice on converted dry lands; effect of compacting

soil to reduce percolation and nutrient losses from rice fields. Over 200 drop-cum-diversion boxes were installed in the two demonstration areas. Similarly over 1260 metres of field drains, nearly 1000 metres of unlined earthen channels and 13000 metres of water courses were completed.

Farm Information Bureau

4.19 Farm Information Bureau continued vigorously its regular commitment of providing farm information support to the farming community. Farm News in the AIR and Farm Feature in news papers two of its innovations in the field of dissemination of farm information—were expanded further during this period. Farm News in the AIR now covers the entire State. More newspapers have commenced Farm News as a regular feature for which the Bureau provides the necessary information support.

Central Sector Programmes

4.20 The Directorate of Coconut Development continued the implementation of the projects which have already been launched in the initial years of the Fifth Five Year Plan. Among them the Coconut Package Programme which covered 93500 hectares spread over 187 units deserves special mention. The programme consisted of laying out 1800 demonstration plots, manuring 12.37 lakh trees distribution of 1069 pump sets and digging of 1200 wells. Under the programme, short-term credit amounting to Rs. 89.50 lakhs and medium term credit to the extent of Rs. 50.3 lakhs were also made available. Another programme launched was the production and distribution of T×D hybrid under which 52182 hybrid seedlings were distributed. The pilot project for rejuvenation of diseased coconut gardens was extended to cover an area of 1512 hectares and 32,000 hybrid coconut seedlings were distributed.

4.21 The Directorate of Arecanut and Spices Development continued the implementation of a few projects for the development of spices in the State. With its support, 12.5 hectares of old pepper progeny orchards were maintained, new progeny orchards were raised in 8.9 hectares and 3 lakh rooted-cuttings of pepper were produced and distributed. Under the Package Programme for Pepper which covered 5000 hectares, 192 old hybrid pepper demonstration plots were maintained and 60 new demonstrations were organised.

State Farms Corporation of India

4.22 The State Farm established at Aaralam by the State Farms Corporation of India expanded its activities further. During 1975-76, 311 hectares were brought additionally under perennial crops such as coconut, cashew and rubber bringing the total area under plantations to 712 hectares. The farm had put 702 hectares and 665 hectares respectively under kharif and rabi crops. The farm has been an important production centre

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for high quality planting materials. During the planting season of 1976, 8841 budded stumps of high yielding clones of rubber, 51693 pepper cuttings, 8500 suckers of export quality banana and 8000 suckers of 'nenthran' were distributed. The contribution of the farm to the food basket of the Cannanore district has been substantial with 9,000 tonnes of tapioca, 60 tonnes of sweet potato, 250 tonnes of banana and 200 tonnes of yams.

State Farming Corporation of Kerala

4.23 The State Farming Corporation has not been able to make much headway during 1975-76 especially in its major objective of supplying adequate sugarcane to the sugar factories in the State. The capacity utilization of the sugar factories continued to the very low. In fact only 20 per cent of the capacity could be utilised against nearly 45 per cent attained during 1974-75 (See Table 4.11). The Corporation was able to cultivate sugarcane on 2018 hectares of clearfelled forest land.

Kerala Agro-Industries Corporation

4.24 The Kerala Agro-Industries Corporation pursued many of its activities designed for assisting the farmers in the State in using modern farm machinery. The Corporation revived on a modest scale its activities on the distribution of agricultural machinery on hire purchase system with the distribution of 1 tractor, 30 power tillers and 130 pump sets. Substantial progress has been achieved in the recovery of hire purchase dues. The collection reached about Rs. 291 lakhs which was 90% of the amount due on this account. (See Table 4.12). The Corporation also distributed 77 tractors and 182 power tillers on outright sale. There has been improvement in the custom-service rendered as also in the services rendered through workshops. So far, the Corporation has been able to establish 10 agro-service centres and impart training to 1037 trainees. Considerable progress has been achieved in setting up the project for the manufacture of power tillers. One of the subsidiary companies of the Corporation, the Meat Products

TABLE 4.11
Installed Capacity and Utilisation of Sugar Mills in Kerala

Sl. No.	Name of the Mill	Installed Capacity (Metric tonnes)		Cane Crushed	
		per day	Annual (200 days)	1974-75	1975-76
1.	Mannam Sugar Mills, Pandalam	1000	200,000	61301	43403
2.	Pamba River Factory	850	170,000	48273	38676
3.	Co-operative Sugar Limited, Chittur	1000	200,000	143273	31993
Total		2850	570,000	252847	114072

Source: The State Farming Corporation of Kerala.

TABLE 4.12
Activities of Kerala Agro-Industries Corporation

Item	1974-75	1975-76
	(in Rs. lakhs)	(in Rs. lakhs)
(1)	(2)	(3)
1. Direct sale of Agricultural Machinery and implements within the State	96.13	82.64
Tractor (Nos.)	74	77
Power Tiller (Nos.)	108	182
2. Hire purchase sales	1.53	10.75
a. Tractor (Nos.)	Nil	1
b. Power Tiller (Nos.)	Nil	30
c. Pump set (Nos.)	32	130
3. Procurement of spare parts	4.91	7.79
3a. Sale of spare parts	13.19	13.60
4. Sale of Kubotta Components	Nil	Nil
5. Sale of fertilizers	Nil	Nil
6. Sale of paddy seeds	1.39	Nil
7. Sale of other items	0.84	2.76
8. Sale of Agro Chemicals	1.16	1.56
9. Custom Service		
a. Bull dozers (Nos.)	7	8
Work done in hours	1295	1746
b. Tractors (Nos.)	31	31
Work done in hours	15625	13647
c. Power Tillers (Nos.)	10	10
Work done in hours	3529	4868
d. Receipts from	6.80	7.23
10. Receipts from work shops/Service stations	1.68	2.44
11. Repayment of loans issued	..	Nil
12. Profit before provision for reserve and Taxes	7.98	(-)-2.75

Source: Kerala Agro-Industries Corporation.

of India, took over the Bacon Factory at Koothattukulam from the Government management. Steps are being taken to establish agro-industrial complexes based on pine apple, tapioca, and spices under the Indo-Bulgarian Joint Commission Programme. The Corporation suffered a loss of Rs. 2.75 lakhs against the net profit of nearly Rs. 62,000 for the previous year.

Kerala State Coconut Development Corporation

4.25 The State Government released Rs. 35 lakhs towards the share capital to the Kerala State Coconut Development Corporation during 1975-76. A Project Report for processing and marketing of coconut products was got prepared. Preliminary steps have been taken to establish two coconut processing complexes involving an aggregate investment of Rs 320 lakhs, each with a capacity of crushing 60 tonnes of copra per day. Arrangements for obtaining institutional finance for establishing the proposed coconut processing complexes have been completed.

Kerala State Warehousing Corporation

4.26 The Kerala State Warehousing Corporation registered rapid strides in its activities during the year under review. The warehousing capacity was more than doubled (See Table 4.13). Deposits received for warehousing showed an increase of 86 per cent. Capacity utilization reached new heights by attaining nearly 98 per cent. Expansion of activities of the Corporation necessitated the hiring of more capacity which increased by nearly three-fold over the previous year. The increased activities resulted in nearly doubling the income of the Corporation by way of storage charges thereby increasing the net profit by a third as compared to the previous year. The Corporation has added two more centres making a total number of 20 centres. There have been qualitative changes in the commodity mix received for deposit. More than half of the storage capacity was used for stocking fertilizers against only a third a year ago. At the same time, share of food grains declined from 31 per cent to little less than 26 per cent (See Table 4.14). Farm commodities still continued to account for a very low share of the warehousing capacity. Only a little over 1 per cent has been accounted for by pepper, cashew, rubber, coffee and cardamom. This is an indication that warehousing as an instrument against the uncertainties of the market conditions and in stabilising farm commodity prices which is the main service that is expected from warehousing sponsored in the public sector is yet to make any perceptible impact in the State.

Small Farmer Development Programme

4.27 Four out of eleven districts in the State are covered by the Small Farmer Development Programme. Small Farmer Development Programmes were launched in Quilon and Cannanore Districts during the Fourth Five Year Plan period. Small Farmer Development Agencies (SFDA) began functioning in Trivandrum and Trichur Districts only during the latter half of 1975-76, and therefore these agencies were largely concentrating on the preliminary activities such as the identification of participants—small and marginal farmers and agricultural labour and strengthening the infra-structure such as the co-operative credit institutions. Broadly, the programmes initiated by the SFDA's could be grouped into those directly benefiting individual participants; benefiting a community of participants; and strengthening the infra-structure especially the co-operative institutions so as to make credit from these institutions more easily accessible to small and marginal farmers. The strategy of development has been to assist the small and marginal farmers in developing the potential resources—both physical and human—by making available investment support by the institutional financing agencies. By rendering financial and technological support to the participants,

TABLE 4.13
Warehousing Activities of Kerala State Warehousing Corporation

Year	Number of Deposits	Deposits received in M. T.	Bank advances (Rs.)	Storage charges collected (Rs.)	Profit & Loss (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
1959-60	..	..	..	..	5638
1960-61	361	725	444000	2669	(-)741487
1961-62	827	5939	2400000	28780	(-)441500
1962-63	1811	14545	4824600	76448	(-)67245
1963-64	2447	13490	7383782	92361	(-)88768
1964-65	3357	25052	7853797	100554	(-)91448
1965-66	3932	40456	8245629	172782	(-)66645
1966-67	5042	54256	8607409	239477	(-)79222
1967-68	5512	66282	7056121	397376	(-)102308
1968-69	5366	68726	7685132	422018	(-)139809
1969-70	5400	60929	9356235	513765	(-)37903
1970-71	5471	89011	6044089	548392	(+)82908
1971-72	7803	164859	10801601	843392	(+)107155
1972-73	8922	169586	14428000	1027780	(+)206661
1973-74	10918	227037	16855088	1252021	(+)244419
1974-75	11336	275951	24000000	2200748	(+)1000218
1975-76	18000	517177	27000000	4052674	(+)1340674

Source:—Kerala State Warehousing Corporation.

TABLE 4.14
Commodity-wise Deposit Received by the Kerala State Warehousing Corporation

Sl. No.	Commodity	1974-75		1975-76	
		Commodity in tonnes	Percentage	Commodity in tonnes	Percentage
(1)	(2)	(3)	(4)	(5)	(6)
1.	Foodgrains	85632	30.81	132483	25.61
2.	Other food-grains	6841	2.46	8210	1.59
3.	Grams and Pulses	1374	0.49	6942	1.35
4.	Pepper	874	0.32	211	0.04
5.	Copra	1145	0.41	834	0.16
6.	Ground nut	407	0.14	357	0.07
7.	Oil Cakes	160	0.06	254	0.05
8.	Arecanut	646	0.23	565	0.12
9.	Cashew	158	0.06	239	0.04
10.	Fertilizers	103693	37.31	263499	51.00
11.	Care Articles	24374	8.76	44547	8.61
12.	Cement	3092	1.12	6516	1.26
13.	Sugar	29449	10.59	35361	6.83
14.	Coffee	591	0.21	408	0.08
15.	Rubber	227	0.08	281	0.05
16.	Cardamom	16	0.01	27	0.01
17.	Miscellaneous	19272	6.94	16443	3.13
Total		277951	100.00	517177	100.00

Source:—Kerala State Warehousing Corporation.

the agency is to function as a catalyst. The risk of institutional agencies involved in extending credit to a group whose resource base is weak has been minimised through a scheme of subsidy. Further, by linking credit with marketing and through creating and fostering institutions for marketing, the repayment of credit is ensured. The confidence of co-operative institutions in lending to the weaker sections of the society and thereby enhancing their accessibility to institutional credit, has been strengthened by granting special support to the co-operatives. Summary of the activities initiated by the SFDA's in support of small and marginal farmers and agricultural labourers is presented in Table 4.15.

4.28 Largely due to the extension of the programme into two more districts, the identification of participants nearly trebled, and enrolment in co-operatives doubled

TABLE 4.15
Selected Indicators of the progress of the Small Farmer Development Programme

Indicators	Unit	Achievement during 1975-76	Cumulative till the end of March 1976
(1)	(2)	(3)	(4)
<i>General</i>			
1. Participants identified	Nos.	131842	372598
2. Enrolment in the Co-operatives	"	64106	137630
3. Wells and tanks dug	"	4588	5643
4. Filter point tube wells installed	"	21	77
5. Pump set distributed	"	4167	6864
6. Community tube wells installed irrigated works	"	32	44
7. Minor irrigation works executed	"	48	113
8. Community soil conservation works executed	Hect.	1976	2504
9. Land development works executed	Nos.	330	510
10. Seedlings and planting materials supplied	"	66598	211433
11. Bose ploughs distributed	"	832	13501
12. Plant protection equipment distributed	"	1349	3126
13. Milch cattle supplied	"	3758	7278
14. Poultry birds supplied	"	4304	11811
15. Ducklings supplied	"	..	32
16. Goats supplied	"	16376	25320
17. Custom service of tractors	Hect.	8032	9786
18. Rural custom service units	Nos.	..	5
19. Demonstration plots laid	"	2158	3737
20. Fodder plots laid	"	..	325
21. Homestead gardens established	"	..	520
22. Farmers trained	"	850	2100
23. Expansion of district poultry farm	"	1	2

TABLE 4.15—Contd.
Selected Indicators of the progress of the small farmer Development Programme

Indicators	Unit	Achievement during 1975-76	Cumulative till the end of March 1976
(1)	(2)	(3)	(4)
24. Piglings supplied	No. of farmers benefited	..	41
25. Participants assisted under Rural Artsans Scheme	Nos.	1252	1517
26. Boats and nets supplied	fishermen benefited	55	55
<i>*Strengthening of Co-operatives</i>			
27. Godowns subsidy to Co-operatives	Rs. in lakhs	..	1.85
28. Managerial assistance to co-operatives	"	0.14	5.64
29. Share capital loans to Co-operatives	"	..	2.00
30. Interest rebate to co-operatives	"	..	..
31. Capital subsidy to co-operatives	"	..	..
32. Risks fund contribution	"	3.52	11.06
33. Interest free loans for purchase of Shares	"	..	..
34. Credit, Commercial Year)			
<i>(a) Co-operatives</i>			
Short term	"	208.38	474.92
Medium term	"	164.81	354.93
Long term	"	10.98	39.11
<i>(b) Commercial banks</i>			
Short term	"	13.87	20.99
Term loans	"	77.45	113.94
<i>(c) Agro Industries Corporation</i>			
35. Gardens attached to one lakh housing scheme	No.	2500	2500

* Information relates to District S. F.D. A. Cannanore.

Source:—S. F. D. As. Cannanore, Trichur, Quilon and Trivandrum during 1975-76. Live stock development activities received considerable impetus. The distribution of milch cattle nearly doubled, that of poultry trebled and the supply of goats increased by 60 per cent. Development of minor irrigation sources received considerable support as the number of such works executed more than doubled. A notable achievement of the small farmer development agencies has been the substantial increase registered in the availability of credit of all terms to small farmers. The quantum of short term credit issued through co-operatives increased by more than 125 per cent, while medium term credit nearly doubled, long term credit increased

by more than three-fold. Commercial banks also made significant progress in disbursing credit to small farmers. Both short-term credit and term loans distributed by them showed an increase of 50 per cent. As a reflection of the increased quantum of credit advanced by co-operatives, the contribution to the risk fund of the co-operatives has been increased by three-fold. Through extension of support to fishermen in Quilon district during this period, the SFDA has entered a new area of activity hitherto neglected country crafts and nets were distributed to 55 fishermen. In the Trivandrum district, the SFDA launched a special animal husbandry programme under which identified participants are rendered assistance for rearing calf born to cross-bred animals.

Western Ghats Development Programme

4.29 The three projects launched during 1974-75 under the Western Ghats Development Programme in the State included two dairy development schemes one each at Idukki and Attappady and a co-operative farm at Attappady. During 1975-76 a sum of Rs. 33.20 lakhs has been expended on these projects as against Rs. 24.34 lakhs spent during the previous year. The Planning Commission has approved three more projects for implementation in the State under the Western Ghats Development Programme. They include a project for afforestation, land improvement and agricultural development in Idukki district; organisation of a co-operative farm for cardamom cultivation in South Wynad; and the development of Ponnudy hill-station as a tourist resort.

Wynad Development

4.30 Considering the unique features of Wynad and its relative social and economic backwardness, the State Government initiated a special programme for the development of Wynad during 1974-75. The Director of Tribal Welfare was appointed as the Special Officer and a Deputy Collector with headquarters at Kalpetta was assigned exclusively for the implementation of this programme which includes projects for the development of livestock and communication net work; and expansion of rural electrification and minor irrigation. During the year 1974-75, three minor irrigation works were completed; three road works were initiated; and a number of pump sets were distributed. All these activities involved an investment of a little over Rs. 4 lakhs. Similar activities were pursued during 1975-76 also, involving an investment of nearly Rs. 22 lakhs.

Soil Conservation and Land Development

4.31 Soil conservation programmes in the State are implemented by the Soil Conservation Unit of the Department of Agriculture largely under the provision of the Kerala Land Development Act 17 of 1964. Through the implementation of various projects, it has been possible during 1975-76 to protect 860 hectares

TABLE 4.16

Progress of Soil Conservation and Soil Survey Schemes in Kerala State during 1975-76

Schemes	Achievements	
	Physical (in Hects.)	Financial (Rs. in lakhs)
I Soil Conservation Schemes		
(a) State Plan Schemes		
1. Soil and Water Conservation in arable lands	673.40	14.027
2. Reclamation of waterlogged areas	Draft Schemes for 100 H prepared and kept ready for execution	0.727
3. Soil Conservation in river valley catchment of Idukki	50.0	1.980
4. Do. in lands belonging to Harijan/Tribal landless allottees etc.	187 (Exe.) 145 (Inv.)	8.16
5. Soil Conservation in Irrigated lands	Draft Soil Conservation Scheme for Ayacut development of Malampuzha project prepared	0.499
6. Do. Research and Training	Continuance of Research and Training Assistants and Officers in the S.C. and Soil Survey Wing	2.154
Total (Execu.)	1010.40 + 145 (Inv.)	27.547
(b) Centrally sponsored schemes		
1. Soil conservation in the catchment of Kundah River Valley Project	259	7.999
2. Total Soil Conservation (State & Central)	1269.40 (Exe.) 145.00 (Inv.)	35.546
II Soil Survey Scheme		
1. Soil Survey in Command areas and Problem Areas	75000 DSS	2.576
2. Soil Survey in Govt. and Forest lands	40000	1.117
Grand Total (I and II)	1269.40 (Exe.) 145.0 (Invest.) 115000 RSS+ DSS	39.239

Source: Department of Agriculture (Soil Conservation).

of arable land, from the hazards of soil erosion including 187 hectares of land belonging to harijan and tribal communities, reclamation of 100 hectares of waterlogged areas and fifty hectares of land in the river-valley catchment of Idukki (See Table 4.16). Soil conservation measures were executed on 259 hectares in the catchment of the Kundah river-valley project and investment on these projects totalled Rs. 35.55 lakhs. In addition, project preparation including investigation has been completed for areas benefiting 145 hectares of harijan and tribal land and 100 hectares of water-logged areas.

Soil Survey

4.32 Command areas and forest lands are the two major areas concentrated by the Soil Survey Unit in the State for its activities. Soil surveys of 75000 hectares of command areas and 40,000 hectares of forest land were completed. The latter include the land resumed by the Government from the Kannan Devan Hill Produce Company.

Kerala Land Development Corporation

4.33 Kuttanad Development Project continued to be the major activity of the Kerala Land Development

Corporation. Till 1975-76, 43 schemes were completed benefiting 1800 hectares of land involving an investment of Rs. 68 lakhs. Another 66 schemes are under various stages of implementation and they would benefit 7500 hectares at an investment cost of Rs. 356 lakhs. Through the implementation of various schemes, it has been possible for the Corporation to make nearly 4500 hectares of land suitable for double-crop cultivation at a total investment cost of Rs. 230 lakhs.

4.34 The first phase of the Kuttanad Development Project involving an investment of Rs. 375 lakhs has been programmed to be completed by 1977-78. The second phase of the project involving an estimated outlay of Rs. 600 lakhs has been sent to the Agricultural Refinance and Development Corporation. Projects have been formulated for developing the Trichur Kole lands and pazhangad Kannan Kayal, in Ponnani Kole lands. Investigations are under way for preparing projects benefiting about 2500 hectares in Ponnani Kole lands, 1600 hectares in Kattampally Kole lands and 800 hectares in Konath Puzha in Mulanthuruthy block in Ernakulam district.

Kerala State Land-use Board

4.35 The Kerala State Land Use Board initiated a number of studies. They include the identification of cultivable waste lands suitable for cashew cultivation in selected taluks of Cannanore, Calicut, Malappuram, Palghat and Trichur. The Board has commenced work on the preparation of a land use plan for the Idukki district.

Agricultural Credit

4.36 The highly successful deposit mobilisation scheme launched in April 1976 which netted a total amount of Rs. 26 crores was the highlight of the Co-operative movement in the State during the year 1976. This should go a long way in meeting the credit requirements of the vulnerable sections of the community in the wake of the shrinkage of private sources of credit consequent on the implementation of the debt relief measures by the State Government.

4.37 The Kerala State Co-operative Bank, 11 District Co-operative banks and their 18 branches, and 1278 selected primary agricultural credit societies spear headed the campaign for mobilising deposits. As a result of this campaign, 252,800 new accounts were opened in the co-operative societies at different levels. Out of this, 212,436 accounts were opened with the primary societies, 27,343 accounts with the district banks and 12,205 accounts with the urban co-operative banks. Following the mobilisation effort, a scheme for the utilisation of the deposits has also been evolved.

Short Term Credit

4.38 The impact of the deposit mobilisation campaign is seen reflected in the performance of the agricultural credit co-operative societies. The membership rose by about 1.20 lakhs. Besides, there has also been improvement in the financial viability of the co-operative institutions. (See Table 4.17).

4.39 Loans advanced during the year registered an increase of Rs. 250 lakhs. Financially the operations of the co-operatives showed some deterioration. Though the loans overdue declined from Rs. 25.34 crores to Rs. 22.09 crores and the percentage of overdue to outstanding declined from 46 to 34, the net profit earned by the societies declined by Rs. 28 lakhs. The number of societies worked at profit declined from 922 to 841 and the societies worked at loss increased from 777 to 829. The losses sustained by the societies increased by Rs. 55.61 lakhs. There has been further improvement in the credit operations of the societies. Significant among them have been the increase in the deposit per society from Rs. 1.21 lakhs to Rs. 2.10 lakhs and the increase in average deposit per member from Rs. 99 to Rs. 157. (See Table 4.18). Average loan per member increased from Rs. 235 to 239 while the average loan advanced per borrowing member declined from Rs. 548 to Rs. 436.

TABLE 4.17

Selected indicators of the Credit Operations of Agricultural Credit Societies

Sl. No.	Details	As on	
		30-6-1975	30-6-1976*
(1)	(2)	(3)	(4)
1.	No. of Societies	1731	1677
2.	No. of Members (lakhs)	21.14	22.33
3.	Paid up share capital (Rs. in lakhs)	1418.27	1531.91
4.	Statutory reserves	491.82	636.58
5.	Other reserves		
6.	Deposits	2092.02	3513.63
7.	Other borrowings	4109.75	3803.71
8.	Working capital	8779.80	9700.92
9.	Loans advanced during the year		
	(a) Short term	4292.30	4540.06
	(b) Medium term	667.87	802.54
10.	Loans outstanding at the end of the year	5499.26	6353.10
11.	Loans overdue	2533.53	2209.36
12.	No. of societies that worked at profit	922	841
13.	Net profit for the year (Rs. lakhs)	157.87	129.71
14.	No. of Societies that worked at loss	777	829
15.	Loss sustained (Rs. lakhs)	143.22	198.83
16.	No. of societies without profit/loss	32	7

*figures are provisional.

Source:—Registrar of Co-operative Societies, Government of Kerala

TABLE 4.18

Selected Indicators of the Performance of the Agricultural Credit Societies

Sl. No.	Details	As on	
		30-6-1975	30-6-1976*
(1)	(2)	(3)	(4)
1.	Average membership per society	1221	1331
2.	Average share capital per society (Rs.)	81934	91948
3.	Average deposit per society (Rs.)	1,20,856	2,09,518
4.	Average deposit per member (Rs.)	99	157
5.	Average working capital per society (Rs.)	5,07,210	5,78,468
6.	Average loan per member (Rs.)	235	239
7.	Percentage of borrowing members to total members	55	55
8.	Average loan advanced per advancing society (Rs.)	2,78,000	3,18,580
9.	Average loan advanced per borrowing member (Rs.)	458	436
10.	Percentage of overdue to outstanding	46	34

*figures are provisional

Source:—Registrar of Co-operative Societies, Government of Kerala

Long Term Credit

4.40 The long term credit needs of the farmers in the State are met by the Kerala Co-operative Central Land Mortgage Bank at the state level and the primary Land Mortgage Banks numbering 31 at the primary level. This system makes available long term credit for periods not exceeding 15 years. Necessary funds are raised through floating debentures. The LMB system operates two kinds of loaning programmes. First is the ordinary loaning programme which is generally given over to individual farmers coming within the jurisdiction of a primary land mortgage bank irrespective of the location. Recently it has been stipulated by the Reserve Bank of India that not less than 30 per cent of the amount disbursed under this programme should be for "easily identifiable productive purposes" such as digging of wells/tanks, installation of pumpsets and purchase of agricultural machinery. There has been a marginal improvement in the disbursement of this kind of loan with an increase of Rs. 20 lakhs over the previous year. (See Table 4.19). However there has been a qualitative change in the purposes for which credit has been disbursed. The proportion for improving development of water resources has gone up. It has nearly doubled and proportionately increased from a quarter to a third of the total disbursement. The allocation for farm machinery including pumpsets trebled.

4.41 The Agricultural Refinance and Development Corporation (ARDC) makes available finance for agricultural development in compact areas on a long term basis for identified projects with specific objectives. During 1975-76, 23 such schemes involving an investment of Rs. 711 lakhs benefiting an area of nearly 8,500 hectares were under various stages of implementation. (See Table 4.20). Among them, two schemes for the development of rubber plantations involving an outlay of Rs. 18.20 lakhs and benefiting 225 hectares were initiated during 1975-76. During this period five schemes were completed. Disbursement under this programme amounted to Rs. 82 lakhs. Twenty four schemes involving an investment of Rs. 1206 lakhs benefiting an area of nearly 8,000 hectares are in the pipeline and at various stages of authorisation. Sanction has been accorded for a project with an outlay of Rs. 21.13 lakhs for digging 250 new wells, renovation of 75 old wells and installation of 200 pumpsets; but

TABLE 4.19
Ordinary Loaning Programmes of the Kerala Central Co-operative Land Mortgage Bank

Purpose	(Rs. lakhs)	
	1974-75	1975-76 (Financial Year)
1. New Wells	40.99	71.68
2. New tanks	7.69	17.05
3. Pumpsets	9.91	20.80
4. Agricultural Machinery	0.53	12.74
5. Repairs to wells	14.19	10.51
6. Repairs to tanks	0.81	2.70
7. Persian wheels	..	0.08
8. Field channels	1.69	3.03
9. Cattle shed and farm house	30.48	23.33
10. Fencing	18.66	17.93
11. Levelling and bunding	88.46	63.27
12. Terracing	15.90	15.48
13. Drainage channels	2.44	1.01
14. Plantations	38.45	28.93
15. Others	3.76	3.70
Total	272.99	292.24

Source:—Kerala Central Co-operative Land Mortgage Bank.

could not be taken up for implementation due to certain procedural difficulties. Various measures have been taken to strengthen the project formulation and implementation capabilities of the KCCLMB so as to absorb far more investment which is available from the ARDC.

Agricultural Education and Research

4.42 The Kerala Agricultural University has brought about organisational and structural changes leading to the integration of teaching, research and extension education. This has been achieved by grouping the entire technical staff of the University on the basis of their areas of specialisation under the departments with the Professor as Head of the Department exercising technical and functional control.

TABLE 4.20

Agricultural Development Schemes Financed by Agricultural Refinance and Development Corporation and Implemented by Kerala Co-operative Central Land Mortgage Bank Limited Trivandrum

Sl. No.	Name of Scheme	Total period of the schemes (Years)	Year of Com-mence-ment	Target		Achievement as on 30-6-1976		Area in Acres. Amount in Rs. Lakhs			
				1975-76 (Co-operative year)				Physical		Financial	
				Physical	Financial	Physical	Financial	Target	Achieve-ment	Target	Achieve-ment
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Wynad Coffee Scheme	7	1968-69	5000	100.00	4694.25	75.53	..	..	19.52	2.37
2	Cardamom Scheme Wynad High Ranges	5	1970-71	1150	13.65	1240.20	12.78	..	..	3.63	1.37
3	Kayal Reclamation Quilon and Alleppey	7	1971-72	350	19.76	353.20	14.40	..	..	5.31	0.40
4	Kunnathur Coconut Scheme	7	1971-72	500	19.50	501.82	13.94	..	..	2.32	1.76
5	Parur Coconut Scheme*	3	1972-73	100	5.00	73.26	2.63	..	0.71	1.19	0.16
6	Pokkali Paddy Stabilisation*	7	1972-73	154	5.00	72.65	2.18	..	2.64	0.52	0.34
7	Coconut Scheme Kasargod Hosdurg	7	1972-73	2000 100 Wells 50 P. Sets	84.50	1910.15 217 Wells 16 P. Sets	42.00	586.00	495.40 62 Wells 6 P. Sets	26.16	12.84
8	Mundar Paddy Scheme	3	1972-73	500	12.50	503.62	10.18	..	40.38	5.71	3.39
9	Trivandrum Kayal Reclamation Scheme	7	1972-73	150	8.40	151.79	5.33	89.47	91.26	3.93	3.16
10	Ezhimala Coconut Scheme	7	1972-73	500	18.75	439.70	10.63	138.60	78.30	5.17	2.57
11	Malappuram Coconut Scheme	7	1972-73	2000 401 Wells 50 P. sets	82.50	2010.10 401 Wells 30 P. sets	40.94	594.50	604.60 114 Wells 12 P. sets	22.80	14.41
12	Trichur Kayal Reclamation Scheme	3	1972-73	200	11.20	212.26	9.47	..	10.50	2.98	2.16
13	Waste Lands Reclamation Schemes Cannanore *	3	1972-73	1500	24.73	750.65	12.78	834.00	84.75	14.88	2.38
14	Kunnathukal Coconut Scheme	3	1973-74	500	20.25	273.25	4.53	202.28	125.53	5.70	2.48
15	Palghat Coconut Scheme	9	1974-75	2100	83.50	701.79	13.62	159.00	310.69	6.21	6.99
16	Tellicherry Coconut Scheme	7	1974-75	1000	40.00	480.25	8.95	432.00	302.79	8.61	5.79
17	Thaliparamba Payyannur Coconut Scheme	7	1974-75	1000	40.00	910.00	16.98	214.00	624.75	5.98	12.39
18	Kodakara Coconut Scheme	7	1974-75	200	8.00	103.75	2.10	63.00	41.12	1.68	1.19
19	Parakkadavu Coconut Scheme	7	1974-75	400	16.00	85.35	1.64	151.00	36.01	3.29	1.08
20	Badagara Coconut Scheme	7	1974-75	500	20.00	81.85	1.60	273.00	54.45	5.05	1.12
21	Kozhikode Coconut Scheme	7	1974-75	1500	60.00	118.83	2.00	250.00	106.08	4.50	1.85
22	Rubber Development Scheme in Thodupuzha-Muvattupuzha	9	1975-76	250	78.75	94.35	0.88	50.00	94.35	0.46	0.88
23	Do. Meenachil-Kanjirappally	9	1975-76	300	9.45	97.19	1.01	100.00	97.19	0.93	1.01
Total		..	..	21854	710.56516	160.86	306.10	4136.65	3201.20	156.53	82.09

*Schemes completed in 1975-76.

Source: Kerala Co-operative Central Land Mortgage Bank.

Education

4.43 During the academic year 1975-76, 89 students to the first year B.Sc. (Ag.) course in Agriculture, 21 students to the first year B. Sc. (Hort) Course, 43 students to the first year B. V. Sc. course and 50 students to the two year Certificate Course in Agriculture in the Rural Institute, Tavanur were admitted. (See Table 4.21). For the post-graduate programme 17 students to M. Sc., (Ag.) course in various disciplines

of the Faculty of Agriculture, 10 students to M. V. Sc. course in various disciplines of the faculty of Veterinary & Animal Sciences were admitted during the academic year. For the Doctoral Programme, 2 students in the faculty of Veterinary and Animal Sciences and 11 students in the faculty of Agriculture were admitted during the academic year. New post-graduate programmes in Agricultural Extension, Horticulture, Animal Husbandry Extension, Clinical Medicine (Therapeutics) Veterinary Public Health, Preventive

Medicine and Veterinary Pathology were started during the year. Added facilities by way of new buildings such as the Animal Science Block, Dairy and Poultry Corplex, reorganisation of library working hours, publications of journal abstracts were provided for teaching and research. A new post-graduate hostel

TABLE 4.21
Teaching Programme of the Kerala Agricultural University

Programme	Unit	1974-75	1975-76
(1)	(2)	(3)	(4)
<i>Graduate Programme:</i>			
Admission to B. Sc. (Agriculture)	Nos.	83	89
Admission to B. Sc. (Hort.)	"	20	21
Admission to B. V. Sc. & A. H.	"	44	43
Successful completion of B. Sc. (Ag.)	"	51	44
Successful completion of B. Sc. (Hort.)	"	Nil	19
Successful completion of B. V. Sc.	"	37	24
<i>Post-Graduate Programme:</i>			
Admission to M. Sc. (Agriculture)	"	10	17
Admission to M. V. Sc.	"	13	10
Admission to Ph. D. (Ag. Faculty)	"	18	11
Admission to Ph. D. (Vet. Faculty)	"	2	2
Successful completion of M. Sc. (Ag.)	"	..	19
Successful completion of M. V. Sc.	"	..	7
Successful completion of Ph. D.	"	..	..

Source:—Kerala Agricultural University.

block and new ladies' hostel block were opened during the year providing additional amenities to students. A new teaching and research complex comprising of three academic blocks, two hostels and an instructional farm is nearing completion in the Main Campus. Research projects on cashew, pepper and pineapple have been taken up in the Main Campus Farm. The Rural Institute, Tavanur was transferred to the University and became a constituent unit of the University. Two new courses, the certificate course in Agriculture and Training Course on Operation, Maintenance and Repairs of Farm Machinery were started at the Institute.

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Extension Education

4.44 The Extension Education activities of the University were considerably expanded during the year. Apart from continuing the ongoing programmes such as publication of periodicals, both popular and technical, information communication through mass media, organisation of seminars and workshops and advisory and consultative service, a number of new programmes in different disciplines and categories of personnel, correspondence course for farmers, regular and systematic information support programme for agricultural columns of newspapers, village adoption programme, technical assistance project for tribals and national demonstrations were taken up and implemented during the year. An Action Programme detailing the extension education activities was drawn up and implemented in collaboration with the Department of Agriculture and other agencies and organisations engaged in agricultural development.

4.45 For the proper and efficient organisation of training programmes, a Training Service was constituted with one Unit at the Mannuthy Campus and another Unit at the College of Agriculture, Vellayani. The curricula, syllabi, course outlines and evaluation schedules for the training programmes were drawn up with reference to specific training needs of the clientele. A total of 18 training programmes including inservice training specialised training in minikit trials, training in pest and disease surveillance, training in horticulture for school teachers, were organised during the year. A special training course in agriculture with special reference to cardamom cultivation was conducted for the field officers of the Cardamom Board. Special training programmes were also organised for personnel of the Co-operative Marketing Federation, Co-operative Societies and officers of the Accountant General's Office. A Refresher Training course for Senior Officers of the Department of Animal Husbandry was also started during the year. A pre-service training course for Livestock Assistants was organised at the Rural Institute, Tavanur.

4.46 Considering the broadening perspectives in the field of agricultural production and to widen the dissemination of agricultural technology, a series of training and information communication programmes were designed to provide basic and applied scientific knowledge in agricultural sciences to farmers. The correspondence course for farmers in Rice Production elicited considerable response from the farmers and about 425 farmers enrolled themselves for the first course. A significant effort of the University in extension education was the regular and systematic information support provided to leading newspapers in the publication of weekly agricultural column. The University contributed over 150 articles and notes for publication in the agricultural columns. This

programme ensuring regular agricultural information flow to newspapers has opened up new vistas in a crucial area of agricultural development in the State. One of the outstanding farmer training programmes organised was the massive programme of organising 800 training camps for farmers in all the districts of the State in support of the Agricultural Production Drive in collaboration with the Department of Agriculture. Apart from providing training to farmers, this programme also gave an opportunity to University Scientists to get acquainted with varied farming situations and field problems which helped them design research projects to find out solutions. The University has selected 10 villages in the State under the Village Adoption Programme. These Villages serve as field laboratories for testing new research findings and transfer of new technology and afford an opportunity to the scientists to tailor their findings to field farming situations and to gain valuable experience on the research support needed to solve current field problems. A special programme of technical assistance to tribals has been drawn up with reference to their backwardness and unique characteristics of their farming situations. This programme includes training of tribals in basic agricultural practices, specialised skills, establishment of training centres, demonstrations and technical advice and guidance in land use planning.

Research

4.47 Research efforts in support of the agricultural development of the State initiated by the University was vigorously pursued through its three constituent Colleges of Agriculture, Veterinary and Horticulture, and 22 research stations (17 for agricultural research and 5 for research on animal sciences) established in the different agro-climatic regions of the State. In addition to pursuing research projects initiated on its own, the University participated in 21 All India Co-ordinated Research Projects on agriculture, animal husbandry and fisheries. The University also collaborated in the research activities of the institutions located in the State under the Indian Council of Agricultural Research and the Commodity boards of Cardamom and Rubber. Several measures were taken to make research activities of the University more productive and problem oriented and to enable the research workers to get acquainted with field problems of immediate relevance. A number of conventions of farmers were organised, to identify areas requiring immediate research support to solve the production problems of the farming community. Research and extension advisory committees were constituted giving representation to various interest groups.

4.48 At present 720 research projects (627 in agriculture, 92 in veterinary and animal sciences and 1 in fisheries) have been undertaken by the University. All these years rice research has received the major attention of the University. Already substantial contributions

have been made in the evolution of high yielding varieties of rice reaching new heights in production potentials. A new direction has been given with the objective of evolving varieties having multiple resistance to pests and diseases. Management practices for increasing the efficiency of fertilizers have been developed. Manurial and cultural experiments to formulate appropriate management practices for the newly evolved high yielding varieties under different agro-climatic conditions intensive studies on the control of pests, diseases and weeds and in water management practices and cropping patterns in command areas are in progress. Special problems like iron and aluminium toxicity, micronutrient deficiency, water logging and continuous submergence have received attention of the research workers. Work is also in progress to develop varieties suitable for cultivation under shade, high altitude and saline areas.

4.49 Introduction of exotic varieties, measures to control of root (wilt) disease, yield potential inheritance, cultural and manurial aspects of different varieties, irrigation requirements are the major studies on coconut in progress. Research on banana has led to the evolution of effective and economic measures for the control of bunchy top disease. A number of promising hybrids involving indigenous and exotic types were produced in the cashew research stations of the University. Artificial pollination techniques for pepper have been standardised. Production of better intervarietal hybrids, determining the optimum cultural and manurial requirements of Panniyur-1, Control of spike shedding, slow and quick-wilt diseases, pollu disease and nematode control are the other major studies in progress on pepper. Investigations on the control of the major diseases of cardamom viz., 'Katte,' and 'azhukal' and the new disease 'chental' are in progress. Methods of storage of seed, fertilizer dosage, time of planting, weight of seed bits and spacing for ginger have been standardised. Studies on blossom biology, varietal testing, intervarietal hybridisation and trials on inter cropping of ginger are in progress. Investigations on the effective and economic control measures of african payal are making progress.

4.50 A number of studies were initiated under veterinary and animal sciences research. Studies on the utilization of various agricultural byproducts and industrial waste materials for animal feed has shown that tapioca starch waste can profitably be used to replace costly ingredients such as maize, tapioca chips etc. Much progress has been achieved in evolving new breeds of milch goats suitable for different climatic conditions and capable of giving higher milk yield by crossing Saannen and Alpine bucks with Malabari goats. Exotic breeds of pigs and poultry have been introduced to be used as genetic material for improving local breeds. A research project to develop appropriate techniques of brackish water fish culture has been initiated at Vyttila.

4.51. The Central Plantation Crops Research Institute (CPCRI) at Kasargode and the Central Tuber Crops Research Institute (CTCRI) at Trivandrum are the two All-India research institutes engaged in agricultural research under the Indian Council of Agricultural Research located in the State. Together with the sub-stations, these institutes provide substantial research support to the production of crops, especially coconut and tapioca, which are significant in the farm economy of the State.

4.52 Apart from the main station at Kasargode the CPCRI has in this state a regional station for coconut at Kayamkulam, and one for spices at Calicut (the farm is at Peruvannamuzhi) and two substations one each at Peechi in Trichur district and at Palode in Trivandrum District. The main functions of the Institute are: (1) conducting research in the different disciplines related to plantation crops; (2) guiding the research work carried out at the different regional and substations; (3) co-ordinating the research work on plantation crops done by the other institute, universities, and state departments of agriculture; (4) servicing the All India Co-ordinated Crop Improvement Projects on coconut, arecanut, spices and cashewnut; (5) serving as a centre of information on all matters relating to these crops; and (6) production of genetically superior planting materials in coconut, arecanut, cocoa, and cashew.

4.53 The work done so far by the CPCRI has enabled to develop a package of management practices for coconut and increasing the income earning capacity of coconut gardens through inter-cropping, irrigation and manurial practices. The devastating coconut disease which is spreading to more and more areas in the State over the years has received top priority in the research efforts of the Institute, and multi-disciplinary investigations on it were continued. Irrigation practices for arecanut and coconut, mixed cropping of cocoa in arecanut gardens; manurial practices for cashewnut, control of quick wilt diseases on pepper and varietal characteristics of coconut, arecanut, pepper and ginger were some of the more important studies pursued by the CPCRI.

4.54 An operational research project was launched in the villages at Muttathodi in Cannanore district and Krishnapuram in Alleppey district to understand the problems of transference of technology developed by the Institute.

4.55 The Central Tuber Crops Research Institute has already initiated a number of investigations to improve the yield of tapioca and other tuber crops, and also to increase the income of the farmers cultivating tuber crops. A number of high yielding hybrids of tapioca and sweet potato have already been released and more of them are in the process of evolution. Two varieties of tapioca have been put under minikit trials as pre-released varieties, and 3 strains have been

identified as high yielding. Studies have found that irrigation of the tapioca crop planted in October can increase the yield by four times. Other important areas of research include post-harvest technology and control of cassava (tapioca) mosaic disease. The Institute has launched a programme to control cassava mosaic disease by roguing out the infected plants on a mass scale through the involvement and co-operation of various development agencies and farmers. The Institute has succeeded in developing new high yielding varieties of sweet potato. The International Development Research Centre of Canada has come to the support of the Institute in strengthening and broadening its research capacity in establishing a viable and economic technique for disseminating cassava research findings to small farmers. An operational research project has been launched by the Institute in Vattiyurkavu Panchayat of Trivandrum district.

Plantations

4.56 Rubber, tea, coffee and cardamom which constitute the main plantation crops of Kerala have very great national importance—the first as an essential industrial raw material and the other three as major foreign exchange earners. These four crops occupy an area of about 3.35 lakh hectares which is about 11 per cent of the State's total cropped area.

Rubber

4.57 The rubber plantation industry in the country has made remarkable progress during 1975-76 both in respect of area and production. However the industry had to face rough weather as prices slumped to low levels. Between the years 1974-75 and 1975-76 the number of rubber growing units in India went up from 128,428 to 132,047 and the area from 2.21 lakh hectares to 2.24 lakh hectares. Out of the 1.32 lakh units, only 598 are large estates of above 20 hectares in size, and the remaining are small holdings (less than 20 hectares) which constitute 71 per cent of the total area under rubber in India. The extent of high yielding varieties comprised 1.64 lakh hectares in 1975-76 (73 per cent of the aggregate area) as against 1.60 lakh hectares (72 percent) in 1974-75.

4.58 Kerala accounted for 92 per cent of the area under rubber in the country. The State's share of the area in 1975-76 stood at 205,383 hectares compared to 202,318 hectares in 1974-75, the increase in area over the year being 3,065 hectares (1.5%). 75 per cent of the area comprised small holdings with an average size of 1.20 hectares. The rest of the area was under large estates. During 1975-76 the number of large holdings in Kerala decreased from 543 to 528 while the number of small holdings moved up from 124,540 to 128,050. The State-wise distribution of the rubber holdings and estates is shown in Table 4.22.

TABLE 4.22
State-wise Distribution of Area under Rubber (1975-76)

State	Total area (Hectares)	Holdings		Estates	
		No. of Units	Area (Hectares)	No. of units	Area (Hectares)
(1)	(2)	(3)	(4)	(5)	(6)
Kerala	205,383	128,050	153,380	528	52,003
Tamilnadu	11,498	3,158	4,868	45	6,630
Karnataka	6,585	227	480	20	6,105
Andaman & Nicobar Islands	878	..	..	4	878
Other Regions	84	14	54	1	30
Total	224,428	131,449	158,782	598	65,646

Source: Rubber Board

Of late, the large holdings in the State have been getting fragmented. Between 1970-71 and 1975-76, the number of large estates declined from 585 to 528 and their area from 55813 hectares to 52003 hectares. Recent trends in this regard are indicated in Table 4.23

TABLE 4.23
Trend in the Number and Area of Large Rubber Estates in Kerala

Year	No. of large holdings	Area (Hectares)
1970-71	585	55813
1973-74	560	53233
1974-75	543	52186
1975-76	528	52003

4.59 The production of natural rubber at the all-India level in 1975-76 was estimated at 137,750 tonnes as against 130,143 tonnes in 1974-75. The production of natural rubber in Kerala was 128,769 tonnes in 1975-76 compared to 121,558 tonnes in the previous year, registering an increase of 5% over the year. The State's share of the crop stood at 92.7% in 1975-76. The steady increase in production and productivity of rubber witnessed during the last few years was mainly due to various development schemes implemented by the Rubber Board and the price protection policy adopted by the Government. Important development schemes launched by the Rubber Board have been the conversion of low yielding uneconomic rubber plantations into high yielding plantations (re-planting subsidy scheme), distribution of fertilisers and fungicides at subsidised rates and subscribing share capital and working capital to the Rubber Marketing Co-operative Societies.

4.60 The consumption of rubber in India during 1975-76 was estimated at 177,486 tonnes, the share of natural rubber being 125,692 tonnes (71%), synthetic rubber 32,452 tonnes (18%) and reclaimed rubber 19,342 tonnes (11%). Compared to 1974-75 the level of consumption of all rubber in 1975-76 increased by 2410 tonnes (1.4%). The consumption of rubber in Kerala was estimated at 11,399 tonnes (ie. 6.4 per cent of the all India level). Of this, natural rubber constituted 9268 tonnes. The data on consumption of rubber are shown in Table 4.24.

TABLE 4.24
Consumption of Rubber—India (Tonnes)

Year	Country/ State	Natural Rubber	Synthetic Rubber	Reclaimed Rubber	Total consumption
(1)	(2)	(3)	(4)	(5)	(6)
1973-74	India	130,302	22,421	17,784	170,507
1974-75	India	132,604	24,376	18,096	175,076
1975-76	India	125,692	32,452	19,342	177,486
	Kerala	9,268	1,062	1,069	11,399

Source: Rubber Board

4.61 During the year 1975-76, there was no export of rubber. The internal consumption of natural rubber too went down considerably. The low offtake of natural rubber by manufacturers and consequent accumulation of stocks with the rubber growers led to a steady fall in the price of natural rubber. During October 1976, the price of natural rubber slumped to the lowest ever mark of Rs. 536 per quintal since 1974, creating a crisis in rubber plantation industry. The surplus of natural rubber at the end of 1975-76 was estimated at about 11,000 tonnes.

4.62 Steps are under way to procure the surplus by the State Trading Corporation and export a portion of this to foreign countries with a view to raising the rubber price to a reasonable level. The minimum price of Rs. 520 for a quintal of rubber fixed five years ago is considered to be not remunerative in the context of the present cost of production. Hence, minimum price of rubber has to be refixed taking into account the increase in the cost of production. A realistic assessment of the prevailing cost of the production of rubber is now being attempted so as to refix the floor price of rubber at an economic level.

4.63 The area under the State owned Plantation Corporation comprises 7065 hectares of rubber plantations and 1150 hectares of oil palm plantations. Besides there are also some area under Cashew and Eucalyptus. The Corporation has drawn up a programme for raising additionally 230 hectares under rubber and 390 hectares under cashew. This is under implementation. Of the rubber plantations,

the area under tapping at the end of March 1976 was 5445 hectares as against 5247 hectares in March 1975. The production of rubber by the Corporation during 1975-76 stood at 5088 tonnes. The Corporation has set up a plant to process its rubber into crumb rubber, smoked sheet, centrifuged latex, crepe and brown crepe. A Pale Latex Crepe Factory in Kallala Estate is being set up to process the rubber produced in Kalady Group Estates.

Tea

4.64 The estimate of all India production of tea was 487,137 tonnes in 1975 as against 489,475 tonnes in 1974, the percentage decrease over the year being 0.5. The State accounts for 10 per cent of the area under tea in the country. In 1975, the area under tea in Kerala stood at 36,347 hectares as against 36,907 hectares in the previous year. Even though there was a decrease in area during 1975, production of tea in the State went up from 42161 tonnes in 1974 to 43215 tonnes in 1975, registering an increase of 1054 tonnes (2.5%). This could be achieved as a result of increase in productivity over the year.

4.65 In Kerala the average yield per hectare of tea gardens stood at 1189 Kg. in 1975 as against 1142 Kg. in 1974 and 1209 Kg in 1973. At the national level, it was 1342 Kg. in 1975 compared to 1353 Kg. in 1974 and 1311 Kg. in 1973. Tamil Nadu had the highest level of productivity in 1975 at 1704 Kg. followed by Karnataka 1630 Kg., Assam 1393 Kg. and West Bengal 1260 Kg.

4.66 State wise data relating to the area, production and productivity of tea are given in Appendix 4.8.

4.67 Among the tea producing countries in the world, India continued to be the largest producer of tea contributing to about 48% in 1975. Sri Lanka which stood next in the list accounted for 22% of the world crop. In exports too, India continued to dominate in 1975. Her exports of tea in 1975 reached 218128 tonnes as against 210,588 tonnes in 1974, registering an increase of 3.5 per cent over the year.

Coffee

4.68 Karnataka, Kerala and Tamil Nadu are the principal coffee producing states in the country. These three states together account for 99 per cent of the total coffee plantations in India. The estimate of area under coffee in India according to Coffee Board went up from 155,267 hectares in 1973-74 to 156,138 hectares in 1974-75.

4.69 The State accounts for about 23% of the area under coffee plantations at the national level. The estimate of planted area under coffee plantations in the State, according to Coffee Board, was 36,801 hectares in 1974-75 as against 38,814 hectares in 1973-74, over

the year the area declined by 5 per cent. The total holdings numbered 24,127 out of which as many as 17,502 (72.5%) were holdings of 10 hectares and below. Arabica and Robesta are the two varieties cultivated and the latter covers 91 per cent of the total area under coffee.

4.70 The State's share of the all India production of coffee is estimated to be about 11.5%. The estimate of production for Kerala in 1974-75 stood at 10,775 tonnes as against 16,502 tonnes in 1973-74, registering a decrease of 35% over the year. The drastic fall in production during 1974-75 was mainly due to the unfavourable climatic conditions prevailed during the year. However, the provisional estimate of production of coffee for the State in 1975-76 showed an upward trend, the estimate being 14,395 tonnes showing an increase of 3620 tonnes (33.6%) over the previous year.

4.71 World production of coffee also declined during 1975 mainly because of the frost in Brazil and earthquake in Guatemala. The decrease in world production subsequently led to a substantial increase in the world price of coffee since July 1975.

4.72 Sale prices of coffee realised from the pool auctions both for internal and export markets during 1975 and January-August 1976 are shown below:

Grades	Price in Rs. per 50 kg. exclusive of Central Excise duty	
	1975	1976 January-August
Plantation	441.35	737.65
Arabica cherry	454.12	635.95
Robesta cherry	378.20	664.85

4.73 The export of coffee from India was 59,386 tonnes valued at Rs. 66.65 crores in 1975-76 as against 49,467 tonnes valued at Rs. 51.36 crores in 1974-75 registering 20% increase in quantity and 30 per cent increase in value.

Cardamom

4.74 Cardamom, the 'Queen of Spices', is one of the important plantation crops of Kerala. The area under cardamom at the national level is estimated to be 91,476 hectares in 1975-76, Kerala accounting for about 60 per cent of this. Karnataka and Tamil Nadu are the two other cardamom cultivating States and they together contribute the rest of the area under cardamom in the country.

4.75 The estimate of area under cardamom in the State during 1975-76 stood at 55,188 hectares as against 47,000 hectares in 1974-75, registering an increase of 11.7 per cent over the year. In Kerala 52,058 hectares

have been registered under the Cardamom Registration Act covering 98 per cent of the area under cardamom in the State. The distribution of plantations according to size of holdings registered with the Cardamom Board in 1975-76 is shown in Table 4.25.

TABLE 4.25
Distribution of Registered Cardamom Estates according to Size of Holdings in Kerala and India in 1975-76

Size of Holdings	Kerala		India	
	No. of estates	Area (acres)	No. of estates	Area (acres)
(1)	(2)	(3)	(4)	(5)
0- 5 acres	9817	24899	16216	37995
5-10 "	2969	20530	4555	31094
10-20 "	1845	24952	2554	34201
20-50 "	755	21489	1100	31782
50-100 "	153	9658	255	16090
100 acres and above	104	22828	192	49289
Total	15643	124356	24872	200451

4.76 The number and the area of cardamom estates both at the State and national levels showed an increasing trend in the past. The cardamom plantations are mostly small holdings (less than 20 acre size). They constitute as many as 93 percent of the plantations at the all India level and covered 51 per cent of the area. In Kerala also the small holdings comprised 93 per cent of the plantations having 57 per cent of the area under cardamom. Large estates of 100 acres and above constituted 1% of the plantations in Kerala and covered 18% of the cardamom area.

4.77 The production of cardamom at the national level rose from 2700 tonnes in 1974-75 to 3000 tonnes in 1975-76 registering an increase of 300 tonnes (11 per cent) over the year which is the third best crop during the last decade. Even though the production of cardamom at the national level showed an upward trend during 1975-76, the share of Kerala remained steady. In 1975-76 the State's share of cardamom production was estimated at 2050 tonnes. The export of cardamom from India during 1975-76 was of the order of 1900 tonnes which was the second best during the last decade and the total export earnings from cardamom reached the all time high record of Rs. 19 crores during 1975-76.

Land Reforms

4.78 The various land laws promulgated in Kerala during the last fifteen years are intended to ensure a better social and economic milieu by way of improving economic plight of the poorer sections of the community and modernising and restructuring the agrarian system. The Kerala Land Reforms Act, 1963, (the K.L.R. Act)

one of the most comprehensive enactments ever attempted in the country, was partly put into force from 1-4-1964. The original Act was subjected to a series of amendments in 1969, 1971 and 1972 to enlarge its scope and content. The Amendment Act of 1969 specified the extent of land which a Kudikidappukaran (hutment dweller) is entitled to purchase. Section 72 of the Act provides for the automatic vesting in Government of landlords' and intermediaries' rights and titles on tenanted lands. The amended act of 1971 simplified the procedure for the disposal of tenancy cases while that of 1972 provided for popular participation in the implementation of the Land Reforms Act. The constitution of the Taluk Land Boards with official and non-official members facilitated the decentralisation of the functions of the Land Board in the implementation of the ceiling provisions. This Act was again amended in 1974 and 1976 to enable the Taluk Land Boards to function even without the non-officials and also to remove the difficulties in the implementation of certain provisions of the Act.

4.79 As a result of the K.L.R. Act, full ownership in respect of the tenanted land was conferred on the cultivating tenants subject to the provisions on ceiling and the tenants were brought into direct relationship with the Government duly abolishing the landlords' and intermediaries' rights on such lands. Till the end of December 1976, a total number of 31.49 lakh applications had been filed for getting the assignment of right, title and interest of ownership of tenancy holdings compared to 20.19 lakhs applications at the end of December 1975. Of these, the cases disposed of till the end of December 1976 stood at 26.01 lakhs (82.6 per cent). The total disposals included 18.20 lakhs of allowed cases and 4.63 lakhs of rejected cases. The remaining disposals are cases of a repetitive nature having already been disposed of under any of the other categories like suo-moto and joint application. The certificates of purchase issued to tenants numbered 12.82 lakhs till the end of December 1976. The data relating to total number of applications received, disposals and certificates issued are given in Appendix 4.9.

4.80 Fixation of ceiling on land holdings and take-over of surplus land are important provisions laid down in the Land Reforms Act. The total number of ceiling returns filed by the end of December 1976 amounted to 45,516 while the disposals numbered 36,834 returns. The estimate of the extent of land declared as surplus stood at 106,430 acres out of which the extent of area taken possession comprised 52,083 acres (48.9 per cent). The process of taking possession of surplus land has been delayed primarily on account of court proceedings. The extent of area thus affected by stay orders from court comprised 34,475 acres. By the end of December 1976; 26,270 acres of surplus land had been distributed as

against 8656 acres in the previous year. A part of the remaining area (ie. 7870 acres) has been partly reserved for public purposes and partly managed by the Kerala Plantation Corporation and Agriculture Department. The distribution of surplus land has so far benefited 39,449 persons. These beneficiaries include 14,665 persons belonging to Scheduled Castes and 2,789 of those belonging to Scheduled Tribes. Details on ceiling returns filed, decided and area involved are furnished in Appendix 4.10

4.81 Till the end of December 1976, 4.02 lakh applications were filed before the Land Tribunals for the purchase of Kudikidappu rights, out of which 2.48 lakh applications were allowed and 1.33 lakh applications were rejected. 2.10 lakh certificates of purchase were issued till the end of December 1976. Details of applications received, disposals and certificates issued are furnished in Appendix 4.9.

4.82 Apart from the implementation of the K. L. R. Act, a number of other legislations relating to assignment and distribution of land have been enacted and are being implemented for promoting the welfare of landless and agricultural workers and other weaker sections of the community. These legislations include the Jenmikaram Payment (abolition) Act, Kanam Tenancy (abolition) Act., the Sreepadom Lands Enfranchisement Act, Sree Pandaravaka Lands (Vesting and Enfranchisement) Act, Thiruppuvaram Payment (abolition) Act, Edavagai Rights Abolition Act, the Pattazhi Devaswom Lands Act, the Kannandevan Hills (Resumption of lands) Act, Government Land Assignment Act, Arable Forest Land Assignment Rules, Assignment of Land under the Scheme for Settlement of Agricultural Labourers and the Assignment of Vested Forest Lands Act.

4.83 Under the Kerala Land Assignment Act, Government lands have been classified into two categories viz. land required for Government purpose and land available for assignment. The total extent of Government land available for assignment is estimated to be 4.03 lakh acres, of which 3.51 lakh acres have been assigned upto 31-12-76. Over 52,000 acres are available for further distribution. The beneficiaries of the Kerala Land Assignment programme comprised 3.70 lakh families of which as many as 73,000 belonged to the Scheduled Castes and Tribes.

4.84 The extent of forest area available for assignment under the Arable Forest Land Assignment Rules is estimated to be 17,287 acres. Between January 1970 and December, 1976 10,880 acres of arable forest land have been distributed. The allottees of forest land comprised 8434 persons of whom 3682 belonged to Scheduled Castes and Scheduled Tribes.

4.85 The private forests in the State have been taken over by the Government as per Kerala Private Forest (Vesting and Assignment) Act, 1971. The extent of land available for assignment is estimated to be about 1.5 lakh acres. Steps are under way for the assignment of these lands to indigent families.

4.86 The Kerala Agricultural Workers Act, 1974, envisages providing security of employment, fixation of working hours, payment of reasonable rates of wages, fair settlement of disputes of the agricultural worker and provident fund for agricultural workers. Excepting the provisions relating to Agricultural Workers Provident Fund Scheme, the other provisions of the Act came into being with effect from 2-10-1975. The registration of agricultural workers was started during 1975-76. Upto the end of March 1976, a total number of 1.64 lakh agricultural workers were registered under the Act. The district-wise registrants are as shown in Table 4.26.

TABLE 4.26

District-wise Registrants of Agricultural Workers

District	No. of agricultural workers registered till 31-3-1976
Trivandrum	2200
Quilon	1881
Alleppey	51843
Kottayam	6444
Idukki	1190
Ernakulam	12235
Trichur	13618
Palghat	54840
Malappuram	4611
Kozhikode	8547
Cannanore	6576
Total	163985

Conciliation Officers (District Labour Officers and Deputy Labour Officers) were appointed with executive powers to conciliate in disputes and to decide the 'prescribed wages' in kind and recover the same from defaulting land owners by removing the harvested paddy at the threshing floor. 11 Agricultural Tribunals—one in each district—have been posted to hear appeals on any order passed by the conciliation officers under Section 20 of this Act. At the State level, the enforcement of the Act is supervised by a Deputy Labour Commissioner under the direction and control of Labour Commissioner. Assistant Labour Officers have been notified as the Inspecting Officers for the purpose of enforcement the Act, particularly in the maintenance of necessary register by the land owners. Between October 1975. and March 1976, 3602 inspections have been conducted. Action is being taken against defaulting land owners.

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4.81 Till the end of December 1976, 4.02 lakh applications were filed before the Land Tribunals for the purchase of Kudikidappu rights, out of which 2.48 lakh applications were allowed and 1.33 lakh applications were rejected. 2.10 lakh certificates of purchase were issued till the end of December 1976. Details of applications received, disposals and certificates issued are furnished in Appendix 4.9.

4.82 Apart from the implementation of the K. L. R. Act, a number of other legislations relating to assignment and distribution of land have been enacted and are being implemented for promoting the welfare of landless and agricultural workers and other weaker sections of the community. These legislations include the Jenmikaram Payment (abolition) Act, Kanam Tenancy (abolition) Act., the Sreepadom Lands Enfranchisement Act, Sree Pandaravaka Lands (Vesting and Enfranchisement) Act, Thiruppuvaram Payment (abolition) Act, Edavagai Rights Abolition Act, the Pattazhi Devaswom Lands Act, the Kannandevan Hills (Resumption of lands) Act, Government Land Assignment Act, Arable Forest Land Assignment Rules, Assignment of Land under the Scheme for Settlement of Agricultural Labourers and the Assignment of Vested Forest Lands Act.

4.83 Under the Kerala Land Assignment Act, Government lands have been classified into two categories viz. land required for Government purpose and land available for assignment. The total extent of Government land available for assignment is estimated to be 4.03 lakh acres, of which 3.51 lakh acres have been assigned upto 31-12-76. Over 52,000 acres are available for further distribution. The beneficiaries of the Kerala Land Assignment programme comprised 3.70 lakh families of which as many as 73,000 belonged to the Scheduled Castes and Tribes.

4.84 The extent of forest area available for assignment under the Arable Forest Land Assignment Rules is estimated to be 17,287 acres. Between January 1970 and December, 1976 10,880 acres of arable forest land have been distributed. The allottees of forest land comprised 8434 persons of whom 3682 belonged to Scheduled Castes and Scheduled Tribes.

4.85 The private forests in the State have been taken over by the Government as per Kerala Private Forest (Vesting and Assignment) Act, 1971. The extent of land available for assignment is estimated to be about 1.5 lakh acres. Steps are under way for the assignment of these lands to indigent families.

4.86 The Kerala Agricultural Workers Act, 1974, envisages providing security of employment, fixation of working hours, payment of reasonable rates of wages, fair settlement of disputes of the agricultural worker and provident fund for agricultural workers. Excepting the provisions relating to Agricultural Workers Provident Fund Scheme, the other provisions of the Act came into being with effect from 2-10-1975. The registration of agricultural workers was started during 1975-76. Upto the end of March 1976, a total number of 1.64 lakh agricultural workers were registered under the Act. The district-wise registrants are as shown in Table 4.26.

TABLE 4.26
District-wise Registrants of Agricultural Workers

District	No. of agricultural workers registered till 31-3-1976
Trivandrum	2200
Quilon	1881
Alleppey	51843
Kottayam	6444
Idukki	1190
Ernakulam	12235
Trichur	13618
Palghat	54840
Malappuram	4611
Kozhikode	8547
Cannanore	6576
Total	163985

Conciliation Officers (District Labour Officers and Deputy Labour Officers) were appointed with executive powers to conciliate in disputes and to decide the 'prescribed wages' in kind and recover the same from defaulting land owners by removing the harvested paddy at the threshing floor. 11 Agricultural Tribunals—one in each district—have been posted to hear appeals on any order passed by the conciliation officers under Section 20 of this Act. At the State level, the enforcement of the Act is supervised by a Deputy Labour Commissioner under the direction and control of Labour Commissioner. Assistant Labour Officers have been notified as the Inspecting Officers for the purpose of enforcement the Act, particularly in the maintenance of necessary register by the land owners. Between October 1975. and March 1976, 3602 inspections have been conducted. Action is being taken against defaulting land owners.

4.87 The agrarian reforms in Kerala have benefited over 3.1 million persons till the end of December 1976. The beneficiaries include nearly 94,100 persons belonging to Scheduled Castes and Tribes. The Agricultural Workers Act would benefit 2 million agricultural labourers in the State. The number of beneficiaries covered by the various land legislations is shown in Appendix 4.11.

Animal Husbandry

4.88 Livestock development has a crucial role to play in rehabilitating the rural economy of the State. Besides providing employment to the rural poor, it helps augment supply of protective foods such as milk, meat and egg. As a result of the multi-pronged efforts of the Government for cattle breeding, fodder production, milk marketing and veterinary aid, the supply of livestock products has increased considerably. The estimate of milk production in the State has gone up from 4.40 lakh tonnes in 1974-75 to 4.80 lakh tonnes in 1975-76 yielding a per capita daily availability of 57 g. of milk as against 52 g. in the previous year.

4.89 The Animal Husbandry Department, Dairy Development Department and the Indo-Swiss Project have been implementing programmes of cross-breeding for upgrading the existing cattle stock of the State. The Animal Husbandry Department carried out artificial insemination work through Intensive Cattle Development Blocks, Key Village Centres and Veterinary Hospitals. A total number of 4.0 lakhs artificial inseminations were conducted during 1975-76 compared to 4.20 lakhs inseminations in 1974-75. The calves born to the inseminations done were 25 per cent in 1974-75 compared to 22 per cent in 1973-74. Under the cattle development programme a Jersey Breeding cum cross-breed farm has already started functioning at Vithura in Trivandrum District. The construction work of office buildings and quarters is in progress and the animals bought and kept at Kolahalamedu for this farm have been transferred to Vithura. Fodder cultivation in about 50 acres has been started. The Indo-Swiss Project continued its activities of cattle breeding and fodder development programme during 1975-76.

4.90 With a view to co-ordinating the work of upgrading the quality of the cattle stock in the State an autonomous body (The Kerala Livestock Development and Milk Marketing Board) fully owned by the State Government was set up in 1975 with headquarters at Trivandrum. The authorised capital of the Board is Rs. 5 crores. The Board has been made the sole agency for implementing the cross-breeding programme and dairy development programme in the State. For the effective implementation of the cross-breeding and dairy development programme, all the dairy and chilling plants the Indo-Swiss Project, Dhoni Bull

Station and the L. & P Feed Factory, Malampuzha were brought under the control of the Board in April 1976.

4.91 The infrastructure facilities set up for milk processing and milk marketing comprise 6 dairy plants (Trivandrum, Ernakulam, Kottayam, Palghat, Calicut and Alleppey) and 13 milk chilling plants. The total handling capacity of the dairy plants is 51000 litres per day and that of the chilling plants 31200 litres per day. The milk handled by the dairy plants in 1975-76 was 133.77 lakh litres, the utilisation of installed capacity being 72 per cent. The milk handled by the chilling plants constituted 41.65 lakh litres, the capacity utilised being 37 per cent.

4.92 The Veterinary institutions in Kerala in April 1975 comprised 69 veterinary hospitals, 295 dispensaries, 11 mobile dispensaries and 123 sub centres and first aid centres. In 1975-76, 12 veterinary dispensaries were newly opened and 22 dispensaries were upgraded into full fledged veterinary hospitals. Also 1 mobile dispensary started functioning during 1975-76. Nearly 18 lakh cases of diseases of animals and 5 lakh cases of poultry were treated in various veterinary institutions in the State during 1974-75.

4.93 The estimate of egg production stood around 960 million in 1975-76. A part of this was sent to regions outside Kerala and the rest consumed within the State.

Fisheries

4.94 The performance of the fisheries sector in 1975-76 showed mixed trend. While production remained almost static, sea food export earnings moved up during the year. However, the relative importance of the State fisheries vis-a-vis the national fisheries declined in 1975-76. The estimate of sea fish production stood at 4.21 lakh tonnes in 1975 compared to 4.20 lakhs tonnes in 1974. The State's share of national marine fish production which was 34.5 per cent in 1974 declined to 29.6 per cent in 1975.

4.95 The exports of sea food products from Kerala reached 31,683 tonnes valued at Rs. 67.62 crores in 1975-76, registering an increase of 6403 tonnes (25%) in quantity and Rs. 28.04 crores (71 per cent) in value over the previous year. The State's share of the all-India sea food export trade in terms of quantity increased from 56 per cent to 58 per cent in 1975-76. The share of value on the other hand declined from 58 per cent to 54 per cent during the year as the export earnings from marine products at the national level increased at a faster pace. The all-India sea food export trade in 1976 (January - December) has been commendable registering an all time record of Rs. 180 crores as against Rs. 105 crores in 1975.

4.96 The State income from fisheries was computed at Rs. 56.60 crores in 1974-75 as against Rs. 45.59 crores in 1973-74. The percentage share of the sector to the total regional income stood at 2.9 per cent in 1974-75 compared to 2.6 per cent in the previous year.

4.97 The principal marine species in the fish landings (1975) comprised oil sardine 97200 tonnes (23%), other sardines 33,700 tonnes (8%), mackerel 14,900 tonnes (4%), prawns 78,000 tonnes (19%), cat fish 32,600 tonnes (8%), sciaenids 16,800 tonnes (4%) and ribbon fish 15,200 tonnes (4%). Kerala accounted for 54 per cent of the non-penaeid prawns (export varieties) and 61 per cent of the oil sardine landed in the country in 1975. The species-wise landings data are given in appendix 4.12.

4.98 Of the total quantity of 23,200 tonnes of inland fish landed in 1975-76, prawns accounted for 4032 tonnes (17%), etroplus 3031 tonnes (13%) murrels 2859 tonnes (12%), tilapia 2691 tonnes (12%) cat fish 2165 tonnes (9%), mullets 1979 tonnes (9%), jew fish 1554 tonnes (7%) and the rest miscellaneous species like crab, barbus, labio, mrigala, catla and carpio.

4.99 The net availability of fish for domestic consumption in 1975-76 was about 3.37 lakh tonnes as against 3.48 lakh tonnes in the previous year. This is after making necessary adjustments towards foreign exports and other disposals. The other disposals include fish wastes as well as fish converted into fish meal, oil etc., which are computed at 10 per cent of the total landings. The estimated population for 1975 stood at 232.2 lakhs compared to 227.5 lakhs in 1974. The percapita supply of fish declined from 15.3 kg. to 14.5 kg. over the year.

4.100 The marine fishing sector supports about 25,000 traditional fishing craft and 2000 mechanised fishing boats. The industry provides employment for about 110,000 active fishermen and an almost equal number in fish processing, marketing, net making and other allied activities.

4.101 The Kerala Fisheries Corporation continued its efforts at making its operations commercially more viable. All the uneconomic units have already been dispensed with. The Pudiappa-Puthiangadi ARC sponsored fisheries project near Kozhikode, started as model co-operative venture, was organised under a project officer to spear-head controlled fishing by mechanised boats with supporting programme for marketing the catches. A similar project has also been set up at Vypeen. But the performance of the Vypeen Project has been discouraging. However, two more units are being organised at Anjengo and Parappanangadi on the model of the Pudiappa Project. The Projects would need a lot of organisational improvements for close supervision in fishing as well as handling and marketing of catches for promoting their efficiency in implementation.

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4.102 The performance of the co-operatives in the fisheries sector has been far from satisfactory. The primary societies handling mechanised boats mostly work on loss. A number of societies have been placed under liquidation. At the end of 1975-76, there were 899 fishermen co-operatives in the State as against 1057 in 1974-75. The number of credit societies declined from 189 to 153, producer co-operatives from 849 to 728 and fish marketing societies from 19 to 18. The producer societies had a membership of 64,562 as against 71,906 in the previous year. All the societies together had a paid up share capital of Rs. 75.18 lakhs in 1975-76 registering an increase of Rs. 16.56 lakhs (28%) over the previous year. This increase was mainly the result of the enhancement of the share capital of the marketing societies. The producer societies in fact showed a fall in the share capital from Rs. 21.25 lakhs in 1974-75 to Rs. 20.19 lakhs in 1975-76. The details relating to fishermen co-operatives in Kerala are given in appendix 4.13.

4.103 The marine fishery resources of Kerala sprawl over a total fishable area of 38,100 sq. km. comprising inshore, offshore and deep sea regions of the continental shelf. Fishing at present is confined mostly to the inshore region leaving the vast offshore and deep sea bounties unexploited. The offshore grounds extending from 20 m. to 75 m. depth imbibe rich fishing grounds for bottom fishes like threadfin breams, pomfrets, jew fishes, perches and shark and rays. The deep sea area within the continental shelf extends from 75 m. to 180 m. depth. Exploratory fishing conducted by the vessels of the Integrated Fisheries Project, Cochin shows that this region is strewn with rock out-crops that support a rich perch fishery. Fishing with handlines from dories working from a mother vessel can be profitable here. In depth zones ranging from 100-200 metres, extensive fishing grounds which can sustain trawl fishing for pink perch, lizard fish, breams, etc., are available. The slope beyond the continental shelf off Quilon upto 450 m. depth offers good fishing grounds for deep sea prawns, lobsters and fish. The Wadge Bank, the well known fishing ground of world fame, which is only 60 km. south of Vizhinjam is now within our territorial waters by virtue of the 320 km. economic sea limit agreed upon by the maritime nations of the World. Experimental fishing conducted by the Integrated Fisheries Project in 1975-76 in this area yielded an average return of 130 kg/hour which comprised mostly perches.

4.104 The project reports prepared for the integrated development of Vizhinjam, Neendakara and Beypore harbour projects seeking World Bank assistance in 1975 augur well for the seafood export industry of the State.

4.105 As the economy of the traditional fishermen continues to be poor Government have appointed a committee to study their problems and suggest

remedial measures for promoting their economic activities and social welfare. The setting up of a Welfare Board is considered to be useful to attract institutional finance for the purchase of fishing equipment, construction of houses, etc., in view of the fact that the fishermen co-operatives in the past could hardly do much for the benefit of the ordinary fishermen.

Forests

4.106 According to the Department of Forests, the actual area available as forests is 8.99 lakh hectares constituting over 23 per cent of the geographical area of the State. The division-wise area of forests as on 31-3-1975 is furnished in appendix—4.15.

4.107 The forests in Kerala comprise two types, the natural forests and the man-made forests (forest plantations). The natural forests account for as much as 86% of the area, the rest being man-made. The extent of forest plantations in the State in 1975-76 has been 126, 543 hectares as against 123,048 hectares in 1974-75, registering an increase of 3495 hectares (2.8%) over the year. The plantations mainly consist of 63824 hectares of teak, 32090 hectares of Eucalyptus, 20021 hectares of softwood, 2995 hectares of cashew, 1190 hectares of rubber and 6423 hectares of other plantations viz., junglewood (hardwood), wattle, mahogany, bamboo, cardamom etc. The species-wise break up of the forest plantations under the Department at the end of March 1976 is furnished in appendix 4.16.

4.108 Timber, firewood, charcoal, cardamom, honey, wax, rattans, bamboos and sandalwood are the important forest produce of Kerala. The out-turn of timber registered a remarkable increase during 1975-76. The production of timber roundlogs increased from 4.52 lakh cum. in 1974-75 to 6.40 lakh cum. in 1975-76 and that of timber-round poles from 8.13 lakhs (numbers) to 11.59 lakhs (numbers) during the same period, registering 42% and 43% increases over the year respectively. But on the other hand, the production of timber decreased slightly from 2.38 lakh tonnes in 1974-75 to 2.19 lakh tonnes in 1975-76, the decrease over the year being 8 per cent. The production of cardamom increased from 7 tonnes to 10.5 tonnes and that of bamboos from 3.81 lakh numbers to 5.15 lakh numbers during 1975-76. The production of minor forest produce like honey, wax and

sandalwood maintained a mixed trend during 1975-76. While the production of wax almost doubled to 760 kg. the production of honey declined slightly from 29,995 kg. to 26,625 kg. The details are furnished in appendix 4.17.

4.109 The net revenue from forests which stood at Rs. 18.17 crores in 1974-75 increased to Rs. 21.92 crores in 1975-76 registering an increase of 20.6 per cent over the year. The details are given in appendix 4.18. The sale proceeds of timber roundlogs, timber round poles and other forest produce increased considerably during the period under report, despite a fall in the production of certain items like firewood, charcoal and livestock.

4.110 A Forest Development Corporation for Kerala was set up in 1975 with the objective of raising plantations in an area of 44500 hectares (40900 hectares with pulpwood and 3600 hectares with match wood) within a period of 10 years and to take over the management of 17,700 hectares of existing plantations (15400 hectares of pulpwood and 2300 hectares of matchwood) from the Forest Department. The Corporation has already formulated a project report for this purpose. The investment plan envisaged an outlay of Rs. 10 crores spread over a period of 10 years. The finance required for this project is expected to be met by the State and Central Government and by the Agricultural Refinance and Development Corporation. The annual physical target of the Corporation is set at 4300 hectares. In the first year the Corporation could plant only 500 hectares on account of certain initial difficulties. The Corporation has already taken over 145 hectares of existing cardamom plantations from the Forest Department for management. The Corporation has set up two Regional Offices, one at Trivandrum and the other at Punalur with a view to promoting speedy implementation of its programmes.

4.111 About one third of the 1.4 lakh hectares of private forests vested with the Government is reported to be available for assignment. The assignees have to follow the crop pattern recommended by the expert committee in this regard. The priority in assignment is given to the tribals in the forests. The land is proposed to be given only to co-operatives and not to individual families.

IRRIGATION AND POWER

Irrigation

It has been possible to extend irrigation support to nearly 12,900 hectares of land enabling to crop a gross area of 25,100 hectares during 1975-76; out of which the contribution of major and medium irrigation projects was 9000 hectares and the rest that of minor irrigation projects

Major and Medium Irrigation Projects

5.2 During the Fifth Five Year Plan, four new irrigation projects were taken up while there were already seven on going projects. These projects are under various stages of implementation and their status is presented in Table 5.1

5.3 Development of irrigation has assumed importance with the added emphasis on augmenting agricultural production in the country. The national

goal is to bring five million hectares of land under irrigation during the Fifth Five Year Plan. The State's share is 1.11 lakh hectares (gross). This objective is sought to be achieved by completing major portions of Chitturpuzha, Kuttiyadi, Periyar Valley and Pamba Irrigation Projects; and by partially commissioning Kanhirapuzha and Pazhassi Irrigation Projects. Detailed schedules have been drawn up to attain the targets. The estimated cost of the seven on-going projects when completed would amount to Rs. 194.56 crores. During 1975-76 an additional area of 9000 hectares has been brought under irrigation. Expansion in area irrigated has come from Chitturpuzha Project (5,300 hectares) followed by Kuttiadi (1,400 hectares) Periyar Valley (1,300 hectares) and Pamba (1,000 hectares). Out of the six new schemes stated to be taken up during the Fifth Five Year Plan, four

TABLE 5.1

Major Irrigation Projects in Kerala

Name of Project (1)	Command area (hectare)		Area benefited-cumulative till the end of 1975-76 (Hectares)		Investment (Rs. in lakhs) (6)
	Net (2)	Gross (3)	Net (4)	Gross (5)	
I. Continuing Projects	17806	41683	979	2937	1099.88
1. Pamba					
2. Kallada	52610	105220	..	..	815.42
3. Periyar Valley	32800	85600	17023	44189	983.68
4. Chitturpuzha	17287	32550	11218	21000	381.65
5. Kanjirapuzha	9720	21868	..	..	467.79
6. Kuttiadi	14569	31161	3024	7910	1614.72
7. Pazhassi	16189	32374	..	..	646.30
Total	160979	350456	32244	76036	6009.44
II. New Schemes					
1. Moovattupuzha	17400	52200	..	..	14.17
2. Chimoni	13000	26000	..	..	3.47
3. Attappadi	4323	6200	..	..	17.11
4. Karapuzha	4650	9300	..	..	22.73
Total	39373	93700	..	..	57.48

Source: Chief Engineer, (Projects)

schemes viz. Attappady, Karapuzha, Muvattupuzha and Chimoni have been already taken up. Investment on these projects during 1975-76 amounted to Rs. 30 lakhs.

Minor Irrigation

5.4 It has been possible to bring 3915 hectares of land under minor irrigation benefiting a gross area

of 4,500 hectares. Of this, the contribution of surface irrigation has been 3497 hectares and that of lift irrigation 419 hectares (See Table 5.2). These projects involved an investment of Rs. 161.9 lakhs. Apart from the projects executed by the Department of Irrigation, the Department of Agriculture assisted in bringing additional area under irrigation through supply of pumpsets to Panchayats. A major effort

has been initiated to develop the ground water potential. Initiation of ground water survey and installation of filter points and tube wells were some of the activities initiated under the ground water exploitation programme.

TABLE 5.2
Minor Irrigation Programmes in Kerala 1975-76

Classification of the Project	Area benefited (hectares)		Amount invested (Rs. in lakhs)
	Net	Gross	
I. Minor Irrigation			
1. Minor Irrigation Class I	3915	4449	169.098
2. Minor Irrigation Class II			
3. Lift Irrigation			
4. Yela Programme			
5. Deepening of Wells and Tanks	Nil.	Nil.	0.361
6. Other Expenditure	Nil.	Nil.	0.216
Total	3915	4449	169.675
II. Anti sea Erosion in Km.	15.261Km.	..	110.295
III. Flood Control	726.59 Hect.	..	47.008
IV. I.W.T. (State)	Nil.	Nil.	4.807
V. I.W.T. (Central)	Nil.	Nil.	44.939
VI. Thanneermukkom	Nil.	Nil.	25.995
Total	..	..	402.719

Source: Chief Engineer, Minor Irrigation.

5.5 Considering the enormous potential for the exploitation of both surface and ground water through minor irrigation projects and their quick maturing nature, a massive effort for their development has been launched in the State with the participation of the beneficiary farmers. The projects proposed to be taken up under this programme fall in the category of Class II Minor Irrigation works each costing less than Rs. two lakhs and benefiting more than two hectares. Fifty per cent of the cost of the project would be met by the Government while another twenty five per cent would be provided by CARE in the form of food; the remaining twenty five per cent representing the contribution by the beneficiaries. The beneficiary farmers have to form an association and get it registered under the Society's Registration Act/Charitable Endowment Act. The Block Development Officer would be the advisor of the association. Throughout the State, about 700 minor irrigation projects are under various stages of implementation under this programme.

Power

5.6 Power is generated in Kerala from hydel resources. Power generation in the State is cheap compared to other States. The total installed capacity of the State's power system which stood at 28.5 M.W. at the inception of the First Plan increased to 1011.5 M.W. by the end of December 1976. The major achievement in recent years under power generation in Kerala has been the commissioning of the Idukki hydro-electric project. The first stage of the project envisaged the working of three generating units with a total installed capacity of 390 M.W. The third unit of the Idukki (stage one) started commercial production in December, 1976. The various power projects in the State and their power generation capacities are indicated in Table 5.3

TABLE 5.3
Power Projects in Kerala

Sl. No.	Name of Project	Installed capacity (M.W.) (31-12-1976)	Units generated (M.K.W.H.) (31.3:1976)
(1)	(2)	(3)	(4)
1.	Pallivasal	37.5	219.0
2.	Sengulam	48.0	159.0
3.	Neriamangalam	45.0	293.0
4.	Panniar	30.0	125.0
5.	Peringalkuthu	32.0	219.0
6.	Sholayar	54.0	222.0
7.	Sabarigiri	300.0	1284.0
8.	Kuttiyadi	75.0	263.0
9.	Idukki (I stage)	390.0	..
Total		1011.5	2784.0

5.7 The total power generated in the State which was 2659 M.K.W.H. units during 1974-75 rose to 2783 units in 1975-76. The per capita consumption of electricity rose from 79.85 units in 1974-75 to 85.75 units in 1975-76. Electricity was extended to 20 villages in 1975-76 as against 14 in 1974-75 thus bringing the total number of villages electrified in the State to 1202 (See Appendix 5.1).

5.8 The total revenue of the State Electricity Board from sale of energy amounted to Rs. 29.81 crores in 1975-76 as against 26.57 crores in 1974-75. After meeting depreciation and other expenses, the net surplus available for payment of interest on loan from the State Government and other financial institutions was only Rs. 1.88 crores. (See Appendix 5.2). But during the year, a sum of Rs. 4.40 crores was released by the State Government towards subsidy for loss incurred on Board's rural electrification works. The financial working of the Board for the year 1975-76 resulted in a deficit of Rs. 9.24 crores.

5.9 The capital investment of the Board at the end of 1975-76 stood at Rs. 281.85 crores as against 259.20 crores at the end of 1974-75. The loans outstanding during the year increased from Rs. 231.98 crores to Rs. 253.73 crores and the loans repaid during the year were Rs. 4.68 crores as against Rs. 1.82 crores in 1974-75. The total interest payable for 1975-76 was Rs. 14.92 crores and the interest available for repayment during the year was Rs. 5.68 crores as against Rs. 4.93 crores in 1974-75.

5.10 Out of the total quantity of energy consumed in 1975-76, 72.5 per cent has been for industrial purposes. Extra high tension energy for industry alone accounted for 63.7 per cent. Industry contributes about 46 per cent of the revenue realised by the Electricity Board. (See Appendix 5.3). Though domestic consumers use only 10 per cent of the total power consumed, nearly 21 per cent of the revenue is collected from this class of consumers (See Table 5.4 and Appendix 5.4).

TABLE 5.4
Electrical Energy Consumed and Revenue Realised

Sl. No.	Category	Energy consumed		Revenue collected	
		M.K. W.H.	% to total	Rs. lakhs	% to total
(1)	(2)	(3)	(4)	(5)	(6)
1.	Industrial High Voltage + E. H. T. and low and medium voltage	1461	73	1022	46
2.	Domestic lights and fans, heat and small power	201	10	469	21
3.	Commercial lights and fans, heat and small power	90	5	380	18
4.	Others	263	12	369	15
	Total	2015	100	2240	100

5.11 The major projects under implementation in 1975-76 were Idamalayar, Silent Valley, Idukki (Third Stage), Sabarigiri Augmentation and replacement of the sixth unit of the Sabarigiri power project. An amount of Rs. 25 crores has been provided in the annual plan for 1977-78. Of this, Rs. 9.39 crores is for generation schemes. With a view to augmenting the transmission systems, a provision of Rs. 10 crore^s is proposed for transmission schemes. An amount of Rs. 4 crores is provided for schemes relating to distribution and rural electrification.

5.12 It is proposed to lay greater emphasis on distribution schemes in the coming years. Even in the already electrified villages the distribution system has to be streamlined by laying more lines. Recently the Kerala State Electricity Board has drawn up a two year programme (debenture loan programme) to complete the electrification of all the villages in the State. The first debenture loan of Rs. 2 crores was introduced in August 1976. The second debenture loan of Rs. 5 crores was floated by the Board in January 1977. The loans raised would be fully utilised for supply of power to the rural areas.

5.13 To streamline the distribution system, the Rural Electrification Corporation took up two major schemes costing Rs. 6.84 crores in 1975-76. These schemes which are implemented in Idukki District will cover 42 centres where 155 lakh Kms. of 11 K. V. power lines and 218 kms. of low tension lines will be laid. Of the 42 centres, 31 have already been completed. Work relating to a Rs. 75 lakh scheme known as the Thodupuzha Scheme, aided by the Rural Electrification Corporation, is expected to commence in the first half of 1977. This scheme envisages the setting up of 50 electrification centres, laying of 130 Kms. of 11 K.V. power lines and another 267 Kms. of L. T. lines and setting up of 50 transformer stations. The scheme is to be completed in three years. When these rural electrification projects are completed, almost all the areas in the backward district of Idukki will get electric power.

An Overview

Industrial growth in India which was as low as 2.5 per cent in 1974-75, increased to 5.7 per cent in 1975-76. It is expected to be of the order of 10 per cent during 1976-77. Industrial output has increased substantially and this has contributed to improved capacity utilisation in many sectors of industry. However in certain areas such as consumer durables and cotton textiles a decline in production was noticed in the past year. One of the important features of industrial development witnessed in the recent past in India is the spectacular improvement in the working of public sector undertakings. They registered a growth of 16 per cent during 1975-76 against an overall growth rate of 5.7 per cent registered by the industrial sector. In the sphere of small scale industries, a policy of ancillaries development was adopted and vigorously pursued. These and other achievements in the industrial front during the period 1975 to 1977 augur well for the country which is undoubtedly poised for a big break-through in the industrial sector.

6.2 The impressive industrial progress in India as a whole had its favourable impact on Kerala State as well. The year 1975-76 was free of any severe industrial strife and hence was characterised by better utilisation of industrial capacity and higher production. In several industries, especially in those belonging to the public sector, workers' participation in management was given due emphasis. Considerable headway was made in the efforts to establish certain new industries like cement, titanium and electronics. The year witnessed a better and effective utilisation of funds from financial institutions for industrial purposes. In the sphere of small scale industries a massive programme of industrialisation was pursued with vigour. Greater attention was paid to traditional industries in the State like coir, cashew and handloom during 1975-76. Fresh efforts to revive the handloom sector were taken through the introduction of new intensive development projects.

6.3 The number of registered working factories in Kerala increased from 6036 to 6317 during 1975. The rate of increase was however low compared to 1974 when nearly thousand units were newly added. The average daily employment in all the working factories was 2.64 lakhs at the end of 1975. There were 1367 joint stock companies in the State on 31-3-1976 compared to 1301 companies as on 31-3-1975. Of these 386 were public limited companies. The public sector continued to play a major role in the

development of industries in the State. The Kerala State Industrial Enterprises, which is the Holding Company with seven Government-owned units as its subsidiaries, is engaged in the programmes relating to diversification and expansion of these subsidiaries. The Holding Company took over the management of Super Clays and Minerals Mining Company Ltd., Cannanore, in 1975-76 besides including the Kerala State Detergents and Chemicals as a subsidiary company. The gross business turnover of the subsidiaries registered an increase of sixteen per cent during the year. Out of the seven companies, four companies, namely, Trivandrum Rubber Works, Kerala Ceramics, Kerala Electrical and Allied Engineering Company and the Kerala Soaps and Oils were running at a loss in 1975-76.

6.4 The Travancore-Cochin Chemicals is one of the foremost Government majority concerns. New machinery and plant have been added to this unit. However, a total loss of about Rs. 1.34 crores was incurred by the Company in 1975-76. The Transformers and Electricals Kerala, could increase its net profit from Rs. 51.52 lakhs in 1974-75 to Rs. 71.96 lakhs in 1975-76 and as a result of this the Company was able to declare a dividend of twelve per cent. The Company completed the first phase of the third stage of its expansion during the year. The Traco Cable Factory was also able to register a profit in 1975-76 as against continuous loss in the previous years. The Company could secure firm orders worth more than Rs. 4 crores. The first phase of expansion programme for the manufacture of telephone cables has already been commissioned. The proposals for the second stage of expansion are in its preliminary stages. The net profit earned by Travancore Titanium Products has significantly fallen from Rs. 63.05 lakhs in 1974 to 2.56 lakhs in 1975. The profits of United Electrical Industries, Quilon, have been declining steadily during the last two years and, in 1975, the Company for the first time had to incur a net loss of Rs. 13.02 lakhs.

6.5 The Kerala State Industrial Development Corporation continued to function as a major agency in the promotion of large and medium industries in the State. The Corporation has so far rendered assistance to 34 companies for establishing new projects and to 13 companies for expansion, diversification or modernisation. Out of the 34 new projects, 29 have gone into production before March 1975. The Corporation has so far set up 12 companies on its own

and of these seven are in the production stage. It holds eleven letters of intent for the establishment of new projects. It has also extended its association for the establishment of few companies sponsored by private parties through its promotional and financial assistance.

6.6 Under the Central Sector Undertakings, the major unit which is entering into production stage is the Cochin Shipbuilding Yard. It is a composite Shipyard where ships are not only built but also repaired. At the full production stage, the Shipyard will have a capacity to produce two ships (each of 85,000 DWT) per year. Under the FACT Complex, the Cochin Fertilizer Products which envisages the manufacture of 4.85 lakh tonnes of NPK granulated fertilizers, is the new expansion project on hand. Production under this scheme is expected to be achieved soon. The profits of the Central sector undertakings like the Hindustan Insecticides Ltd., the Hindustan Latex Ltd., and the Modern-Bakeries (Cochin unit) were higher during 1975-76 compared to the previous year. The Cochin Refineries, which is experiencing difficulties owing to the high price of crude, has been able to reduce its margin of loss during 1975-76.

6.7 The newly formed Small Industries Development Commissionerate is making concerted efforts to accelerate the development of small scale industries in the State. The State has launched a massive programme of industrialisation since 1-4-1975. The main thrust of the programme is on the establishment of one Growth Centre in the form of mini industrial estates in each Panchayat. Eleven such estates involving an overall investment of Rs. 175 lakhs started functioning from October 1975. Twenty-three more estates under the second and third series have been set up. The establishment of 66 co-operative type of mini estates was also taken up. The technical consultancy support for this programme is being given by the Kerala Industrial Technical Consultancy Organisation (KITCO) and the Small Industries Service Institute, Trichur.

6.8 In the matter of provision of loans to small industries, the Kerala Finance Corporation stands foremost among the financing institutions. The Corporation has till now advanced about Rs. 23 crores for all types of units in the State.

6.9 The State Government has been making all efforts at solving the problems confronting the traditional industries of the State like coir, cashew and handloom. The operations of coir co-operatives and Coir Corporation of Kerala enable the workers get minimum wages fixed for the workers in the industry. Production of cashew kernels is hampered by the inadequate availability of raw nuts. The State is experimenting with the new method of processing

indigenous raw nuts through the Kerala Co-operative Marketing Federation. The handloom industry is facing the problem of unsold stocks. A special drive to clear the unsold stocks is being made. Two intensive development projects has been sanctioned by the Government of India.

Joint Stock Companies

6.10 The total number of joint stock companies in Kerala was 1301 as on 31-3-1975. Of these 368 were public limited companies and 933 private limited companies. Twenty-one public companies and 88 private companies were newly registered during the year 1975-76, while three public companies and forty private companies were wound up. Thus at the close of the year 1975-76 (31-3-1976) the total number of joint stock companies stood at 1,367, of which 386 were public limited companies and 981 were private limited companies. The number of Government Companies registered with the Registrar of Companies increased from 56 on 31-3-1975 to 62 on 31-3-1976. This increase was observed in the case of private limited Government Companies which rose from 32 to 38 during the year. The number of public limited Government Companies however remained stationary at twenty-four.

Working Factories

6.11 The total number of registered working factories in the State increased from 6036 in 1974 to 6317 in 1975. A district-wise distribution of registered working factories at the end of 1974 and 1975 is given in Table 6.1.

TABLE 6.1
Registered Working Factories

Sl. No.	District	No. of registered working factories at the end of		Variation in number in 1975 compared to 1974
		1974	1975	
(1)	(2)	(3)	(4)	(5)
1	Trivandrum	240	252	(+)12
2	Quilon	638	659	(+)21
3	Alleppey	466	462	(-) 4
4	Kottayam	540	507	(-)33
5	Idukki	124	122	(-) 2
6	Ernakulam	966	1012	(+)46
7	Trichur	832	827	(-) 5
8	Palghat	545	631	(+)86
9	Malappuram	102	112	(+)10
10	Kozhikode	872	966	(+)94
11	Cannanore	711	767	(+)56
	Total	6036	6317	-281

6.12 The increase in the number of working factories during 1975 had been significant in Kozhikode, Palghat and Cannanore districts. There had only been a nominal increase in factory units in Trivandrum, Quilon and Malappuram districts. Kottayam, Trichur, Alleppey and Idukki are the districts where the number of factories has shown a fall as compared to the previous year. The fall in number was the highest (33) in Kottayam and lowest (2) in Malappuram.

6.13 An industry-wise distribution of working factories, and average daily employment in these factories as at the end of 1975 is given in Appendix 6.1. Factories under cashew, cotton, textiles, tiles, plywood and splints and veneers and printing provide the maximum employment. The average daily employment in all the working factories together was 2.64 lakhs at the end of 1975 as against 2.59 lakhs in 1974. The actual increase in employment during the one year period was only 5,234 while the number of factory units increased by 281. This in other words would mean that every new factory that was opened in 1975 could employ only about 18 persons on an average.

Large and medium Industries

Government-owned Companies

(i) Kerala State Industrial Enterprises Ltd.

6.14 The Kerala State Industrial Enterprises Limited, a holding company constituted for the control and development of the six Government owned companies, expanded its activity by incorporating in June 1976, a new subsidiary company under the name and style of "Kerala State Detergents and Chemicals Ltd". This subsidiary company will implement a project for the manufacture of synthetic detergents. The unit will have a capacity of 10,000 tonnes per annum and will be located at Tirur Taluk of Malappuram District. The holding company under instructions from the Government, also took over the management of Super Clays and Minerals Mining Company at Cannanore which remained closed for about an year. Mining operations have been re-started in the unit.

6.15 The Holding Company continued to extend management services to its subsidiaries. The monitoring system which covered activities like drawing up of annual budgets, monthly targets of production and sales, obtaining monthly reports covering all important areas of activities, consultations and drawing up programmes of management action was in force to watch the performance of the subsidiary companies. The concept of working on institutional finance to

supplement the periodic payments obtained from State budgets was enforced, and the Holding Company assisted its subsidiaries in the negotiations for financial arrangements with banks and other institutions. In order to avail institutional finance restructuring of capital base was also done in the case of some companies after obtaining necessary approval from Government.

6.16 The Holding Company continued to actively assist the subsidiaries in resolving problems of personnel management, in promoting good industrial relations and in bringing about a mechanical and codified system of accounting which enabled the subsidiaries finalise their annual accounts within the statutory period. The Holding Company also organised a central marketing facility for the subsidiaries. Market outlets were established for the sale of various products in the upper India regions. The common arrangement made by the Holding Company for the export of kaolin, soap products, rubber products, and plywood has made a successful start. Exports worth Rs. 40 lakhs have already been effected and contracts for further export of about Rs. 120 lakhs are under negotiation.

6.17 The total business turnover of the subsidiary companies registered an increase of 16 per cent from Rs. 532.62 lakhs in 1974-75 to Rs. 618.11 lakhs in 1975-76. Out of the seven companies in the group, four companies i.e. Trivandrum Rubber Works, Kerala Ceramics, Kerala Electrical and Allied Engineering Company and Kerala Soaps and Oils were running on loss during 1975-76. Certain basic factors which affect the healthy working of these companies came into play in the case of these companies. Lack of modernisation of manufacturing facilities and insufficient financial inputs for the replenishment of eroded working finance for complete utilisation of production capacities are the basic problems facing these companies. The Holding Company proposes to tackle these problems expeditiously.

6.18 The authorised capital of the Holding Company was raised from Rs. 100 lakhs to Rs. 300 lakhs, and the paid up capital from Rs. 55 lakhs to Rs. 155.65 lakhs in 1975-76. The operations of the Holding Company during the year resulted in a nominal profit of Rs. 1,596. The company has held in prominence the obligations to manage and improve the affairs of the subsidiaries, and has accordingly regulated the collection of management fees, limiting it to the expenses incurred by the holding company. The management fees charged by the company for the services rendered to the subsidiaries for the last two years is given in Table 6.2.

TABLE 6.2
Management Fees Collected by Holding Company

Sl. No.	Company	Management fees collected in Rs.	
		1974-75	1975-76
(1)	(2)	(3)	(4)
1	Trivandrum Rubber Works	73,515	50,100
2	Kerala Ceramics	73,788	51,275
3	Travancore Plywood Industries	69,264	42,700
4	Kerala Electrical & Allied Engineering Company	78,195	65,600
5	Kerala State Drugs & Pharmaceuticals	44,889	44,075
6	Kerala Soaps and Oils Ltd.	64,818	59,925
Total		4,04,469	3,13,675

A brief review of the working of the subsidiary companies for the year 1975-76 is presented below:

(a) *The Trivandrum Rubber Works*

6.19 The Trivandrum Rubber Works Ltd. having an authorised capital of Rs. 75 lakhs, and a paid up capital of Rs. 57.70 lakhs provides employment to 412 persons. The Company produced cycles, cycle accessories and rubber goods worth of Rs. 99.79 lakhs in 1975-76. The total sale proceeds for the year was Rs. 116.15 lakhs. This Company which had been running on a profit up to 1968-69 began to incur losses from 1969-70. It sustained a loss of Rs. 10.59 lakhs in 1973-74, and Rs. 15.27 lakhs in 1974-75. The loss for the year 1975-76 was Rs. 34.11 lakhs. It is surprising to note that the Company has been incurring losses from 1969-70 when the expansion schemes anticipating additional profit of Rs. 8 lakhs per annum was implemented. These expansion schemes were undertaken to increase the production capacity of cycle tyres and cycle rims. The actual production of cycle tyres was far below the production capacity, and the production of cycle tubes was practically nil even after the completion of the expansion schemes. The Company, instead of exploring new markets for the products, reduced the production step by step to a minimum due to lack of market for the products. Certain expansion/diversification programmes of the Company to manufacture moulded tubes, inflated mattresses, rubberised jute mats, rice mill rollers, lubricating pads, and scooter tyres and tubes are at various stages of implementation.

6.20 The Company can look forward to work on a profit only if some concrete steps are taken to improve its working by raising enough finance. Government had already accepted in principle the restructuring of the capital base of the Company so as to avail itself of the assistance from the Reconstruction Corporation of India. The authorised capital of the Company then can be raised to Rs. 200 lakhs. The total amount of outstanding loan and its interest to the Government,

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aggregating to Rs. 80.94 lakhs, will be converted into share capital. With this conversion, the total paid up capital of the Company will stand raised to Rs. 138.64 lakhs.

(b) *Kerala Soaps and Oils Limited*

6.21 The paid up capital of the Kerala Soaps and Oils has increased from Rs. 132.93 lakhs to Rs. 138.53 lakhs, and the number of employees from 279 to 288 during the year 1975-76. The Company has an installed capacity to produce 4,300 tonnes of soap (700 tonnes in the old plant and 3,600 tonnes in the Mazzoni plant) and 300 tonnes of shark liver oil products. Production during 1975-76 was 504 tonnes of soap (282 tonnes in the old plant and 222 tonnes in the Mazzoni plant) and 53 tonnes of shark liver oil products, as against 729 tonnes of soap and 62 tonnes of shark liver products in 1974-75. The value of goods produced decreased from Rs. 89.75 lakhs in 1974-75 to Rs. 62.13 lakhs in 1975-76. Correspondingly the sales turnover also decreased from Rs. 81.19 lakhs to Rs. 57.53 lakhs. As a result the net loss increased from Rs. 2.24 lakhs in 1974-75 to Rs. 4.96 lakhs in 1975-76.

(c) *Travancore Plywood Industries*

6.22 During 1975-76 this Company had sufficient raw materials, and satisfactory production facilities, but these facilities could not be fully exploited due to unfavourable market conditions. Out of the total production capacity of 22.8 lakhs sq. meters of plywood (in 4 mm. basis) the Company achieved a production of 10.72 lakhs meters, a reduction to the extent of 1.67 lakhs meters in 1975-76 compared to the previous year. The sluggishness in the market resulted in huge piling up of stock and inadequate storage facilities and the Company was forced to curtail production. The total value of goods produced decreased to Rs. 110.43 lakhs in 1975-76 from Rs. 137.05 lakhs in 1974-75. The sales turnover also decreased from Rs. 98.50 lakhs to Rs. 94.59 lakhs. In spite of these adverse market conditions and consequent production constraints, the Company could make a profit, through the profit margin was less than that in the previous year. The net profit in 1975-76 was only Rs. 2.11 lakhs as against Rs. 6.88 lakhs in 1974-75.

6.23 The Company has a paid up capital of Rs. 48.58 lakhs and provides employment to 447 persons. It manufactures, tea chest panels, commercial plywood, decorative plywood, chair seats, flush doors and black boards.

(d) *Kerala Electrical and Allied Engineering Company*

6.24 The Kerala Electrical and Allied Engineering company having a paid up capital of Rs. 95.82 lakhs and employing 461 persons in its two units at Mamala and Kundara manufactured 63,695 K.V.A

distribution transformers, 172 electric motors, 2.84 lakhs meter components, 3,326 contactors/starters, 707 tonnes of steel structures, 138 tonnes of C.I. specials and pipes and 24,353 electrical wiring accessories during 1975-76. The total sale proceeds of the Company increased to Rs. 143.65 lakhs in 1975-76 from Rs. 109.19 lakhs in 1974-75. However, the Company which earned a nominal profit of Rs. 1.36 lakhs in 1974-75 incurred a substantial loss of Rs. 44.64 lakhs in 1975-76.

6.25 The Company's expansion programme to manufacture 750 brushless alternators of up to 40 KV capacity per year at its Kundara unit is nearing completion. The project is being implemented in collaboration with a French firm at an estimated cost of Rs. 65 lakhs. The project on completion will provide employment to about 150 workers.

(e) *Kerala State Drugs and Pharmaceuticals Limited*

6.26 The paid-up capital of Kerala State Drugs and Pharmaceuticals was raised to Rs. 30 lakhs in 1975-76 from Rs. 11 lakhs in 1974-75. The unit provides employment to 285 persons. The unit proposes to enter the field of basic drugs manufacture, and has already initiated steps to identify and procure necessary know-how.

6.27 Commercial production in the unit commenced only from October 1974. The year 1975-76 was thus the first full year of production for the Company. During that year, the Company manufactured 1341 lakhs tablets, 120 lakhs capsules, 1.85 lakh litres of liquids and 29.33 lakhs numbers of injectibles consisting of 2.63 lakhs bottles, 5.18 lakhs vials and 21.52 lakh ampoules. The total value of medicines produced amounted to Rs. 162.21 lakhs. Medicines worth Rs. 154.50 lakhs were sold during the year. The Company's net profit in 1975-76 was Rs. 2.16 lakhs.

(f) *Kerala Ceramics Limited*

6.28 The Kerala Ceramics Ltd. which has a paid up capital of Rs. 107.95 lakhs, incurred a net loss of Rs. 42.99 lakhs during 1975-76. Its accumulated loss at the end of the year was Rs. 132.26 lakhs. Thus the total loss of the Company has overrun the paid up capital by Rs. 24.21 lakhs.

6.29 The Company produces porcelain, china clay and spray dried Kaolin. The production during 1975-76 consisted of 602 tonnes of porcelain, 5,939 tonnes of china clay and 1,559 tonnes of kaolin valued at Rs.58.24 lakhs, as against a total production worth Rs. 52.70 lakhs in the previous year. Sales during 1975-76 amounted to Rs. 59.32 lakhs (porcelain Rs. 26.59 lakhs, china clay Rs. 15.87 lakhs and kaolin Rs. 16.86 lakhs) against Rs. 44.37 lakhs in the previous year.

6.30 The Porcelain Division of the unit operated on optimum production capacity. Production registered a twelve per cent increase during the year. Though there were increases in production and sales in the Kaolin Division during the year the operations could not be brought to the budgeted level because of the slack in demand for spray dried kaolin in the export and internal markets. The Kaolin plant could only be marginally utilised for production on account of the gestation problems met with in the mining and refining of clay products and tardy market conditions.

6.31 Government-owned companies outside the control of the holding company include Kerala Minerals and Metals Limited and the Kerala Premo Pipe factory. A short account of the working of these units is given below:

(ii) *Kerala Minerals and Metals Limited*

6.32 The working of Kerala Minerals and Metals Ltd., during 1975-76 reveals an upward trend in production of important products, from the unit. Table 6.3 gives the progress of production in the factory for the last three years.

TABLE 6.3

Production of Mineral Products

Product	(Tonnes)		
	1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)
Ilmenite	15005	19324	21565
Rutile	1527	1449	1633
Zircon	243	731	377
Monozone	55	126	90
Lucoxene	161	128	237
Sillimanite	337	8	225
Total	17328	21766	24127

6.33 There was, however, a slight shortfall in sales, which can be attributed to the temporary recession in the pigment industry. The sales turnover which was Rs. 48.12 lakhs in 1974-75 decreased to Rs. 45.20 lakhs in 1975-76. In fact the profit increased to Rs. 12.28 lakhs in 1975-76 from Rs. 2.65 lakhs in 1974-75.

6.34 The present production capacity of the Company is 20,000 tonnes of ilmenite, and other minerals in proportionate quantities per annum. An expansion programme to increase the production capacity to 2 lakhs tonnes is under active consideration. The detailed project report for this programme is being prepared by M/S. Australian Mineral Development Laboratories, Australia. Their report is expected shortly.

6.35 The Company has also secured a letter of intent from Government of India for the manufacture of 48,000 tonnes of titanium dioxide per annum through chlorine process. M/S Metallurgical and Engineering Consultants (India) Ltd. (MECON), Ranchi, the Indian consultants for the establishment of the titanium dioxide plant, has submitted their detailed project report in November 1976. The collaboration agreements with M/s. Kerr-McGree Chemical Corporation of U.S.A. and M/S. Woodall-Duckham Ltd., U.K., have been approved by the Government of India.

6.36 The site for the mineral separation plant, and the titanium dioxide plant has been fixed at Sankaramangalam in Karunagappally Taluk of Quilon District. The acquisition of 200 acres of land required for these plants is in progress.

(iii) *Kerala Premo Pipe Factory Ltd.*

6.37 The production and sales of Kerala Premo Pipe Factory during 1975-76 was far from satisfactory and has resulted in heavy losses. The Company manufactured 2,814 pre-stressed concrete pipes, 6,374 R.C.C. spun pipes and 5,437 R.C.C. Collars during 1975-76. In the previous year the production consisted of 5,895 pre-stressed concrete pipes, 3,902 R.C.C. spun pipes and 1,426 R.C.C. collars. The total value of production during 1975-76 decreased to Rs. 59.19 lakhs from Rs. 72.9 lakhs in 1974-75. The total sale proceeds of the Company which was Rs. 45.6 lakhs in 1973-74 increased sharply to Rs. 71.5 lakhs during 1974-75, but slumped to Rs. 42.91 lakhs in 1975-76. The Company which earned a net profit of Rs. 17.28 lakhs in 1974-75 incurred a net loss of about Rs. 9.94 lakhs 1975-76. The Company has a paid up capital of Rs. 18 lakhs and provides employment to 264 permanent and 47 temporary workers. As part of its expansion programme, a Project Report for setting up a factory to manufacture premo pipe for the Coimbatore Water Supply Augmentation Scheme is now under preparation.

6.38 Data relating to investment, employment, production, value of production, sales turnover and profit/loss of the Government-owned companies are presented in Appendix 6.2.

Government Majority Concerns:

(a) *Travancore Cochin Chemicals Ltd.*

6.39 The paid up capital of Travancore Cochin Chemicals has increased from Rs. 130 lakhs in 1974-75 to Rs. 564.75 lakhs in 1975-76. The Company provides employment to 1069 persons and manufactures chemicals such as caustic soda, sodium hydrosulphite and sodium sulphide. The installed capacity and production of certain selected items of manufacture for the last three years are presented in Table 6.4

TABLE 6.4
*Production of Chemical Products by Travancore
Cochin Chemicals*

Items manufactured	Installed capacity	Production during		
		1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)
1 Caustic soda	66000	23336	22574	21468
2 Sodium hydro- sulphite	3000	1127	806	387
3 Sodium sulphide	2100	680	521	695

6.40 The installed capacity of the caustic soda plant increased from 33,000 tonnes in 1974-75 to 66,000 tonnes in 1975-76 with the commissioning of a new plant. Another new plant with a capacity of 1100 tonnes of sodium sulphide was also commissioned on 1-6-1975. During 1975-76 the Company produced chemicals worth only Rs. 488.14 lakhs. An analysis of production statistics for the last few years reveals gradual decline in production. The Company had to depend on worn out and out-dated machinery until recently. Now that new plants are added, it is hoped that the Company will improve production in the coming years.

6.41 The sale proceeds of the Company in 1975-76 was only Rs. 417.17 lakhs against Rs. 450 lakhs in 1973-74 and Rs. 467 lakhs in 1974-75. The Company has been incurring losses for the past several years. The net loss increased from Rs. 10.60 lakhs in 1973-74 to Rs. 14.34 lakhs in 1974-75. The Company's loss in 1975-76 reached an alarmingly high figure of Rs. 134.18 lakhs.

6.42 As part of the fourth Stage expansion programme of the Company, a new plant to produce 7,500 tonnes of liquid sulphur dioxide per annum is under erection. Most of the machinery for the plant, ordered from abroad, has already arrived at the site. The civil construction work is in progress, and it is expected that the plant will be commissioned by the middle of 1977. The total outlay for this project is estimated at Rs. 194.96 lakhs. Of this about Rs. 47.45 lakhs has already been expended till the end of 1975-76.

(b) *Transformers and Electricals Kerala Ltd.*

6.43 The production of power transformers, and current and potential transformers of this enterprise showed a slight decline in 1975-76 compared to the previous years. As against the production of 1432.5 MVA power transformers and 546 current and potential transformers in 1974-75, the Company produced only 1387 MVA power transformers and 492 current and potential transformers in 1975-76. There was also a slight shortfall in the sale of transformers. In 1975-76

the sale has decreased to 1359 MVA power transformers and 487 current and potential transformers. The corresponding figures for the previous year were 1370.5 and 557. But in terms of value the sale during the year 1975-76 was higher at Rs. 756.52 lakhs against Rs. 685.95 lakhs in 1974-75. The Company has Rs. 30 crores worth of orders in hand which can maintain a production schedule for the next 2½ years. The Company could make a net profit of Rs. 71.96 lakhs (after income tax) in 1975-76 as against Rs. 51.62 lakhs in 1974-75. The Company declared dividend of 12 per cent amounting to Rs. 36.13 lakhs.

6.44 The first phase of the third stage expansion programme of the Company was completed during 1975-76. The manufacture of 400 K.V. power transformers and current transformers commenced in December 1975. The second phase of the programme is also progressing satisfactorily. For financing the expansion projects, the Company is resorting to the issue additional equity capital to the extent of Rs. 184.17 lakhs, of which Rs. 50.69 lakhs will be allotted to Government of Kerala, Rs. 47.97 lakhs to M/S. Hitachi Ltd., Japan, and Rs. 85.51 lakhs to the general public.

(c) *Traco Cable Company*

6.45 Better availability of aluminium, favourable price level and labour relations and increased productivity and sales are the major factors which helped the Traco Cable Company to register substantial profit during 1975-76. This is in contrast to the losses obtained in the previous years. The profit of the Company in 1975-76 was Rs. 13.81 lakhs, as against the loss of Rs. 32.50 lakhs in the previous year. The gross sales of the Company stood at Rs. 210.75 lakhs, comprising telephone cables valued at Rs. 99.15 lakhs, power cables at Rs. 28.83 lakhs, and AAC/ACSR at Rs. 82.77 lakhs. During 1975-76, however, the total sales was only Rs. 86 lakhs. The Company can now look forward confidently for a better sales performance in the coming years, as it has already secured firm orders worth more than Rs. 4 crores.

6.46 The first phase of the expansion programme of the Company was for the manufacture of telephone cables. This project has already been commissioned and has started production. The proposals for the second stage expansion programmes are under investigation.

(d) *Travancore Titanium Products*

6.47 The Travancore Titanium Products which has a capacity to manufacture 24,500 tonnes of titanium dioxide produced only 5,377 tonnes during the year 1975 as against 7,611 tonnes in 1974. The unprecedented slump in domestic and export markets towards the end of 1974 resulted in the accumulation of huge stock of the finished product. This trend continued during 1975. Consequently production

was altogether suspended for few weeks, and was subsequently curtailed to avoid accumulation of stock. Due to the decrease in production and sales together with the charges in higher depreciation arising due to the capitalisation of new plant and machinery, and increase on the cost of raw materials and wages, the net profit of the company fell sharply from Rs. 63.05 lakhs in 1974 to Rs. 2.56 lakhs in 1975. The production, sales turnover and net profit of the Company for the last few years are given in Table 6.5.

TABLE 6.5

Production, Sales and Profit—Travancore Titanium Products

Item	1972	1973	1974	1975
(1)	(2)	(3)	(4)	(5)
Titanium dioxide produced (tonnes)	5886	4369	7611	5377
Sales turnover (Rs. lakhs)	305.93	237.47	547.64	595.16
Net profit (Rs. lakhs)	42.08	93.25	63.05	2.56

6.48 The paid up capital of the company remained at Rs. 93.24 lakhs. The number of employees increased from 1016 in 1974 to 1152 in 1975. The Company has commissioned the rutile steam plant and released the treated titanium dioxide in the market during the year on a trial basis. The reaction of the consumers to the new product has been quite satisfactory. The Company has also formulated a scheme for the manufacture of synthetic rutile utilising the waste effluents. This scheme has received the approval of the Government of India.

(e) *United Electrical Industries, Quilon*

6.49 The unhealthy competition prevailing in the meter industry, the steep rise in wages and prices of materials along with the lower demand for electrical engineering and electronic goods affected the production and sale of the Company. Figures relating to installed capacity, production, and value of goods produced during the year 1975 are given in Table 6.6.

TABLE 6.6

Installed Capacity, Production, Value of Production United Electrical Industries

Items manufactured	Installed capacity	Production during 1975	Value of production (Rs. lakhs)
(1)	(2)	(3)	(4)
K.W.A. metres	200,000	122,620	64.12
Motor control gears	11,800	4,469	32.43
L.T. switchgears	600	81	3.26
Magneto generator	not fixed	254	0.25
11 K.V. switchgear	do.	11	2.98
Plastic film capacitor	10 million	710,625	3.84
Electronic items	not fixed	878	0.45

6.50 The sale proceeds of the Company in 1975 was only Rs. 103.62 lakhs as against Rs. 121.92 lakhs in 1974. The profits of the Company has been decreasing steadily over the last few years, and for the first time in 1975 the Company sustained a net loss of Rs. 13.02 lakhs.

6.51 The paid up capital of the Company increased from Rs. 36.90 lakhs in 1974 to Rs. 43.90 lakhs in 1975. The Company provides employment to 494 persons. The expansion programme of the Company to manufacture plastic film capacitors in collaboration with a Japanese firm has been completed and commercial production commenced in 1975. The Company has also taken steps to implement the carbon resistor project by arranging for the import of machinery and for training of engineers in the collaborating Japanese firm. Implementation of the 11 K.V. project is also in progress, and the Company has already started manufacturing the product by C.K.D. arrangements with the collaborators, the General Electric Company of India Ltd.

(f) *Forest Industries (Travancore) Ltd.*

6.52 The working of the Forest Industries (Travancore) Ltd. during 1975-76 resulted in a net profit of Rs. 4.81 lakhs as against the net loss of Rs. 5.78 lakhs in 1974-75. The total sale proceeds of the Company increased from Rs. 15.63 lakhs in 1974-75 to Rs. 58.63 lakhs in 1975-76. The Company successfully completed the extraction of timber from the 200 hectares of forest land assigned to it by the Forest Department during 1974-75. During 1975-76, 8202 cubic metres of timber was extracted from the areas taken up for working. Despite severe competition the performance of the timber workshop was satisfactory as there was sufficient demand for the finished goods. The record turn over of the timber workshop was achieved in the year 1975-76.

(g) *Chalaky Potteries Ltd.*

6.53 Chalaky Potteries is geared to meet the refractory requirements of mini-steel plants only. However, owing to the fall in the off take of finished products, most of these mini-steel plants had either to close down or reduce production. To combat this, the Chalaky Potteries had no facility to diversify and produce high alumina refractories required by other industries such as cement etc.

The situation in mini steel industries continued to be unsatisfactory and the Company was forced to terminate the services of some workers, and taken up the manufacture of ordinary items of lesser value.

6.54 The production of refractory items during 1975-76 was only 1863 tonnes compared to 2038 tonnes in 1974-75 valued at Rs. 10 lakhs. The sales turnover

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also has decreased from Rs. 11.03 lakhs in 1974-75 to Rs. 10 lakhs in 1975-76. As a result the Company incurred a net loss of Rs. 4.29 lakhs while in the previous year the loss was only Rs. 0.98 lakh. The accumulated loss of the Company as on 31-3-1976 was Rs. 9.17 lakhs, which is more than the paid up capital of Rs. 6.63 lakhs.

6.55 As per the detailed project report prepared by the Kerala State Industrial Development Corporation, and approved by the Government of Kerala, expansion and diversification of the Company has been taken up. The additional expenditure needed for this expansion programme is Rs. 82 lakhs. According to the project report the authorised capital of the Company is to be raised from Rs. 10 lakhs to Rs. 50 lakhs, and issued capital to Rs. 40 lakhs. The loan of Rs. 55 lakhs required for this expansion/diversification programme is to be obtained from financial institutions. It is expected that when the project is fully implemented, the present capacity production of 5,000 tonnes of refractories will be raised to 16,800 tonnes, while the product mix will meet the requirements of cement, steel, and chemical industries.

6.56 Data relating to investment, employment, production, value of production, sales turn over and profit/loss of the Government majority concerns are provided in Appendix 6.3.

Kerala State Industrial Development Corporation

6.57 The Kerala State Industrial Development Corporation was incorporated in 1961 with the object of stimulating the industrial development in the State. The authorised capital of the Corporation is Rs. 500 lakhs. Its paid-up capital stood at Rs. 464 lakhs at the end of March 1976. To augment the resources, the Corporation issued a fresh series of bonds for Rs. 55 lakhs in 1975-76 compared to Rs. 137.50 lakhs issued during the previous year. In 1975-76 the Corporation did not receive any funds from Government by way of loan. In addition to this, default on the part of assisted concerns in meeting their commitments in time also considerably affected the resource position of the Corporation. Therefore due to shortage of funds the Corporation was not able to assist a number of applicants.

6.58 During 1975-76, the Corporation received applications for assistance worth Rs. 250.83 lakhs of which Rs. 233.73 lakhs were sanctioned. The actual disbursement for the period was only Rs. 148.36 lakhs. The total sanction and disbursement by the Corporation in 1975-76 was comparatively lower as compared with the previous year (See Table 6.7)

TABLE 6.7

Amounts Sanctioned and Disbursed by Kerala State
Industrial Development Corporation

Item	(Rs. lakhs)	
	1974-75	1975-76
(1)	(2)	(3)
Amount applied for	271.27	250.83
Amount sanctioned	277.27	223.73
Amount disbursed	197.87	148.36

6.59 A further analysis of the type-wise assistance reveals that out of Rs. 223.73 lakhs sanctioned during 1975-76, Rs. 139.25 lakhs was loan, Rs. 67.13 lakhs was share capital and Rs. 17.35 lakhs guarantee. A notable feature in the working of the Corporation is the increasing tempo in providing promotional and financial assistance for the establishment of new industries by actively participating in their share capital structure (See Table 6.8)

TABLE 6.8

Type-wise Financial Assistance by KSIDC

Type of assistance	(Rs. lakhs)			
	Sanctioned during		Disbursed during	
	1974-75	1975-76	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)
Share Capital	29.34	67.13	7.54	28.86
Loans	231.93	139.25	188.23	110.23
Guarantee	10.00	17.35	2.10	9.27

6.60 The gross income of the Corporation for the year 1975-76 was Rs. 67.75 lakhs, as against Rs. 73.65 lakhs in the previous year. After providing for interest, administrative expenses, taxes and other miscellaneous expenses the net profit in 1975-76 was Rs. 12.76 lakhs as against Rs. 17.09 lakhs in the previous year. This decrease in profit was mainly due to the substantial increase in interest burden, increased expenditure on investigation, research and feasibility studies and lower dividend from assisted companies.

6.61 The Corporation has so far rendered financial assistance to 34 companies for establishing new projects and to 13 existing companies for expansion, diversification or modernisation. Out of the 34 new projects, 29 units have gone into production before March 1975. Bristol Boats Ltd., commenced commercial production of luxury diesel trawler yachts in February 1976. Of the remaining four units, Veeners and Laminations (India) Ltd., Chengannur

and Pearlite Wire Products Ltd., Alleppey, have already commenced trial production, commercial production in these units is expected soon. The construction work of T. K. Chemicals, Trivandrum, is in progress. The fourth Company—Power System and Projects (Private) Ltd., a subsidiary of the British Physical Laboratories—has completed its first stage and production has commenced.

6.62 The Corporation has rendered financial assistance to thirteen existing units to undertake substantial expansion, diversification or modernisation and or to tide over temporary financial difficulties. Most of the units which have received financial assistance have already implemented their programmes. Travancore Cochin Chemicals, United Electrical Industries and O/E/N India Ltd., implemented their programmes during 1975-76 with the financial assistance provided by the Corporation.

6.63 The Corporation on its own has so far set up twelve companies of which seven have reached production stage. Two projects, Packing Paper Corporation Ltd., and the Kerala State Textile Corporation, have been wound up, and the remaining three projects, namely, the Vanjinad Leathers Ltd., Kuttippuram, Kerala Chemicals and Proteins Ltd., Koratti, and the Kunnathara Textiles Ltd., Quilandy, are in various stages of implementation.

6.64 The Corporation now holds about eleven letters of intent for the establishment of new projects, and the progress achieved in their implementation during 1975-76 is given below:—

- (1) Cigarettes The project has been abandoned for want of indigenous technical know-how on reasonable terms
- (2) Soda Ash and Ammonium Chloride Government of India has recently revoked the letter of intent
- (3) Nylon Filament Yarn Pending approval of the application for foreign technical collaboration
- (4) Nickel Cadmium cells Market survey is being arranged
- (5) Pulp and Paper Raw material position is being ascertained through survey by the Forest Department
- (6) Conveyor Belts Revised application for foreign collaboration pending with Government of India

- (7) H. D. P. E. Sacks Percentage of export guarantee tied up with import of machinery and is pending with the Central Government
- (8) Special Refractories Feasibility Report of the U. S. S. R. received
- (9) Rubber Threads Revised foreign collaboration agreement is under consideration of Government of India
- (10) Spinning Mills The project is being re-examined due to recession in textile industry
- (11) Formaldehyde A new company is being incorporated.

6.65 The Corporation has also offered its association in the establishment of the following companies sponsored by private parties through its promotional and financial assistance:—

- (1) Formic Acid Project at Edayar
- (2) Carbon Black Project at Ambalamugal
- (3) Potassium Chlorate Plant at Mavelikkara
- (4) Ferric Alum Project at Alleppey
- (5) Marine Freight Container Project

6.66 The Corporation also proposed to sponsor the following new projects, and steps have been taken for their implementation:—

- (1) Chemical Complex
- (2) Cement Plant
- (3) Chalakudy Potteries (Expansion)
- (4) Textile Processing Unit jointly with the Kerala Handloom Finance and Trading Corporation
- (5) Glastrusions.

6.67 With a view to setting up a sponge iron plant, the Corporation has commissioned the Geological Survey of India for a detailed investigation of the iron ore deposits of Kozhikode district, and also appointed a reputed firm of consultants for giving necessary assistance in mining, pilot plant studies, collection of representative samples, and preparation of feasibility reports. The State Department of Mining and Geology and the Geological Survey of India have identified graphite deposits in Ernakulam and Idukki districts. Detailed investigation is being done by these agencies with the active assistance of the Corporation. The Corporation proposes to set up a plant for the beneficiation of graphite ore and for the manufacture of crucibles and other articles.

Kerala State Electronics Development Corporation

6.68 The Kerala State Electronics Development Corporation made significant progress with regard to the number of schemes implemented either directly or through different companies incorporated under the auspices of the Corporation. The production activity directly undertaken by the Corporation cover a wide range of electronic items such as—

- (a) Television receivers
- (b) Calculators
- (c) Electronic information display system
- (d) Communication system
- (e) Power system
- (f) Audio accoustics
- (g) Electronic printers
- (h) Industrial electronics like variable speed devices, static invertors, voltage stabilisers etc.

6.69 The Corporation entered into an agreement with India Space Research Organisation to manufacture X-Y plotters and incremental plotters, two vital computer peripherals. Besides these production activities directly undertaken by the Corporation, it also implemented certain projects through its associates or subsidiary companies. The Corporation has so far promoted eleven companies, besides taking over the management, at the instance of the State Government, of Keltron Counters Ltd. (formerly Metropolitan Instruments Ltd.). The companies promoted by the Corporation are:—

(1) Keltron Components Complex Ltd. for the manufacture of aluminium electrolytic capacitors at a capital outlay of Rs. 542 lakhs. This factory is located at Mangattuparamba in Cannanore district. The factory building has been constructed and machinery is being erected.

(2) Keltron Magnetics Ltd. The construction of the factory building to manufacture 2.75 million electromagnetic components and electronic sub assemblies with hundred per cent export commitment is almost over. Plant and machinery have started arriving from foreign countries and this Rs. 61 lakhs project will start commercial production during 1977. This unit is located at Cannanore.

(3) Keltron Crystals Ltd. was incorporated to implement the Rs. 64 lakhs project for the manufacture of piezo-electric crystals. The Company which is located at Cannanore has already commenced production.

(4) Keltron Resisters Ltd. The Corporation is making a preliminary assessment of the economic viability of the project to manufacture 50 million carbon film resisters for which it has received a letter of intent. The Company will take steps for the acquisition of land, construction of factory buildings etc. only on receipt of the economic viability report.

(5) Keltron Varisters Ltd. The Corporation has agreed to provide finance and marketing support to some technocrats for the manufacture of thermistors and Varisters. A company under the name Keltron Varisters Ltd. has been incorporated. The Project which is located at Olavakkode has already commenced production.

(6) Dielecto Magnetics Ltd. is another company promoted for the manufacture of ceramic capacitors in the joint technocrat sector. The project will cost Rs. 60.50 lakhs. The construction of the factory building at Kuttipuram is almost over. The Company expects to commence commercial production soon.

(7) Keltron Ferrites Private Ltd. The Company has been incorporated to implement the Rs. 11.21 lakh project for the manufacture of industrial ferrites at the factory to be located at Harrisons and Crosfield compound, Quilon. The project has been inaugurated recently.

(8) Keltron Projectors Ltd. A separate company for the manufacture of 16 m.m. projectors was incorporated on 29th April, 1975 and the Company which is located at Trivandrum has already commenced commercial production.

(9) Keltron Entertainment Systems Ltd: This Company was incorporated to manufacture low cost radios, stereos etc. developed by the Electronic Development and Research Centre of the Corporation. The factory is located at Trivandrum. The Company has already started commercial production of two-band radio sets with the latest know-how and design.

(10) Keltron Power Devices Ltd: This Company will take up the manufacture of power transistors which are vital components in television circuits, medical electronics, power supplies, power control units etc. The Company has taken effective steps for the implementation of this Rs. 225 lakh project at Mulankunnathukavu near Trichur.

(11) Keltron Rectifiers Ltd: The Company will implement a Rs. 102 lakh project for the manufacture of 3.20 lakh rectifier diodes and silicon-controlled rectifiers at Mulankunnathukavu near Trichur.

6.70 Besides these activities, the Corporation has set up an Electronic Research and Development Centre, an Electronic Testing and Development Centre, and a Material Development Centre. The Electronic Research and Development Centre undertakes the designing and manufacturing of application-intensive and employment-oriented electronic equipment and systems locally. The Testing and Development Centre has been set up to provide testing facilities for electronic equipment produced by the electronic industry in Kerala. The Materials Development Centre has been set up to develop necessary strategic chemicals required for the electronic industry.

Central Sector Units

6.71 The Central Sector Units have a dominant role in the development of Indian economy. They are expected to fulfil certain economic and commercial objectives, like reducing inequalities of income, expanding employment opportunities, removing regional imbalances etc. The overall impact of central sector investment in Kerala State has been unimpressive till the beginning of this decade. It is only recently that the investment in this sector has shown signs of improvement. Investment (gross block) in the Central Sector Undertakings in Kerala which was Rs. 173.2 crores in 1973-74 increased to Rs. 202.2 crores in 1974-75. A statement giving the State-wise investment is given in Appendix 6.5. The Central Sector units in the State include the Cochin Ship Building Yard, Fertilisers and Chemicals Travancore Limited, Hindustan Machine Tools (Kalamassery), Indian Rare Earths Limited, Cochin Refineries, Hindustan Insecticides, and Modern Bakeries (Cochin).

(a) The Fertilisers and Chemicals Travancore Ltd.

6.72 During the year 1975-76, the authorised capital of FACT was increased by Rs. 25 crores and the paid-up capital by Rs. 8 crores. At the end of the year the cumulative total of these stood at Rs. 100 crores and Rs. 73.86 crores respectively. The net increase in borrowings from Government of India amounted to Rs. 1,834 lakhs, of which Rs.1,371 lakhs was utilised towards working capital and Rs. 463 lakhs for capital expenditure. The net loss of the Company increased to Rs. 1,284.43 lakhs in 1975-76 from Rs. 305.88 lakhs in 1974-75. The division-wise loss or profit in 1975-76 is given below:—

Udyogamandal Division	Rs. 388.11	lakhs
Marketing Division	Rs. 22.43	„
Fact Engineering Design Organisation	Rs. 21.71	„
Cochin Phase I	Rs. 853.36	„
Total Loss	Rs. 1,285.61	„
Profit from Fact Engineering Works	Rs. 1.18	„
Net loss	Rs. 1,284.43	„

6.73 During 1975-76, the Company was able to achieve an overall increase of 45 per cent in the production of nitrogenous fertilizers comprising 10 per cent increase in the plant at Udyogamandal Division and 70 per cent increase in the Cochin Division over the previous year. But in the case of phosphatic fertilizers there was a fall in production owing to lack of demand. A picture of the various products manufactured by the company (including Cochin Division) during the last three years is provided in Table 6.9.

TABLE 6.9
Products Manufactured by FACT

Sl. No.	Item	Installed capacity	Production during		
			1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)
1.	Ammonium Sulphate	1,98,000	1,04,358	93,313	1,25,819
2.	Ammonium Phosphate 16:20	1,32,000	65,416	68,231	66,866
3.	Ammonium Phosphate 20:20	49,500	19,596	23,803	30,194
4.	Super Phosphate	44,000	35,746	23,450	15,355
5.	Ammonium Chloride	24,750	9,384	9,661	7,089
6.	Sulphur Dioxide	8,250	1,392	1,345	1,060
7.	Oleum	..	2,182	2,380	2,436
8.	Urea	3,30,000	..	63,059	1,46,646

6.74 FACT Engineering and Design Organisation (FEDO) made satisfactory progress during the year 1975-76 in the execution of various projects entrusted to it. The Hindustan Coppers Limited, the Phosphoric Acid Plant at Sindri, a Plant at the Cordite Factory, Aruvankadu, and one phase of the project for the Fertilizers Corporation of India Limited, Trombay, are some of the projects which FEDO has either completed or nearing completion. The FACT Engineering Works (FEW) increased its turn over to Rs. one crore during 1975-76.

6.75 Though there was near normalcy in the working of the factory as a result of good industrial relations, shortage of sulphuric acid, repeated power interruptions, delay in the modifications of the Cochin Unit and other constraints stood in the way of fuller capacity utilization in FACT during 1975-76. The sale proceeds of the Company during the year stood at Rs. 6,528 lakhs as against Rs. 5,541 lakhs in 1974-75—an increase of 18 per cent. The Company marketed 1,06,107 tonnes of nitrogenous fertilizers, 25,935 tonnes of phosphatic fertilizers and 17,697 tonnes of potash in 1975-76 compared to 71,538 tonnes of nitrogenous fertilizers, 31,376 tonnes of phosphatic fertilizers and 18,076 tonnes of potash in 1974-75. As in the previous years the Company continued the supply of industrial chemicals like ammonium chloride, ammonia, oleum, sulphur dioxide etc., to industrial users.

6.76 The year 1975-76 witnessed a radical change in the consumption, availability and pricing of fertilizers. There was actually a fall in fertilizer consumption. As a result of the reduced off take, higher production and large imports, there was sizeable accumulation of stock all over the country. The stock level of FACT itself at the end of the year 1975-76 was more than one lakh

tonnes valued at Rs. 1,715 lakhs, as against a closing stock of 69,000 tonnes valued at Rs. 990 lakhs at the end of 1974-75. This led to the withdrawal of State and district level controls on the movement of fertiliser products. The increasing trend in fertiliser price noticed during 1974-75 was reversed during 1975-76 especially for products like urea, super phosphate and complex fertilizers. There were more than one downward price revision for phosphate and complex fertilizers which resulted in a highly unsettled market condition. The Government of India is now giving subsidy of Rs. 1,250 per tonne of phosphatic fertilizers and this subsidy was passed on to consumers through a reduction in prices. The Government also reduced excise duty on certain fertilizers and announced certain relief in excise duty on fertilizer production achieved over a base period. It is expected that these measures will help improve fertilizer off take during the coming years.

6.77 The second phase of the Cochin Fertilizer Project is being implemented at present. The project envisages the manufacture of 4,85,000 tonnes of NPK granulated fertilizers. The civil works and mechanical erection of sulphuric acid plant, and NPK plants have been almost completed. Production of NPK fertilizers estimated at 50,000 tonnes is expected to be achieved soon.

(b) *Cochin Shipyard.*

6.78 The paid-up capital of Cochin Shipyard as on 31-3-1976 was Rs. 2,250.09 lakhs. During 1975-76 the Company received an amount of Rs. 200 lakhs from the Government of India by way of loan, raising the total quantum of loan assistance to Rs. 3,900 lakhs as on 31-3-1976. The Company also received an amount of Rs. 567 lakhs from Shipping Corporation of India by way of instalment payments to finance the ship building operations. British credit to the tune of approximately Rs. 1,946 lakhs has also been allocated to the Shipyard to meet the cost of import of materials for the first five ships and for the cost of consultancy and associated expenditure.

6.79 There were 184 officers and 764 employees in the rolls of the Company at the end of the year 1975-76, as against 154 officers and 418 employees in the preceding year. The first batch of apprentices who commenced their training in 1973 at the Shipyard Training School were inducted as regular workmen in October 1975. Three hundred and five trainees were undergoing training in this school as on 31-3-1976. In addition to this direct employment by the Shipyard, over 3,000 persons were employed by the contractors working in the Shipyard premises. A sizeable number is also engaged in producing the various machinery and equipments for the Shipyard in different factories all over the country.

6.80 To avoid any hold-up in commencing ship-building as scheduled, most of the facilities in the hull shop and dock floor are being provided as planned. Various other civil works like assembly shop, main office, power, water supply system etc., were in different stages of completion. On the repair dock site about two-third of the excavation work has been completed and nearly 80 per cent of the steel sheet piles drawn. Major part of the machinery and equipment had been received at site, the erection works were either commenced or in various stages of operation. During 1975-76 the Shipyard commissioned the Mould Loft and production control complex, main power receiving station, general stores, maintenance shop, medical centre, H.F. sub-station in the assembly shop and the LPG acetylene gas system. Out of the total of nearly 13,000 tonnes of steel to be imported for the first ship, about 5,000 tonnes arrived by October 1975. Orders had been placed for the rest of the steel, propeller, main engine, steering gear etc., required for the first ship.

6.81 After completing the contract arrangement M/s Mitsubishi Heavy Industries, Japan, technical consultants for the construction of the Shipyard withdrew on 31-3-1976 their consultants from the Shipyard. At present the Shipyard has collaboration agreements only with M/s Scott Lithgow Limited of U.K. for the supply of drawings and designs for the first series of ships to be built here and for the training of ship-building personnel.

6.82 Work on this Rs. 109 crore project planned in an area of nearly 170 acres in the heart of Ernakulam city has more or less been completed. The shipyard has already received orders for three ships. The first ship has been contracted for the Shipping Corporation of India, and is due for delivery in June 1978. The second ship contracted for Ratnakar Shipping Company is due for delivery in June 1979.

6.83 The Cochin Shipyard on completion will be a composite shipyard, having facilities for ship building and repair. When completed the Shipyard will have a capacity to produce two ships (each of 85,000 DWT) per year. The Company has now a proposal for expansion of the existing facilities at an estimated cost of Rs. 22 crores and it is presently under the consideration of the Government of India. When this expansion programme comes through, the Shipyard will be able to double its production to four ships a year.

(c) *Indian Rare Earths Ltd.*

6.84 The Indian Rare Earths Ltd., also a Government of India concern, has two divisions in Kerala—the Minerals Division at Quilon and the Rare Earths Division at Udyogamandal. The Minerals Division at Quilon produced 119,331 tonnes of ilmenite, 4,327 tonnes of zircon, 3,783 tonnes of rutile, 969 tonnes of sillimanite, 283 tonnes of zircon A, 1,576 tonnes of zirflor

and 50 tonnes of monozite valued at Rs. 301.34 lakhs during 1975-76. The total sale proceeds was Rs. 183.83 lakhs. This Division which employs 451 persons earned a net profit of Rs. 100.84 lakhs during 1975-76.

6.85 The Rare Earths Division at Udyogamandal produced 4,630 tonnes of rare earth chloride, 5,670 tonnes of trisodium phosphate, 1,520 tonnes of thorium hydroxide, 23 tonnes of rare earth fluoride, 8 tonnes of rare earth oxide and 4 tonnes of cerium oxide valued at Rs. 452.45 lakhs. The total sale proceeds for the year 1975-76 was Rs. 287.09 lakhs, and the net profit amounted to Rs. 153 lakhs. The Company provides employment to 444 persons.

6.86 The production target of the Minerals Division could not be attained during the year 1975-76, because of the poor quality of raw sand and the curb on power supply. The target set out for the Rare Earths Division has however been achieved, and production capacity utilised almost to the full extent. The sale of ilmenite fell considerably during 1975-76 owing to a major recession in the titanium dioxide pigment industry. The Company proposes to curtail production at the Chavara plant in 1976-77 to restrict the piling up of unsold ilmenite stock. At present the Company has no expansion or diversification programmes at the Mineral and Rare Earth Divisions in Kerala, except for the proposal to set up an effluent treatment plant at Alwaye at an estimated cost of Rs. 30 lakhs.

(d) *Cochin Refinery.*

6.87 Crude oil supply for the country was arranged by the Government of India under agreement with some of the oil producing countries of the Middle East. The high price of crude together with constraints on foreign exchange adversely affected the crude imports to India. Cochin Refinery had naturally less than the quantity necessary to run the refinery at its expanded capacity of 3.3 million tonnes. The total crude processed by the Refinery during the year ending 31st August 1975 was 24.59 lakh tonnes averaging 49,904 barrels per calendar day as against 23.92 lakh tonnes and 48,310 barrels per calendar day in the previous year. The cost of crude purchased during the year increased from Rs. 124.67 crores to Rs. 170.44 crores. Though the sale proceeds of the Company increased from Rs. 124 crores to Rs. 190 crores during the year ending 31-8-1975, the increased product price was insufficient to counteract the higher cost of crude, and the result was that the Company had to incur a net loss of Rs. 190.62 lakhs. Yet it is significant to note that the Company, in spite of adverse conditions, was able to reduce the loss margin from Rs. 526.07 lakhs to Rs. 190.62 lakhs.

6.88 The new pricing policy of petroleum products introduced by the Government of India in July 1975 based on the Interim Report of the Oil Prices Committee

is expected to relieve to a certain extent the strain on the financial resources of the Company caused by the exorbitant increase in the price of imported crude. Even then the rate of return provided in the pricing formula is unlikely to restore the Company to the same profitable position as existed prior to the world-wide oil crisis.

(e) *Hindustan Machine Tools Ltd. (Kalamassery Unit)*

6.89 The Kalamassery Unit of Hindustan Machine Tools manufactured 938 machine tools and accessories worth Rs. 6.62 crores and 71 printing machines and accessories worth Rs. 2.16 crores during 1975-76. The sales during the year amounted to Rs. 7.77 crores of which machine tools accounted for Rs. 6.15 crores and printing machinery Rs. 1.62 crores. The corresponding figures for 1974-75 were Rs. 5.74 crores, Rs. 4.61 crores and Rs. 1.13 crores respectively. The unit through its increased production and consequent sales has brought down its loss from Rs. 1.11 crores in 1974-75 to Rs. 0.67 crore in 1975-76. Certain salient features of the unit for the last two years are given in Table 6.10.

TABLE 6.10
Salient Features of HMT, Kalamassery

Item	1974-75	1975-76
(1)	(2)	(3)
1. Number of employees	2413	2437
2. Goods produced		
(i) machine tools (Nos.)	503	938
(ii) printing machines (Nos.)	41	71
3. Value of goods produced		
(i) machine tools (Rs. crores)	4.49	6.62
(ii) printing machines (")	1.14	2.16
4. Value of goods sold		
(i) machine tools (")	4.61	6.15
(ii) printing machines (")	1.13	1.62
Net loss	(")	1.11 0.67

6.90 The Quilon District Engineering Technicians Industrial (Workshop) Co-operative Society Ltd. (QUETCOS) assembled thirty LT 20 lathes from components supplied by the Kalamassery unit. QUETCOS is expected to turn out 300 numbers of L. T. 20 lathes per annum when it attains full capacity. Hindustan Machine Tools provides necessary technical assistance and guidance to this venture; and the marketing department of H. M. T. underwrites the entire production of QUETCOS.

6.91 The prototype of the Unified Series Lathes and Front Chucking Auto FC-25 were designed and developed and the Company proposes to diversify production of the machine tool division of Kalamassery unit by including these machine tools to its production itinerary. The diversification programme of the Printing Machine Division will include the addition of Guillotine, Web Offset and RA2 offset printing machines.

6.92 The Company has offered the Kerala Government to set up twelve ancillary units to cater to the needs of the Kalamassery unit. The buildings and infrastructure facilities like roads, drainage, sewage etc. are being provided by the State Government. The construction of the ancillary units has reached a fairly advanced stage, and it is expected that all the units will be commissioned soon.

(f) *Hindustan Insecticides Ltd.*

6.93 The Udyogamandal Unit of Hindustan Insecticides Ltd. having a paid up capital of Rs. 208.47 lakhs, and providing employment to 491 persons, earned a profit of Rs. 80.91 lakhs (before tax) in 1975-76 as against a profit of Rs. 59.54 lakhs in 1974-75. The Company manufactured 1,450 tonnes of technical D. D. T., 2,784 tonnes of formulated D. D. T. 1,752 tonnes of technical B. H. C. and 2,570 tonnes of formulated B. H. C. The total value of goods produced amounted to Rs. 540.20 lakhs, and the total sale proceeds to Rs. 456.31 lakhs as against the corresponding figures of Rs. 464.60 lakhs and Rs. 403.75 lakhs respectively in 1974-75.

6.94 The Government of India has sanctioned a scheme for setting up of a 1,600 TPA Endosulfan Plant at Udyogamandal at a cost of Rs. 7.33 crores on the basis of N. C. L. Technology. The turn key offer of the battery limit plant was made by M/s Dalal Consultants and Engineers Limited, Bombay. The plant is expected to be completed in 1979. Government of India has also sanctioned two more expansion schemes for the Company, one for setting up an Emulsion Concentrate Formulation Plant for processing 800 tonnes of Endosulfan Technical at a cost of Rs. 1.34 crores and the other for setting up a B. H. C. granulation plant at a cost of Rs. 62 lakhs and with capacity of 20 tonnes of granules a day. These two units are expected to commence production in 1977.

(g) *Modern Bakeries (India) Ltd. (Cochin Unit)*

6.95 The production of the Cochin Unit of Modern Bakeries (India) Ltd. has increased considerably during 1975-76. As against the production of 115.63 lakhs of standard loaves valued at Rs. 140.16 lakhs in 1974-75, the unit produced 134.35 lakhs of standard loaves valued at Rs. 161.16 lakhs in 1975-76. The

sale proceeds has also increased from Rs. 139.93 lakhs to Rs. 161.14 lakhs. The unit earned a net profit of Rs. 16.14 lakhs in 1975-76, an increase of Rs. 2.37 lakhs over that of the previous year. In June 1976 the unit added a new bun producing plant to the existing bread manufacturing unit. This unit has already started commercial production.

(h) *Hindustan Latex Ltd.*

6.96 Hindustan Latex Ltd. Trivandrum received additional share capital of the tune of Rs. 40 lakhs from the Government of India in 1975-76, thereby raising its paid up capital from Rs. 90 lakhs to Rs. 130 lakhs. Following the constructive measures adopted by the Company there was great improvement in production and sales. The Company produced 125.04 million pieces of nirodh (87 per cent of the installed capacity) during 1975-76 as against 85.64 million pieces during the previous year. The production would have been higher had the Company not suspended production for some days due to the non-availability of water. The sales during 1975-76 totalled 138.94 million pieces, 123.23 million pieces under the free distribution scheme and 15.71 million pieces under the commercial distribution scheme. The Company also produced meteorological balloons from its pilot plant. It supplied 785 high altitude balloons to the Indian Meteorological Department. The sales turn-over of the Company during 1975-76 was of the order of Rs. 224.46 lakhs while it was only Rs. 70.76 lakhs in the previous year.

6.97 The net profit of the Company for the financial year 1975-76 was Rs. 20.18 lakhs, even after adjusting the liability of Rs. 10.76 lakhs arising out of rejection of goods sold to the Department of Family Planning in earlier years. This is a very good achievement indeed, especially in view of the continued losses of the Company in earlier years which amounted to Rs. 10.55 lakhs in 1973-74, and Rs. 19.16 lakhs in 1974-75.

6.98 The Company has already initiated a programme to expand its activity and double the capacity of the nirodh unit with an investment of about Rs. 160 lakhs. The work is nearing completion. The Company has also gone much ahead in their plans to manufacture high altitude meteorological balloons, the production of which has now been started on a pilot plant scale in the Research and Development Division of the Company. A new plant with a capital outlay of Rs. 10 lakhs for the production of meteorological balloons is now proposed to be erected near the nirodh factory. With the commissioning of these expansion and diversification programmes additional employment can be provided to 680 persons.

(i) *Newsprint Factory, Velloor*

6.99 The civil and other works on the Rs. 100 Crore Newsprint Mill at Velloor are going on at a swift pace. It is expected that production in the unit

will commence by October 1978 as scheduled. The mill would produce per annum 80,000 tonnes of high quality white newsprint. This factory will be a unique venture as it would be using for the first time in the world hardwood (Eucalyptus) as the main raw material. The Company has secured a loan from West Germany worth Rs. 10.5 crores. This will be utilised for the purchase of paper machine from that country. The mechanical pulp plant will be purchased from Sweden while all the remaining machinery will be fabricated indigenously. Erection of machinery would start towards the end of 1977. The implementation of this project will lead to the setting up of plants for calcium oxide and units for producing alum from bauxite, and sulphuric acid.

6.100 Data relating to investment, employment production, value of production, sales turnover and profit/loss of the Central Sector units are provided in Appendix 6.4

Traditional Industries

The important traditional industries of Kerala are coir, cashew and handloom. The major developments relating to these industries during 1975-76 are discussed in the following paragraphs:

(a) *Coir Industry*

6.101 The Coconut Control Order (1973), the Kerala Coconut Husk and Fibre (Regulation of Movement) Order (1975), and the Kerala Coconut Husks and Coir Fibre (Export Control) Order (1974), were strictly enforced during the year 1976 with a view to ensuring equitable distribution of husk, and regulating the availability of husk and fibre for local consumption at reasonable prices. These statutory measures, together with the ban on defibering machines, have considerably helped in enforcing the price control measures. Apart from these, attempts have also been made to secure physical control of husk. The co-operatives and the Coir Corporation of Kerala have been engaged in the procurement and retting of husks. These steps have contributed a substantial improvement in the procurement of husk at controlled rates. The co-operatives procured a total of 1926.45 lakh husks during the year 1975-76 as against 1223.85 lakh husks during the previous year.

6.102 The self employment programmes for coir workers through the formation and strengthening of co-operatives continued to make progress. The co-operatives in the spinning sector covered 84,580 workers. They were provided with employment and reasonable wages. These co-operatives aid Rs. 211.54 lakhs as wages, and produced coir products worth Rs. 295.19 lakhs. In the manufacturing sector the co-operatives covered only about 1500 workers.

6.103 The co-operatives were reorganised into production-cum-sales units providing workers with necessary means for increased production and higher wages. Thus minimum wages have become a reality in the co-operative sector. This has influenced the private sector also. The wage rates in the private sector recorded substantial improvement but still not at par with the co-operative sector.

6.104 Under the coir development scheme, Government provided financial assistance of Rs. 159 lakhs during the year 1975-76. Besides, institutional finance to co-operatives was also made available to the tune of Rs. 263.66 lakhs. To augment the resources of the co-operatives, the members have been contributing from out of their earnings to a thrift deposit scheme. The total contribution by members aggregated to Rs. 34.93 lakhs during the year.

6.105 Production of coir and coir products recorded an appreciable increase during the year. The declining trend in the export of coir and coir products observed during the past decade was arrested during the year 1975-76. The export earnings went up to Rs. 22.96 crores in 1976 against Rs. 17.92 crores in 1975. Particular attention was also paid during the year to tap the internal market by opening sales depots all over the country.

Kerala State Coir Corporation

6.106 The Kerala State Coir Corporation, a private limited company fully owned by the Government of Kerala, was set up in July 1969, with a paid up capital of Rs. 58 lakhs. The Corporation was expected to act as an export house by stepping up the sale of coir products in international markets, to establish a strong market base for coir products by maintaining high standards of quality, and to render marketing assistance to small scale producers. As in the case of other export houses, the Corporation purchases semi-finished or finished products from small scale producers. The Corporation supplies raw materials such as yarn, dyes, jute etc. to the three thousand and odd small scale producers affiliated to it, and they in turn supply semi-finished goods to the Corporation. Smoking, stenciling, finishing, packing etc. are done at the factory run by the Corporation. The finished products are exported. The turnover of the Corporation which was only Rs. 84,000 in 1969-70 increased gradually to Rs. 148.63 lakhs in 1975-76. The export earnings have also increased steadily from Rs. 48.88 lakhs of 1970-71 to Rs. 86.04 lakhs in 1975-76. Besides acting as an export house the Corporation undertakes certain other activities as well.

6.107 A Distress Relief Purchase Scheme was introduced to assist small scale producers. Under this scheme the stocks of the small producers was purchased by the Corporation and sold later incurring even losses in the transaction.

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6.108 A husk-retting scheme was also introduced in 1973-74 by the Corporation with the intention of making available retted husks at reasonable prices ensuring minimum wages to the workers engaged in the industry. The Corporation has now 27 husk retting centres. Raw husks are purchased at controlled rates and retted husks are issued to the beneficiaries for production of yarn or fibre. The yarn or fibre returned by the beneficiaries are then supplied to small scale producers for production of coir goods. The Corporation gives minimum wages to workers engaged in retting operations, and other spinning activities. During 1975-76, the Corporation retted 148.34 lakhs husks (including husks surrendered) and issued 60.59 lakhs retted husks for production of yarn and sale.

6.109 The Corporation has taken over the Government Model Coir Factory, Beypore. This unit is having a mechanised defibering plant with a bailing press. This unit produces bristle and mattress fibre, mattings, ropes, fenders etc.

6.110 The Corporation has launched a programme for improving the quality of coir products by introducing scientific dyeing by mechanical methods. It has also taken active steps to instal a modern dye house at Alleppey at an estimated cost of Rs. 26 lakhs. Some progress has been achieved by the Corporation in implementing a project to instal a latex foam backed matting plant which has an estimated cost of Rs. 178 lakhs. This project is expected to provide employment to nearly thousand people. In order to obtain IDBI finance, the Corporation has initiated steps to incorporate a subsidiary Company for which the Draft Memorandum and Articles of Association are before the Government for approval.

(b) Cashew Industry

6.111 The State requires about 3.75 lakh tonnes of raw nuts to keep all its cashew factories working throughout the year. Indigenous production of cashewnuts is roughly estimated at one lakh tonnes of which only about 80,000 tonnes are available for the industry. The rest of the requirement has to be imported from countries like Tanzania, Mosambique and Kenya. These countries which could formerly meet all our requirements of raw nuts have recently developed their own cashew processing units. Hence there has been a reduction in the supply of raw nuts from these countries. They link the price of raw nuts with the price of processed nuts at the international market and demand higher prices for raw nuts. Moreover due to the emergence of China and Brazil as cashew exporters, the raw material surpluses in the world market is dwindling. The decrease in the quantum of raw nut imports and the hike in raw nut prices are clearly reflected in Table 6.11.

TABLE 6.11
Import of Rawnuts

Year	Import of raw nuts in tonnes	Value in Rs. crores
1972-73	1,97,938	31.81
1973-74	1,50,249	28.80
1974-75	1,41,079	32.30
1975-76	1,36,500	33.54

6.112 The Cashew Corporation of India which is the sole authority for the import of raw nuts into India is experiencing difficulties in obtaining adequate quantity of raw nuts at competitive prices. While the import requirement is about three lakh tonnes, the actual availability is only between 1 and 1.5 lakh tonnes. This has resulted in under utilisation of capacity and frequent closure of factories. The cashew factories of the State worked on an average for about 100 days during the year 1975-76.

6.113 The figures relating to exports of cashew kernels from India for the last few years are shown in Table 6.12.

TABLE 6.12
Export of Cashew Kernels

Year	Export in tonnes	Value in Rs. lakhs
1972-73	66278	6882.14
1973-74	52293	7443.22
1974-75	65025	11813.73
1975-76	53230	9548.47 (Provisional)

6.114 During 1975-76 there was a perceptible fall in demand for cashew kernels in foreign markets, especially in the Soviet Union, India had once a near monopoly in the supply of cashew kernels in the international market till recently. India's share in the world trade has fallen from 95% in 1960 to 58.4% in 1974. The export of cashew shell liquid however, is showing a slightly increasing trend. The figures relating to exports of cashew shell liquid for the last few years are given in Table 6.13.

TABLE 6.13
Export of Cashew Shell liquid

Year	Export in tonnes	Value in Rs. lakhs
1972-73	4962	56.85
1973-74	3845	49.61
1974-75	6696	166.84
1975-76	6950	152.09

6.115 The export of cashew shell liquid was more than 10,000 tonnes during the years prior to 1968-69, but decreased subsequently to 3845 tonnes in 1973-74. Though it is difficult to attain the 1968-69 level, there is every possibility of increasing it in the coming years.

6.116 The indigenous production has to be stepped up considerably to overcome the difficulties experienced in importing raw nuts. But cashew cultivation in the country is not geared yet to face the situation. Increased production of raw nuts can be achieved by adopting two approaches: first, a short term approach to increase production through better management of the existing cashew plantations and the second a long term goal to increase the area under the crop. To save the industry from extinction these methods have to be implemented on a war-footing.

6.117 With a view to bringing about equitable distribution of raw nuts at fair prices within the State the Government of Kerala passed the Kerala Raw nuts (Movement Control) Order 1975 on 4-9-1975. This order curbed the free movement of raw nuts. Also, the Government of Kerala passed the Kerala Raw Cashewnuts (Restriction on Marketing) Order 1976 with the intention of distributing raw cashew equitably to the processing factories in the State. This restriction on marketing came into effect from 22-3-1976. According to this order about sixty nine agencies were authorised to collect raw nuts at a price fixed by the Government. In the actual implementation of this order however the Government found certain difficulties and subsequently revised the purchase price of raw nuts for the ensuing season and the method of collection and distribution. The new price ranges between Rs. 370 and Rs. 400 per quintal, compared to Rs. 260 per quintal last year. The prices of raw nuts is linked to the likely prices of raw nuts and is intended as an encouragement to the cashew cultivators. The Government has also changed the method of collection of raw nuts. Instead of authorising several agencies (69 last year) for collection of raw nuts the Kerala Co-operative Marketing Federation would be the sole authorised agency now. The Federation would collect raw nuts through its primary co-operative societies and service co-operatives. The societies, nearly thousand in number, would be the sub-agencies for the collection of raw nuts. The raw nuts so purchased will be distributed to the factories in proportion to the allotment of imported nuts last year. Nearly one lakh tonnes of raw nuts are expected to be collected during the ensuing season.

Kerala State Cashew Development Corporation

6.118 The Kerala State Cashew Development Corporation has now under its management thirty-four cashew factories, and provides employment to 32,957 workers and 1769 staff members. Due to the non availability of raw nuts, the Corporation was not able to provide full time employment to all workers during 1975-76. The Corporation received only 27,559 tonnes of raw nuts from the Cashew Corporation of India, and therefore on an average the factories under the Corporation worked for only about 55 days during the year. The Corporation required about 280 tonnes of raw nuts per day to run all its thirty-four factories.

6.119 During 1975-76, a total of 41,926 tonnes of raw nuts (28,222 tonnes of African nuts and 13,704 tonnes of local raw nuts) were processed as against 39,439 tonnes in 1974-75. The Corporation exported cashew kernels worth Rs. 16.92 crores during 1975-76, the country wise break up of which is given below:

Country	Quantity	Value
U. S. A. and Canada	5065.7 tonnes	Rs. 10.06 crores
U. S. S. R.	1836.4 "	Rs. 3.15 "
G. D. R.	167.5 "	Rs. 0.27 "
Other European countries	1695.7 "	Rs. 3.44 "
Total	8765.3 "	Rs. 16.92 "

6.120 The value of export has thus decreased from Rs. 22.20 crores in 1974-75 to Rs. 16.92 crores in 1975-76. This is due to a fall in demand for cashew kernels in the world market because of withdrawal of U. S. S. R., one of the major buyers of Indian kernel and the subsequent fall in prices. The U. S. S. R., purchased kernels worth Rs. 15.93 crores in 1974-75, as against Rs. 3.15 crores in 1975-76. The Corporation exported 1230 tonnes of cashew shell liquid valued at Rs. 35.89 lakhs in 1975-76 compared to Rs. 15.84 lakhs in the previous year.

6.121 The production cost, registered an increase due to the general increase in cost of living index during the early part of the year. Substantial wage increases were also brought about as a result of the revision of minimum wages to workers engaged in cashew industry with effect from 1-9-1975. These factors brought about a net loss of Rs. 70.98 lakhs in 1975-76 as against a net profit of Rs. 39.40 lakhs in the previous year.

(c) *Handloom Industry*

6.122 Among the traditional industries in the State, handloom industry has an important place next only to coir. According to the Census of Handlooms conducted in 1976, the number of handlooms in the State

is about 90,000 of which 22,200 are in the co-operative sector and 67,800 in the private sector. About a lakh of people depend on handloom industry for their livelihood. The production in the handloom sector during the year 1975-76 was on the increase compared to the previous year. The production in the co-operative sector was about 27 million metres of cloth worth Rs. 8.83 crores while that in the private sector the production was 32 million metres of cloth worth Rs.13.3 crores. Though adequate yarn was available in the open market prices were not steady. The price of dyes and chemicals did not show any upward trend, though dyes of imported varieties were scarce.

6.123 The increase in handloom production however was not in proportion to the increase in sales which resulted in accumulation of stocks. This problem was prevalent in 1974-75 also. The special rebate of 20 per cent allowed during January-February 1976 on the sale of handloom cloth by handloom weavers' co-operative societies enabled them to dispose of goods worth Rs. 195 lakhs. But subsequently the stocks mounted up again and the handloom weavers were once again in difficulties. It is estimated that about 12,000 weavers' families were affected in Cannanore district alone which is the foremost centre of handloom production.

6.124 Trivandrum and Quilon districts occupy the second and third places in handloom cloth production in the State. In these districts also the situation is difficult. The associations of producers and exporters estimate the accumulation of stock at about Rs. 20 crores. The major reasons for this setback in the industry are lack of demand for crepe items in foreign markets, inflow of crepe items produced by power-looms into the internal markets, high cost of production due to increase in the price of raw materials and wages, and adherence to the traditional mode and pattern of production. The slashing down of back borrowings coupled with the increase in wages consequent to the fixation of minimum wages in Kerala, affected the cost of production and deprived the industry of its advantages to compete with neighbouring States. Hence to sustain the industry the following measures are necessary:

- (1) rejuvenation of the internal market by producing handloom cloth of new and latest designs, which will suit the tastes and sensibilities of the consumers.
- (2) bringing into force a unified minimum wage policy in handloom industry at least for South India.
- (3) Government or a Government agency should come forward to locate foreign markets, and initiate steps for export.
- (4) making arrangements for the disposal of the present accumulated stock.

6.125 An Intensive Development Project covering 10,000 looms with an outlay of Rs. 185 lakhs and an Export Production Centre covering 1000 looms with an outlay of Rs. 40 lakhs have been sanctioned to this State by the Government of India. These schemes are intended to assist the handloom industry in the private sector or diversification, quality improvement and marketing of products. The schemes are proposed to be implemented through the Kerala Handloom Finance and Trading Corporation. It is expected that the weavers in the private sector will be able to get more employment when the schemes are implemented.

6.126 Considering the potential for the export of ready made garments made of handloom cloth it is proposed to have two garment making factories in the State one under the auspices of the Kerala Handloom Finance and Trading Corporation, and the other under the management of the Kerala State Handloom Weavers Co-operative Society. These will enable the State to avail itself of the export benefits and enhance at the same time employment to more people in Kerala.

Kerala State Handloom Finance and Trading Corporation

6.127 During the year 1975-76, the Kerala State Handloom Finance and Trading Corporation received 230 applications for loans from members for an aggregate amount of Rs. 8.58 lakhs. Of these 178 applications were sanctioned and an amount of Rs. 4.14 lakhs was disbursed in cash. The Corporation also sanctioned credit loan for a total amount of Rs. 2.62 lakhs to 128 members. An abstract of loan operations of the Corporation for the last three years is provided in Table 6.14.

TABLE 6.14

Amounts Sanctioned and Disbursed by Handloom Finance and Trading Corporation
(Rs. lakhs)

Details	1973-74		1974-75		1975-76	
	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Loans sanctioned	144	3.92	256	8.18	191	4.37
Amount disbursed	139	3.67	200	5.70	178	4.14
Amount outstanding	418	10.44	527	11.60	642	13.02

6.128 As the textile industry was passing through a difficult phase, there was an unprecedented fall in the business of the Corporation. The descending and unsteady market conditions resulting in abnormal decrease in prices at short intervals necessitated the Corporation to adopt a go-slow policy in trading, so as to avoid increasing losses. Even then the Corporation was forced to sell some of the goods below cost, in order to ensure regular supply of yarn to members. The sales turnover in 1975-76 was only Rs. 28.86 lakhs

as against Rs. 85.72 lakhs in the previous year. The working of the Corporation in 1975-76 resulted in a net loss of Rs 0.98 lakhs while in the previous year it earned a nominal profit of Rs. 0.12 lakhs.

6.129 "The Kerala Garments Ltd", a subsidiary company of the Corporation, was incorporated with an authorised capital of Rs. 20 lakhs, to implement and manage the garment manufacturing unit. This project has been completed and commercial production has commenced.

Small Scale Industries

6.130 The Government of Kerala has launched a massive programme for the development of small scale Industries in the State. This programme was designed to provide employment opportunities to the unemployed educated youth of the State. Exploitation of local raw material resources, mobilisation of maximum finance from financial institutions and the utilisation of the abundant manpower available in the State are the major considerations of this programme. The programme is proposed to be operated through the establishment of mini industrial estates which will act as growth centres. The mini industrial estates are set up in an area of about one acre of land surrendered by the Panchayat to the Government. The estate buildings are owned by the Kerala State Small Industries Corporation or the District level Industrial Estate Co-operative Societies.

6.131 The programme envisages the setting up of 10,000 new small scale industrial units in the rural areas, and to revitalise 2,500 existing sick units in the coming four years. The target fixed for the first year (1975-76) was to establish 1,000 new small scale units, and for the second year 2,000 units. All the new units coming up within and outside the panchayat level mini industrial estates would also come under the coverage of this target.

6.132 To begin with eleven panchayats were selected in eleven districts of the State. Levelling of ground, construction of roads and buildings, preparation of project reports, arrangements for finance, selection and installation of machinery, supply of power, water etc., were completed within a record time of six weeks. These eleven estates involving an overall investment of Rs. 175 lakhs started functioning from 3rd October 1975. Eleven mini industrial estates under the second series and twelve mini industrial estates under the third series have also been set up.

6.133 The refinance facilities of the Industrial Development Bank of India were utilised in the setting up of co-operative societies of mini industrial estates. As a first step 66 mini industrial estates was taken up under the co-operative fold. Out of the 660 units which will come under the co-operative fold, more than

100 units will be engaged in the production of ancillary items for large establishments like Kerala State Electricity Board, Kerala State Road Transport Corporation, Cochin Shipyard, Hindustan Machine Tools and ISRO. A district-wise list of the proposed 100 mini industrial estates is given in Appendix 6.5.

6.134 Special schemes were also drawn up for promoting and organising women's industrial ventures women's industrial co-operatives and units under individual and collective ownership of which some have already gone into production. More than 150 women's industrial units has so far been registered. Women have come forward to undertake even such items of work as electroplating, welding and foundry.

6.135 A separate wing of the Industries Development Commissionerate, and the Small Industries Development and Employment Corporation are attending to the various problems of the sick units. Arrangements have already been made for the revival of sick units. The Industrial Reconstruction Corporation of India has taken up a detailed study of the sick units. The Corporation has already completed their study of 18 sick sea food units, and final project reports relating to them are under preparation.

6.136 Technical consultancy support for the programme is being given by Kerala Industrial Technical and Consultancy Organisation (KITCO) and the Small Industries Service Institute (SISI), Trichur. A panel of selected consultants from within and outside the State has been set up. District level technical consultancy cells have been set up by drawing the services of public and private sector managers, faculty members of technical colleges and institutions, and such others who are prepared to assist in the technical consultancy requirements of this programme.

6.137 The Kerala Financial Corporation and the commercial banks have already come forward to assist the massive industrialisation programme. The contribution from financial institutions and banks will be to the tune of Rs. 8 crores. A list of financial institutions and the number of mini industrial estates financed by each institution is given in Appendix 6.6.

6.138 Marketing of finished goods is one of the major problems which the small scale units have to face. To identify the potential market and to support the case of small entrepreneurs, a separate wing has been set up in the newly formed Small Industries Development and Employment Corporation. The State Government has also decided to remould its stores purchase programme, so that in future the State Government departments, public sector undertakings, Corporations, quasi Government institutions, statutory bodies, and other undertakings over which the Government have some degree of control should give a price preference of 15 per cent to the products of small scale industrial units in the State.

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6.139 The State Government also proposes to establish major industrial estates consisting of 25 small scale industrial units in each of the municipalities, and Industrial Townships consisting of 100 small scale units in each of the eleven district headquarters. The required land for these estates and townships will be arranged according to the principles of town planning and with all infrastructure facilities. An attempt in this direction has already been made in Kottayam and Ernakulam districts.

6.140 To take up the various responsibilities and services connected with the new industries programme, the Kerala Financial Corporation has been geared up, and an umbrella corporation has been registered under the name "The Kerala State Small Industries Development and Employment Corporation" with its headquarters at Trivandrum, by amalgamating the existing Small Industries Corporation and Employment Promotion Corporation.

Kerala State Small Industries Corporation

6.141 The Kerala State Small Industries Corporation was set up in 1961 in order to aid, counsel, assist, finance and promote the interests of small scale industries in the State. The Corporation is at present attending to activities like administration of industrial estates, execution of civil construction works on behalf of the Government, running of production-cum-service units, supply of machinery on hire-purchase basis, procurement of raw materials and their distribution to small scale units, marketing assistance and sub contracting. In addition to the above the Corporation has recently taken up the construction of mini industrial estates. It also provides margin money to the entrepreneurs under the new industries programme.

6.142 Financial and administration problems has all along bogged the working of the Corporation. To make the Corporation a vital instrument in the promotion of small scale industries, especially in the context of implementing the New Industries Programme, it became necessary to reorganise it. Hence a reorganisation of this Corporation by merging it with the Kerala Employment Promotion Corporation is under way. The new Corporation is styled 'Kerala State Small Industries Development and Employment Corporation'.

6.143 During 1975-76 the working of the State Small Industries Corporation resulted in a net loss of Rs. 8.36 lakhs. This is mainly the result of a fall in the turn over of raw materials. The turn over of raw materials in 1975-76 stood at Rs. 1.82 crores as against Rs. 3.32 crores during 1974-75.

Kerala State Small Industries Development and Employment Corporation

6.144 This Corporation was incorporated in November 1975, with an authorised capital of Rs. 500

lakhs and a paid up capital of Rs. 86 lakhs. Amalgamation of the existing Corporations with the newly formed one is on. This Corporation is expected to have the following 12 functional divisions so as to provide integrated service to the small entrepreneur.

1. Research and development division
2. Industrial estate and infrastructure division
3. Production division
4. Raw materials division
5. Machinery division
6. Finance division
7. Technical consultancy division
8. Entrepreneurial development division
9. Import and export division
10. Marketing division
11. Sick units division
12. Information and publicity.

6.145 Each of the divisions of the Corporation will be under a full fledged General Manager or Executive Director. These divisions will establish effective linkages with all the appropriate agencies such as, NSIC, NIDC, IDBI, KFC, commercial banks, Small Industries Service Institute, KITCO, Development Departments of the Government etc.

6.146 The industrial estate and infrastructure division, finance division, marketing division, import and export division and sick units division have already come into being.

6.147 One of the main functions of the Corporation is to help the channalisation of institutional finance for industrial development. After the massive rural industrialisation programme was introduced, the Corporation has been functioning as a focal point for securing bank assistance. It was mainly through the efforts of this Corporation that finance has been raised from Kerala Financial Corporation, commercial banks and Kerala State Co-operative Bank for the mini-industrial estates. The Corporation has also achieved a fair measure of success in the field of sick unit rehabilitation under a tie up with the Industrial Reconstruction Corporation of India. A Consultant has been appointed to carry out an indepth study of SSI units requiring rehabilitation. The Corporation has also undertaken industrial potential surveys of various districts. In the field of marketing the Corporation is equipping itself to provide active assistance to small entrepreneurs. A major area of work of the Corporation is to identify the potential market, and to help the small entrepreneurs to get the necessary patronage from Government departments and other public undertakings.

Kerala Financial Corporation

6.148 The year 1975-76 witnessed an unprecedented increase in the number of loan applications received, sanctioned and amount disbursed by the Kerala Financial Corporation. Altogether 611 applications for an aggregate amount of Rs. 1208.71 lakhs were received and of this 494 applications for Rs. 966.88 lakhs were sanctioned. An amount of Rs. 504.13 lakhs was disbursed during the year. A comparative statement showing the loan transactions of the Corporation during the last three years is given in Table 6.15.

TABLE 6.15

Loan Transactions of Kerala Financial Corporation

Item	(Rs. lakhs)					
	1973-74		1974-75		1975-76	
	No.	Amount	No.	Amount	No.	Amount
Applications received	386	960.36	506	1182.75	611	1208.71
Applications sanctioned	248	385.92	357	697.78	494	966.88
Amount disbursed	209	209.05	250	265.54	405	504.13

6.149 As a matter of policy, the Corporation stopped its assistance to certain categories of industries like bakeries, softwood based industries, aluminium based industries, steel re-rolling mills, starch factories and washing soap units. Restrictions imposed in earlier years on tourist hotels have been practically lifted. Limitations in providing assistance to ice factories have also been removed.

Since its inception the Corporation received 2771 applications worth Rs. 6490.59 lakhs. Of this 2022 applications for Rs. 4232.53 were sanctioned. The amount disbursed so far comes to Rs. 2250.45 lakhs. A statement showing the cumulative figures of loan transactions of the Corporation till 31-3-1976 is furnished in Table 6.16.

TABLE 6.16

Loan Transactions-Cumulative Figures

Item	(Rs. lakhs)					
	Small scale		Others		Total	
	No.	Amount	No.	Amount	No.	Amount
Applications received	2532	4675.90	239	1814.69	2771	6490.59
Applications sanctioned	1821	2835.30	201	1397.23	2022	4232.53
Amount disbursed	1305	1384.27	153	866.18	458	2250.45

6.150 Consequent on the increase in the refinance rates of the Industrial Development Bank of India, the Corporation revised its lending rates from 1-2-1976 to 12½ per cent for small scale industries, 14 per cent

to other industries and transport and 11 per cent for units in the backward districts. In the case of IDA line of credit the rate of interest charged was 12½ per cent for small scale industries covered under Technician Entrepreneur Scheme, and for units in specified backward districts while in all other cases the rate of interest was 13 per cent per annum. In all cases the Corporation allowed a rebate of 1½ per cent per annum for prompt repayment. The effective rate of interest charged by the Corporation for small scale industries which are eligible for Government subsidy was 5.5 per cent per annum.

6.151 The Corporation has played a prominent role in the promotion of small scale industries in the State. More than 60 per cent of its assistance so far has been granted to the small scale industries sector. The applications for financial assistance received from this sector increased from 486 in 1974-75 to 592 in 1975-76. The amount disbursed amounted to Rs. 408.62 lakhs in 1975-76 as against Rs. 254.47 lakhs in 1974-75.

6.152 The State Government continues to provide interest subsidy to the Corporation for loans upto Rs. 3 lakhs disbursed to small scale industries. The Corporation is actively assisting the massive industrialisation programme of the State Government for the establishment of 10,000 new small scale industrial units. It has already sanctioned Rs. 30 lakhs to the Kerala State Small Industries Corporation for the construction of eleven mini industrial estates under the first series, and has also agreed to finance the industrial units in the series by relaxing its normal norms and conditions. It has also decided to provide financial assistance to the mini industrial units for the purchase of plant and machinery at ten per cent margin.

6.153 Industrial units set up in the industrially most backward districts of Alleppey, Malappuram and Cannanore continue to be eligible for Central Government subsidy at the rate of 10 to 15 per cent of the fixed capital invested. Concessional finance thus granted has not shown any appreciable increase in these districts. In spite of the efforts of the Development Wing of the Corporation, the entrepreneurs of these districts could not be induced to avail themselves of the facilities from the Corporation for establishing new industrial units. The Corporation has opened sub offices attached to the District Industries Office in these districts, to attend to the promotional activities of the Corporation, and to keep a liaison with the prospective entrepreneurs.

6.154 The Corporation's scheme for financing fishing boats introduced last year has not found favour with the entrepreneurs. The Corporation sanctioned a loan of Rs. 30 lakhs to a Company during the year for the acquisition of a mexican fishing trawlers allotted by the Government of India. Under the scheme

relating to the loans for retirement of machinery bills, 92 application for Rs. 57.38 lakhs have been received by the Corporation. Of this 37 applications for Rs. 52.66 lakhs have been sanctioned. The new scheme 'Technocrat Assistance Scheme' put into operation by the Corporation to alleviate the unemployment problem of technically qualified personnel has shown good response. The Corporation received 115 applications for Rs. 215.27 lakhs under this scheme. Of this 92 applications were selected, and 44 applications for Rs. 82.34 lakhs were sanctioned. The Corporation also sponsored 16 applications for Rs. 313.70 lakhs under the IDA line of credit of which seven applications involving an amount of Rs. 151.39 lakhs were sanctioned.

6.155 The smooth working of the Corporation, and further extension of its activities is hampered to a great extent by the non repayment of loans as per the normal repayment scheme. The total cumulative amount due for repayment upto 31-3-1976 was Rs. 11337.83 lakhs of which Rs. 939.31 lakhs has been recovered. Thus total arrears work out to 29.78 per cent as against 24.32 per cent in the previous year. A perusal of the defaulting accounts has disclosed that a substantial portion of this relate to loans in the subsidised sector i.e. loans upto Rs. 3 lakhs, where rate of interest is only 5½ per cent. It looks as though the good intentions of the Government in subsidising such industries, acted as an incentive not to repay. It should be remembered that the bank rate of interest is about three times this lending rate.

6.156 The authorised share capital of the Corporation has been raised from Rs. 3 crores to Rs. 5 crores, and paid up capital from Rs. 2 crores to Rs. 3 crores. The paid up capital as on 31-3-1976 is Rs. 170 lakhs comprising of ordinary share capital of Rs. 145 lakhs, and special share capital of Rs. 25 lakhs. The special share capital is intended to provide financial assistance at concessional rates to weaker sections of the society. The pattern of share holding (as on 31-3-1976) in the Corporation is as follows.

Government of Kerala	Rs. 95.41 lakhs
Reserve Bank	Rs. 28.20 "
Industrial Development Bank of India	Rs. 22.50 "
Banks and Insurance Companies	Rs. 21.84 "
Other parties	Rs. 2.05 "
Total	170.00 "

After March 1976, the paid up capital was increased to Rs. 195 lakhs. This increase of Rs. 25 lakhs has been shared equally by the State Government and Industrial Development Bank of India. According

to Public Financial Institutions Laws (Amendment Act) 1975, which came into force on 16th February 1976, the shares in the name of Reserve Bank of India has been transferred to Industrial Development Bank of India.

6.157 During the year 1975-76, the Corporation earned a profit of Rs. 55.85 lakhs after meeting all expenses, as against Rs. 43.20 lakhs during the previous year. After providing a sum of Rs. 24 lakhs for taxation, the net profit was Rs. 31.85 lakhs, an increase of Rs. 3.37 lakhs over the previous year. This has been appropriated to the special reserves and general reserves and for guaranteed dividend.

Minerals

6.158 The Government of Kerala is becoming more and more conscious of the need for locating and exploiting the mineral wealth in the State. With this object in view the State has reorganised and strengthened the Mining and Geology Department. The activities of the Department during the recent past is given in greater detail below:

6.159 Using the data thrown up by the survey of the Geological Survey of India, the Department has arranged for detailed exploration of lime stone deposits in Walayar area of Palghat district through Mineral Exploration Corporation of India, the reserves of 20 million tonnes having proved satisfactory for setting up a cement factory. M/s. Holtec, consultants for cement industry, have submitted a feasibility report for a 1000 to 1200 tonne per day cement plant at Walayar. The cement project has been approved by both the State and Central Governments after having cleared by various concerned agencies. The Kerala State Industrial Development Corporation is actually concerned with this project. It is estimated that the project will cost about Rs. 30 crores.

6.160 Based on the beach sands of Chavara region, which had been properly assessed, a titanium complex project is underway. This complex is proposed to be set up at Sankaramangalam in Quilon District.

6.161 Based on the exploration works of the Geological Survey of India in the Thodupuzha area, the Kerala State Industrial Development Corporation is going ahead with a project for the mining, beneficiation and manufacture of articles from the Nagapuzha graphite deposits.

6.162 During 1975-76 the State Mining and Geology Department continued detailed investigations for graphite, lime stone and magnesite clays. It also carried out mineral surveys in the north and south Wynad taluk of Cannanore and Kozhikode districts Attappadi hills of Palghat district and Kulathupuzha

reserve forests of Quilon district. With a view to locating graphite deposits, detailed investigation by geological mapping, pitting and trenching were conducted in the Chirakkadavu-Vazhoor area of Kottayam district. These investigations proved the occurrence of graphite, and the beneficiation studies carried out on the samples collected showed that the percentage of graphite vary from 10 to 17 percent by weight. The reported occurrence of graphite near Erumeli and Mundakayam area were also examined and their occurrence at Erumeli was traced.

6.163 The exploratory drilling operations for proving the reserves of sedimentary lime stone deposits in Mayyanad area of Quilon district were also conducted in 1976. These established the deposits of lime stone and calcareous clay below a laterite cover of six to twelve metres. The Department also undertook a survey for locating possible occurrence of clays, laterite etc. in Walayar area to be used as additive materials for the proposed cement plant.

6.164 The Department also undertook detailed investigations for proving the lime shell deposits in Taliparamba and Hosdurg taluks of Cannanore district, Crangannore taluk of Trichur district, Kulasekharamangalam, Vechoor, and Vaikom area of Vembanad lake in Kottayam district and Tannermukkam area of Alleppey district. Reconnaissance probing, followed by detailed probing operations carried out in these regions have proved the existence of sizeable deposits of lime shell.

6.165 An investigation to locate sizeable deposits of refractory clays in Poomangalam village of Mukundapuram taluk of Trichur district was taken up to augment the additional requirements of clays for the proposed expansion programme of Chalakudy Potteries. The investigations have proved the existence of crude refractory clays, Chemical analysis, and furnace trials of clay samples are being conducted to prove its suitability for making refractories.

6.166 The Mining and Geology Department also carried out detailed investigations to prove the resources of sedimentary, refractory clays and Kaolinitic clays at Mulavana, near Kundara in Quilon district. The investigations are in progress. At the request of "Kerala Ceramics, Kundara" a detailed investigation by drilling was taken up in the leasehold area of the Company and as a result of the investigations a total reserve of about eight lakh tonnes of crude Kaolinitic clay was proved in this area. Detailed investigations by auger drilling to prove the reserves of tile and brick clays in Neyyattinkara taluk was taken up and completed during 1975-76. As a result of these operations an area of about 60.50 hectares in Amaravila, Maruthur and Kandankuzhi was proved to contain 28.84 lakh tonnes of tile and brick clays..

6.167 Mineral surveys for locating possible occurrence of crystalline lime stone, graphite, silliminite and gemstones were undertaken in Kulathupuzha reserve forest area of Quilon district and Bonaccad Estate and surrounding areas of Trivandrum district. The Department also carried out a mineral survey for locating possible occurrence of steatite, muscovite, mica, quartz, felspar, pink granite and magnesite in north and south Wynad taluks and Attappadi hills.

6.168 With the intention of stimulating the tempo of mineral exploration activities, the State Government prepared a mineral development project under UNDP assistance and forwarded it to the Government of India. The Government of India in their turn has approved the proposal and forwarded it to the UNDP authorities for their acceptance and inclusion in the country programme of UNDP for 1977-80. The project activities are expected to be initiated in April 1977.

6.169 Among the various minerals now available in the State, the beach minerals like ilmenite, monozite, rutile, silliminite, and zircon are being worked intensively. The quantity of these different minerals exploited and sold during the year 1974-75 and 1975-76 is given in Table 6.17.

TABLE 6.17
Production and Sale of mineral sands

Minerals	(Tonnes)			
	1974-75		1975-76	
	Production	Sale	Production	Sale
(1)	(2)	(3)	(4)	(5)
Ilmenite	111229	113188	185042	56351
Brown Ilmenite	127	258	403	150
Rutile	5615	7401	7868	5130
Monozite	204	220	238	82
Zircon	6014	7461	5830	4477
Sillimanite	224	320	1315	504

6.170 The other major minerals exploited are china clay, lime shell, ball clay, fire clay and glass and white quartz. Figures relating to the production and sale of these minerals in 1974-75 and 1975-76 are given in Table 6.18.

TABLE 6.18
Production and Sale of Other Major Minerals

Minerals	(in Tonnes)			
	1974-75		1975-76	
	Production	Sale	Production	Sale
(1)	(2)	(3)	(4)	(5)
Glass and white quartz sand	25926	24551	58817	42029
Fire clay	8234	7983	7409	5545
Ball clay	1010	1016	2763	1780
Lime shell	78228	78453	121034	88209
China clay	50770	1922	61742	59072
China clay (Processed)	22678	24337	20126	16110

TRANSPORT AND COMMUNICATIONS

An Overview

Kerala is fairly well served in the matter of transport and communication facilities. Besides the usual transport modes such as roads, railways and airways it has an extensive system of inland canals. The major mode of transport in Kerala is the road transport. The road network has been so developed as to connect the major urban and rural centres. The total length of the road system in the State is around 75,000 kms. The motor vehicles registrations are showing regular increase over the last few years. The passenger transport is mainly in the hands of private operators but the State owned Kerala State Road Transport Corporation is also expanding its activities by taking over new routes, providing additional schedules and stabilising the services in the routes already taken over. The Corporation accounts for nearly thirty per cent of the total passenger traffic in the State.

7.2 The conversion of the metre gauge line between Trivandrum and Ernakulam into broad gauge and the doubling of the railway lines between Mullookkara to Vadakkancherry and Puthucaud to Irinjalakuda are the significant achievements in this sector of transport. The major port of Cochin constitutes a vital centre of coastal as well as foreign trade. Some export-import trade is also being attended to by the eight minor ports and three intermediate ports in the State. Kerala is well placed in the sphere of communication facilities like posts and telegraphs and telephones.

7.3 The inland canal system consists of a string of backwaters, navigable rivers and artificial canals. These waterways which play a useful role in the transportation of bulk goods can be made more useful and profitable if greater attention is paid to this mode of transport. A sizeable portion of the passenger and goods traffic is taken care of by the system.

Roads

7.4 The total road length in Kerala (including the roads under the Panchayats) as on 1-4-1974 is estimated at 74,819 kms. (See Table 7.1). This includes National Highways, roads held by the Public Works Department and other agencies.

TABLE 7.1

Roads in Kerala under different Departments as on 1-4-1974

Sl. No.	Category	Length of Roads 1-4-1974 (kms)
(1)	(2)	(3)
1.	National Highway	837
2.	Public Works Department Roads	14796
3.	Panchayats	52561*
4.	Kerala State Electricity Board	522
5.	Military	78
6.	Community Development and National Extension Service Blocks	2905*
7.	Railways	66
8.	Department (Irrigation)	370
9.	Municipalities and Corporation	1547
10.	Other Departments	1197
Total		74819

*Relates to the year 1972.

7.5 Of the estimated total length of roads in the State, nearly 15,000 kms. of roads are maintained by the Public Works Department. The length of Public Works Department roads increased from 13,973 kms. in 1967 to 14,796 kms. in 1974 and to 14,870 in 1975. The Public Works Department roads fall broadly under four categories. The category-wise length of Public Works Department roads as on 1-4-1974 is provided in Table 7.2.

TABLE 7.2

Distribution of Public Works Department Roads by type of surface

(Kms.)

Classification of roads	Cement concrete	Black topped	Water Bound Macadam	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. State High - ways	46	1907	56	74	2084
2. Major District Roads	8	4963	423	38	5432
3. Other District Roads	48	3082	1698	773	5601
4. Village Roads	..	..	..	1679	1679
Total	102	9952	2177	2564	14796

The District-wise break up of the Public Works Department roads as on 1-4-1975 is given in Table 7.3.

TABLE 7.3
Distribution of Public Works Department Roads by Divisions

Sl. No.	Road Division	Length in kms.
(1)	(2)	(3)
1.	Trivandrum	1310
2.	Quilon	2199
3.	Kottayam	1658
4.	M. C. Division, Kottayam	10
5.	Alleppey	1170
6.	Moovattupuzha	1715
7.	Ernakulam	1051
8.	Trichur	1239
9.	Palghat	1104
10.	Manjeri	920
11.	Calicut	964
12.	Cannanore	1530
	Total	14870

7.6 The Fifth Plan outlay on roads and bridges is of the order of Rs. 22.82 crores. The expenditure for the first two years of the plan period on State Highways, District and other roads and village roads accounts for nearly 29 per cent of the total plan outlay. The broad details of expenditure are set out in Table 7.4

TABLE 7.4
Plan Expenditure on Roads and Bridges
(Rs. lakhs)

Sl. No.	Scheme	Fifth Plan outlay	1974-75 (Actuals)	1975-76 (Actuals)
(1)	(2)	(3)	(4)	(5)
1.	State Highways		58.28	112.01
2.	District and other roads		146.76	145.04
3.	Minimum Needs Programme (including Village roads) implemented in the Blocks	2282.00		
			90.40	96.95
4.	Planning and Research		30.60	27.13
5.	Railway safety works		1.90	6.25
	Total	2282.00	327.94	387.38

The anticipated expenditure on roads and bridges for 1976-77 is of the order of Rs. 4.30 crores. According to the proposals for 1977-78, an amount of Rs. 4.25 crores is expected to be spent on this head of development.

Road Transport

Motor Vehicles Registration

7.7 The total number of motor vehicles registered as on 31-3-1976 was over 1.18 lakhs. Trivandrum has the largest number of motor vehicles (25,106). It is followed by Ernakulam (18,195) and Kozhikode (14,406). The other districts have less than 10,000 vehicles on the roads. The vehicle density in the State is high compared to many other States in India. It has 304 vehicles per 100 sq. kms. of area and 553 vehicles per lakh of population in 1975-76. The corresponding all-India figures in 1972-73 is 71 and 405. Motor vehicles in Kerala consist of 40,667 cars, 26,110 motor cycles, 15,882 goods vehicles, 11,582 taxi cabs and 23,835 other vehicles. As regards cars, Trivandrum leads with 9,645 followed by Ernakulam with 7,029, Kozhikode with 4,395 and Quilon with 4,300. Details regarding the number of motor vehicles are furnished in Appendix 7.1.

7.8 The total revenue from Motor Vehicles Taxes and fees collected under the Motor Vehicles and Taxation of Passengers and Goods Act during 1975-76 increased from Rs. 954 lakhs in 1974-75 to Rs. 1081 lakhs in 1975-76. The revenue from this source works out to only 3.2 per cent of the total estimated revenue receipts for 1975-76. The cumulative total of arrears under various Motor Vehicle Taxes on 31-3-1976 stood at Rs. 56.74 lakhs as against Rs. 23.44 lakhs at the end of 1974-75. The receipts under non motor vehicles was Rs. 7.12 lakhs as against Rs. 6.63 lakhs during 1974-75.

7.9 The number of road accidents went down from 5,683 in 1974-75 to 5,390 in 1975-76. The number of deaths as a result of accidents decreased from 1,067 to 861 during this period. In 1975-76, 5,459 persons were injured as a result of road accidents compared to 5,732 in the previous year (See Appendix 7.2).

Passenger Transport

7.10 The passenger transport operations in Kerala are mainly carried out by the private operators, especially in the northern districts of the State. The State-owned Kerala State Road Transport Corporation possesses only less than 30 per cent of the total number of vehicles in the State.

7.11 The number of stage carriages increased from 7,828 in 1974-75 to 8,268 in 1975-76 and the stage carriages per lakh of population in 1975-76 was 35 as against 34 in 1974-75. The number of vehicles in the nationalised sector was only 2,359 out of the total of 8,268. The percentage of nationalised vehicles works out to only 28 per cent of the total number of vehicles. This ratio is low compared to the all India ratio which is around 42.

7.12 The Kerala State Road Transport Corporation is the second biggest public sector undertaking in Kerala having about 21,500 employees in their payroll. The total capital investment of the Corporation was Rs. 17.07 crores at the end of 1975-76. The fleet strength of the Corporation rose from 2,212 to 2,349 during the year 1975-76. New services were introduced in 92 routes during this period. The number of bus schedules increased from 1,726 to 1,922 and the number of routes increased from 2,354 in 1974-75 to 2,568. Consequently the route length increased by 12,299 kms. and the distance operated by 235.51 lakh kms. during the year. About 5,183 lakhs of passengers were carried by the transport service during the year 1975-76. (See Appendix 7.3) The average distance travelled by a passenger worked out to 14.2 kms. in 1975-76 against 15.2 in 1974-75. The average earnings per passenger was 57.4 paise and the average earnings per vehicle on road was Rs. 485 during 1975-76.

7.13 The gross revenue of the Corporation in 1975-76 was Rs. 3,083 lakhs as against Rs. 2,492 lakhs in 1974-75. The corresponding figures relating to gross revenue expenditure were Rs. 3,490 lakhs and Rs. 2,962 lakhs. Thus the net deficit of the Corporation in 1975-76 was Rs. 407 lakhs as against Rs. 470 lakhs in 1974-75. The State Government have contributed Rs. 1,237 lakhs towards the capital investment in the Corporation. The Government of India through the Southern Railway has contributed Rs. 470 lakhs. The total Government investment thus works out to Rs. 1,707 lakhs.

7.14 The Corporation has taken certain steps to better its operational efficiency. The scheme of workers' participation in management was introduced through the committees at the unit level and the Joint Management Council. The Corporation also took up some measures to reduce working losses. This had a significant effect on the revenue. Further, the economic cell attached to the Kerala State Road Transport Corporation identified a number of uneconomic routes and necessary action is initiated to reduce uneconomic operations. With the pressing into service of about 100 new buses availability of vehicles has also been improved. Provision had been made for acquisition of 250 more vehicles.

7.15 Though nationalisation of routes is an accepted policy, it has not yet attained the expected level. During 1975-76, 13 routes were nationalised. Also one inter-state route viz. Cannanore-Kollur was started on 15-8-1975. Further nationalisation proceedings were in progress in respect of 225 routes in the State during the year 1975-76.

Goods Transport

7.16 There are no reliable statistics regarding the present goods transport by road. An important index

of growth of goods transport is the number of lorries registered in the State. The lorry registration figures do not reflect the increase either in the average capacity of the lorries or in the average run per year per lorry. However, the number of lorries registered every year is indicative of the total volume of goods traffic by road. The number of public carrier vehicles registered in the State for six years from 1971 to 1976 is given in Table 7.5.

TABLE 7.5
Registered Public Carrier Vehicles

Year	Number of vehicles	Index
(1)	(2)	(3)
1971	10,062	100.0
1972	10,935	108.7
1973	11,458	113.9
1974	12,007	116.3
1975	12,071	119.9
1976	12,867	127.8

7.17 It would be clear from the above Table that there had been an increase of over 2,800 public carrier vehicles between 1971 and 1976, i. e. an average increase of 466 vehicles per year.

7.18 In^o addition to the existing inter-state and zonal permit system a scheme for the grant of National Permits aimed at facilitating free flow of goods traffic throughout the country was introduced in 1975-76. The Government of India has issued the Motor Vehicles (Amendments) Act 1976, amending the Motor Vehicles Act 1939 and providing for the grant of National Permits. A quota of 250 permits has been sanctioned to Kerala State. In the guidelines issued by the Central Government regarding the grant of National Permits, it has been indicated that 50 per cent of the permits may be given to inter-state operators, 25 per cent to intra-State operators and the remaining 25 per cent to new entrants giving preference to ex-army personnel and unemployed drivers. There has been significant progress in the matter of grant of permits in the State. Till the end of January 1977 all the 250 permits have been granted following the guidelines laid down by the Government of India. Of the 250 permits 176 permits have already been issued to the operators.

7.19 On the request of the State Governments the total number of permits for India as a whole has been increased to 8,050 from 5,300. As a consequence the total number of permits for the State has also gone up from 250 to 400. Vigorous steps are being taken to grant the enhanced quota of permits.

Railways

7.20 Railways have a significant role to play in the State's transport system. It has at present 774.06 kms.

of broad gauge railway lines and 122.56 kms of metre gauge railway lines. The opening of the 65 km Trivandrum-Quilon broad gauge line on 13th of September 1976 marked the completion of the Ernakulam-Trivandrum broad gauge (220 kms) conversion project. Broad gauge services were introduced on the 156 km Ernakulam-Quilon section on November 1975. The conversion work took about three and a half years and cost Rs. 16 crores. This rail link is significant in that it could bring Kerala and its people within closer reach of the other parts of the country. Transshipment of traffic is eliminated as a result of the conversion and movement of goods is thereby quickened and chances of pilferage and damage reduced considerably. Broad gauge trains can carry twice as much as metre gauge trains and at higher speed too. It also marked the opening of an era of further industrial and economic development of the State. But in the matter of rail length, the State is still very much behind with only 4 kms per lakh of population as against the all-India average of 13 kms.

7.21 The originating goods traffic at stations within Kerala State during 1975-76 was 20.85 lakh tonnes as against 21.35 lakh tonnes during 1974-75. Passenger transportation takes place on a large scale. Nearly 23.5 million passengers were carried during 1975-76 as against 17.0 million passengers in the previous year. The originating goods traffic earnings at the 165 railway stations in Kerala (including train halts) during 1975-76 was Rs. 15.5 crores as against Rs. 13.08 crores during the previous year—thus recording an increase of over 18 per cent. Passenger traffic earnings also picked up during the year. It rose from Rs. 8.1 crores in 1974-75 to Rs. 9.64 crores in 1975-76.

7.22 The traffic-cum-engineering survey of the Ernakulam-Alleppey coastal link (52 kms) has been completed. This small line, estimated to cost Rs. 4.5 crores, is considered economical and remunerative. Sanction for two links, viz., Ernakulam-Alleppey and Trichur-Kuttippuram via Guruvayur, is expected from the Railway Ministry. Rapid progress is being made in the construction of the Trivandrum-Thirunelveli line. The State has offered to make available power for electrification of the trunk railway routes.

Inland Navigation

7.23 The inland transport system includes 1895 kilometres of unique inland waterways of navigable rivers, coastal and cross canals. The canals form about 46 per cent while the navigable rivers constitute about 54 per cent of the waterways. Most of the canals are in the southern region of the State serving the commercial regions on both sides of the navigable waterways. Rivers and canals need constant dredging to make the inland water ways play an important role in the State's transportation system.

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7.24 The State Water Transport Department was formed in 1968 with its headquarters at Alleppey. The Department was operating services in 61 routes covering a route distance of 1640 kilometres per day. The additional services were introduced during 1975-76. The Department has in possession 68 passenger boats having a total seating capacity for 5858 persons. Fifty-one boats were in operation and about 84.82 lakh passengers were carried during the year 1975-76. The total revenue collected by the Department was Rs. 51.52 lakhs in 1975-76 compared to Rs. 49.61 lakhs in 1974-75. The total expenditure in 1975-76 however was Rs. 62.50 lakhs as against Rs. 53.76 lakhs in the previous year.

Ports and Harbours

7.25 Ports in Kerala have a special place in the State's transport system. In addition to the major port of Cochin, there are three intermediate ports at Calicut, Alleppey and Neendakara and eight other minor ports spread along the coast line of about 580 km. The re-opening of the Suez Canal from June 1975 had a favourable impact on liner cargo shipping activity with more ships calling at the ports to revive the international trade of the country. The ports primarily cater to the needs of coastal traffic. Coastal tonnage in the State is decreasing year by year. The Kerala ports handled 10.99 lakh tonnes of export commodities and 35.34 lakh tonnes of import commodities during 1975-76. The principal commodities exported included cashew kernels, petroleum, marine products, coir products, tea, pepper etc. The main commodities imported were foodgrains, crude petroleum, coal, fertilisers, iron and steel, machinery etc.

Cochin Port

7.26 Most of the exports and imports of Kerala are handled by the Cochin Port. The National Council of Applied Economic Research would be conducting a traffic survey of the hinterland of Cochin Port to assess the traffic potential of the Port. It is expected that this survey would evolve ways and means to stem the decline in the Port's traffic.

7.27 The volume of traffic handled at this Port was 4.81 million tonnes in 1974-75, but it declined to 4.26 million tonnes in 1975-76, a fall of 11.53 per cent over the previous year. Imports declined from 3.59 million tonnes to 3.32 million tonnes and exports declined from 1.22 million tonnes to 0.94 million tonnes during this period (See Appendices 7.4 and 7.5). Despite this fall in the volume of traffic handled, there was a slight increase in the number of ships that entered the Port during the year.

7.28 Both the total income and total expenditure of the Port increased considerably during 1975-76. Income during the year was Rs. 1053.50 lakhs as against Rs. 610.23 lakhs in the preceding year. The total expenditure of the Port amounted to Rs. 815.02 lakhs in 1975-76 as against Rs. 699.18 lakhs in 1974-75. The

revenue account of the Port for the year 1975-76 thus closed with a net surplus of Rs. 238.48 lakhs as against a net deficit of Rs. 88.15 lakhs in the previous year. The main contributory cause for the surplus is the revision of port charges from July 1975 and port dues from September 1975. The hopper suction dredger constructed at the Garden Reach Workshops Ltd., Calcutta, was commissioned at the Port during the year 1975-76. The preparation of the Master Plan for Port Development was in progress at the end of the year.

7.29 The approved annual plan outlay for the year 1975-76 for Cochin Port was Rs. 510 lakhs. As against this, the expenditure during the year was only Rs. 213.96 lakhs which is 42 per cent of the total outlay. The reasons for this short-fall in expenditure are the non-receipt of Government sanction as in the case of super tanker oil terminal project and the poor progress of works connected with grab dredger, water barge and pilot launch.

Intermediate and Minor Ports

7.30 The three intermediate ports were responsible for earning foreign exchange by export trade during the year 1975-76. Twenty-seven coastal steamers and 38 foreign steamers with an aggregate tonnage of 2,12,162 tonnes entered the minor ports during 1975-76 as against 37 coastal steamers and 27 foreign steamers with an aggregate tonnage of 1,70,633 tonnes in the previous year. Further, 741 coastal sailing vessels and 568 foreign vessels with a tonnage of 90,601 tonnes called on the ports during 1975-76. This is to be compared against 808 coastal vessels and 30 foreign vessels having an aggregate tonnage of 95,084 tonnes in 1974-75. (See Appendix 7.6). The total tonnage of cargo handled at the minor ports during 1975-76 was 3,24,225 tonnes consisting of 1,11,323 tonnes of exports and 2,12,972 tonnes of imports. The revenue collections at these ports during the year 1975-76 were Rs.15.34 lakhs as against Rs. 14.37 lakhs in 1974-75. (See Appendix 7.7).

Shipping Corporation

7.31. The Shipping Corporation of Kerala, set up in May 1974, has an authorised capital of Rs. 15 crores. Not less than 26 per cent of its paid up capital is to be held by the Government of Kerala. The paid up capital of the Company at the end of 1975-76 was Rs. 170.90 lakhs. Of this, the shares held by the Government of India were worth Rs. 153 lakhs.

7.32 The Corporation acquired its commercial vessel M.V. KAIRALI in February 1975. The ship which has a dead weight tonnage of 21,550 was built in Norway in 1967. There was only one voyage possible for 'Kairali' during the year 1975-76 and it fetched Rs. 44.5 lakhs for the Corporation at the rate of Rs. 233 per tonne. The Corporation was exploring the

possibility of getting further loans from foreign banks for purchase of two more ships to make it an economically viable unit.

Communications

7.33 Kerala is comfortably placed in the matter of posts and telegraph services compared to many other States in India. Every revenue village in Kerala except one has a post office. Some villages have more than one post office and even the village without a post office is within 2 kms. of the nearest post office and is served daily. The average area served by a post office is 9.55 sq. kms. against the all India average of 27.89 sq.kms. The State has at present 16 Postal Divisions, 2 R. M. S. Divisions, 2 Postal Stores Depots and one Mail Motor Service Division. There are 4,097 post offices functioning under the categories head post offices, sub post offices and branch post offices as on 30-11-1976. With the emphasis on development of rural economy the pace of development of postal services in rural areas has picked up. Sixty-seven new post offices were opened from 1-3-1976 to 31-10-1976. Thirteen of these are in hilly and backward areas and four have been upgraded to a higher status. Kerala also accounts for the highest number of rural mobile branch offices in the country. Such offices function in 21 centres in Kerala. Quick Mail Service is available in nine centres. Of these Trivandrum and Cochin are National QMS Centres directly linked to other air centres in the country. The conversion to broad gauge of the Ernakulam-Trivandrum railway line facilitated quick movement of the mails. This has also enabled prompt receipt of postal stationery articles like the inland letters.

7.34 The postal circle in the State was functioning at a loss even though there has been marked expansion of the services. The revenue of the Department was Rs. 8.21 crores during 1975-76 while the working expenditure and capital expenditure amounted to Rs. 11.77 crores.

7.35 Kerala is ahead of the other States in India by two years in respect of Subscriber Trunk Dialling Services. Trivandrum, the State capital, has STD Services with all district headquarters except Malappuram and Idukki, but these are connected by no-delay services.

7.36 Kerala has an average of 18 telephones per ten sq.km. as against the all-India average of six telephones. There are 311 telephone exchanges with a capacity for 78,000 telephones as on 31-12-1976. Ninety per cent of the telephones are connected to automatic exchanges. This is higher than the national average of 82 per cent. All but 11 of 279 villages in the State having a population of more than 10,000 have telephone and telegraph facilities. Kerala has six teleprinter exchanges at Trivandrum, Ernakulam, Calicut, Cannanore, Alleppey and Quilon.

CHAPTER 8

EXPORT IMPORT TRADE

India's Foreign Trade

During the year developments in foreign trade sector were favourable. India's exports during 1975-76 amounted to Rs. 3942 crores as against Rs. 3329 crores in the previous year, i.e., an increase of 18 per cent. This growth rate is on top of an increase of nearly 32 per cent in 1974-75. The trade deficit during 1975-76 was to the tune of Rs. 1216 crores as compared with the deficit of Rs. 1190 crores during the preceding year. Import bill went up mainly on account of food grains, petroleum and machinery. Commodity-wise the rise in exports was spread over a wide front with fish recording the largest increase as the data given in table 8.1 would show.

TABLE 8.1
Commodity-wise Export Trade of India

(Rs. crores)			
Principal commodities	1974-75	1975-76	Percentage increase
(1)	(2)	(3)	(4)
1. Engineering goods	357	409	+15
2. Iron ore	160	214	+34
3. Chemicals	98	85	-9
4. Jute manufactures	297	248	-17
5. Cotton manufactures	272	304	+12
6. Tea	228	237	+4
7. Cashew kernel	118	96	-19
8. Spices	61	71	+16
9. Fish	66	127	+92
10. Sugar	339	472	+39
11. Tobacco	80	93	+16
12. Leather and leather manufactures including foot wear	165	223	+35
13. Handicrafts	187	224	+20
Total (including others)	3329	3942	+18

8.2. The U.S.A. was India's best customer in 1975-76 followed by Japan, the U.S.S.R., the U.K. and Iran. These five markets accounted for more than 50 per cent of India's total export trade in the year. The relative positions of the five countries in 1974-75 and 1975-76 are given in Table 8.2.

TABLE 8.2
Country-wise Exports from India
(Rs. crores)

Countries	1974-75	1975-76
U.S.A.	374.93	507.74
Japan	296.65	426.88
U.S.S.R.	421.35	412.78
U.K.	312.27	408.56
Iran	214.84	270.83

8.3. The country-wise pattern of trade during 1975-76 shows that our exports to U.S.A., Japan, U.K. and Iran have increased substantially as compared to the previous year.

8.4. India's imports amounted to Rs. 5158 crores in 1975-76 showing an increase of only 14 per cent during the year as against 51 per cent during the preceding year. The expansion in imports was mainly due to a 75 per cent increase in food grain imports at the previous year's level. Table 8.3 shows expansion in imports of major items.

TABLE 8.3
Commodity-wise Imports
(Rs. crores)

Major import items	1974-75	1975-76	Percentage increase
(1)	(2)	(3)	(4)
1. Food grains	764	1338	+75
2. Petroleum	1157	1226	+6
3. Fertilisers including chemicals	623	612	-1
4. Iron and steel	424	306	-28
5. Non-ferous metals	179	98	-45
6. Machinery and transport	696	887	+27
Total (including others)	4519	5158	+14

8.5. Major suppliers to India were the U.S.A., Iran, West Germany, Japan and the U.S.S.R. Imports from U.S.A have increased considerably as compared to the previous year.

8.6. Exports in 1976-77 are expected to touch a level of Rs. 4,800 crores showing a growth of 22 per cent. By achieving this figure, the country will have exceeded the Fifth Plan export target this year itself.

Actually, exports in the first seven months of 1976-77 are running at a rate of 34 per cent annual growth but the likely fall in the earnings from sugar exports will bring down the rate to somewhat 22 per cent. Commodity-wise, there has been a steep fall in sugar exports from Rs. 400 crores to an estimated figure of Rs. 90 crores, but this is likely to be compensated by increased earnings from the export of iron and steel, engineering goods and cotton textiles. Exports of Plantation products are expected to be higher. It may be mentioned however that the gains on export

front are likely to be partly neutralised by the larger import bill caused by the recent increase in crude prices.

Kerala's Exports

8.7. Trends in exports in respect of the major commodities produced in Kerala are discussed in the following paragraphs. The following table indicates the trends in export and export earnings in respect of major items.

TABLE 8.4
Kerala's Export of Principal Commodities

Principal Commodities	1974-75		1975-76		Percentage increase	
	Quantity in tonnes	Value in Rs. crores	Quantity in tonnes	Value in Rs. crores	Quantity	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Marine Products	25280	39.58	31588	67.62	+25	+71
2. Spices of which	31324	41.91	28091	39.38	-11	-6
(i) Pepper	25553	33.47	23197	32.50	-10	-3
(ii) Cardamon	636	5.05	437	4.00	-32	-21
(iii) Ginger	3509	2.62	2638	2.12	-25	-20
(iv) Turmeric	1626	0.77	1819	0.76	+12	-1
3. Cashew kernels*	55865	100.66	53197	104.78	-5	+4
4. Cashew shell liquid*	4921	1.18	5250	1.06	+7	-10
5. Coir Products**	41834	17.54	37284	19.35	-11	+10
6. Tea†	48271	41.29	42315	41.91	-13	+2
7. Coffee†	40820	38.60	21455	21.04	-47	-46
Total	248315	280.76	219180	295.14	-12	+5

* Date given is for the calendar year 1975 and 1976 respectively.

** Data relates to all India—Kerala accounts for 95% of the same.

† Exports through Cochin Port only.

Marine Products

8.8. The year 1975-76 was marked by a substantial growth in the exports of marine products both in quantity and value. A total of 54463 tonnes valued at Rs. 124.53 crores were exported during the year. The exports during the previous year were 45099 tonnes valued at Rs. 68.41 crores only. This represents an increase of 9364 tonnes in quantity and Rs. 56.12 crores in value i.e., an increase of 20.8 per cent in quantity and 82 per cent in value over the previous year. Kerala's contribution for the all India export of Marine products during 1975-76 was 58 per cent in respect of quantity and 54.3 per cent in respect of value. Table 8.5 shows the details of exports of marine products from Kerala and India for the past 12 years.

TABLE 8.5
Export growth of Marine Products from India and Kerala from 1964-65 to 1975-76

Year	Export from Kerala		Export from India		Average unit value realisation Rs./Kg.
	Qty. in (tonnes)	Value (Rs. crores)	Qty. in (tonnes)	Value (Rs. crores)	
(1)	(2)	(3)	(4)	(5)	(6)
1964-65	9750	5.04	21122	7.14	3.38
1965-66	9561	6.01	15295	7.06	4.62
1966-67	13175	14.64	21116	17.37	8.23
1967-68	15245	16.75	21907	19.72	9.00
1968-69	18481	20.25	26811	24.70	9.21
1969-70	22172	27.23	31695	33.46	10.56
1970-71	23896	27.57	35883	35.07	9.77
1971-72	21892	33.70	35523	44.55	12.54
1972-73	25797	41.97	38903	59.72	15.35
1973-74	31561	57.76	52279	89.51	17.12
1974-75	25280	39.58	45099	68.41	15.17
1975-76	31588	67.62	54463	124.53	22.86

Source: Marine Products Export Development Authority, Cochin.

Table 8.6 shows the item-wise share of exports of marine products from India.

TABLE 8.6
Sectoral Share of export of Marine Products from
India 1972-73 to 1975-76

Sectors		Percentage			
		1975-76	1974-75	1973-74	1972-73
(1)		(2)	(3)	(4)	(5)
Frozen	Q	83.79	81.0	79.93	86.38
	V	96.93	89.9	90.56	91.75
Canned	Q	0.32	2.6	3.87	4.07
	V	0.37	5.2	6.03	5.43
Dried	Q	10.07	3.6	7.27	7.03
	V	1.29	1.1	1.52	2.44
Others	Q	5.82	12.8	8.93	2.50
	V	1.41	3.8	1.89	0.38
All	Q	100.00	100.0	100.00	100.00
	V	100.00	100.0	100.00	100.00

8.9. In 1975-76 also frozen items constituted the largest single item of export accounting for 83.79 per cent of the quantity and 96.93 per cent of the value of the total exports of marine products. The percentage share with respect to both quantity and earning showed an increase during the year.

8.10. There has been a sharp rise in export prices particularly for frozen shrimps both in Japan and U.S. There were poor shrimp catches in most of the shrimp producing countries while a fairly good catch was reported in India. Frozen shrimp therefore continued to be the major item of export. Its contribution was 46385 tonnes valued at Rs. 110.17 crores. Frozen cuttle fish emerged as an important export item in 1975-76 for the first time. Japan was the major buyer. Other countries which bought frozen cuttle fish were the Netherlands and the United States.

8.11. Activities during the first seven months of 1976-77 (April-October 1976) show an increase of 15.50 per cent in quantity over the corresponding period of the previous year while the earnings show an increase of 63.67 per cent. There was 49.85 per cent quantitative increase over the corresponding period of 1974, while the increase in value was of 175 per cent. Table 8.7 gives details of item-wise exports of Marine Products from India.

TABLE 8.7
Item-wise Exports of Marine Products from India

(Quantity in tonnes value in Rs.'000)

Item	1976		1975		1974	
	April Quantity	October Value	April Quantity	October Value	April Quantity	October Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Frozen item	32324	1058538	30736	643973	19005	342934
Canned	120	4140	145	3284	997	31454
Dried	3881	14095	2119	15345	1252	10106
Others	2241	15479	398	4749	4489	12319
Total	38576	1092252	33398	667351	25743	396813
Increase over 1974	+12833 (49.85%)	+695439 (175.25%)	+7655 (29.74%)	+270538 (68.18%)		
Increase over 1975	+5178 (15.50%)	+424901 (63.67%)				

Source: Marine Products Export Development Authority Cochin.

8.12. The principal buyer of India's marine products was Japan followed by U.S. as in the previous year. Sixty-six per cent of the total earnings from marine products was from our exports to Japan during the period of April to October 1976. U.S.A. constituted only twenty-four per cent of the total earnings.

Spices

8.13. During 1975-76 India achieved a new peak of Rs. 70 crores in earnings from spices exports which is about 12% higher than the previous record of 37/1019/MC.

Rs. 62.6 crores in 1974-75. There was also considerable increase in the quantity exported. Export of cardamom, ginger and turmeric attained all time records during 1975-76. Pepper was the only major item which registered decline in 1975-76 compared with 1974-75.

8.14. There was no remarkable change in the direction of trade in spices exports during 1975-76. Eastern Europe and Middle East Zone ranked as the first and second important zones in import of spices

from India. American zone was the third important zone followed by Western Europe. In respect of Pepper and Chillies, Eastern Europe was the major importing zone, while in respect of cardamom, Ginger and Turmeric Middle East ranked first. As usual West European countries accounted for the major share of curry powder exports from India. Middle

East countries, American zone and countries in East Asia were the important buyers of minor spices.

8.15. About sixty per cent of India's earnings from the export of spices during 1975-76 was contributed by Kerala. The item-wise exports of spices from Kerala and India for 1974-75 and 1975-76 are shown in Table 8.8.

TABLE 8.8
Export of Spices from the Ports of Kerala and India during 1974-75 and 1975-76

Commodities	Kerala		India		Percentage of Kerala's Export to India's export							
	1975-76		1974-75		1975-76		1974-75		1975-76		1974-75	
	Q	V	Q	V	Q	V	Q	V	Q	V	Q	V
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Pepper	23197	325006	25553	334726	24169	338103	26341	344762	95.9	96.1	97	97
Cardamom (Small)	437	40090	636	50530	1861	186586	1626	133232	23.4	21.4	39.1	37.9
Cardamom (Big)	..	..	..	..	44	725	70	949	..	..	..	..
Ginger	2638	21214	3509	26252	4774	40571	4681	35127	55.2	52.2	74.9	74.7
Turmeric	1819	7648	1626	7665	12011	42522	9227	41441	15.1	17.9	17.6	18.4
Total including other items	29096	409813	31616	421151	57555	701334	54306	625925	50.5	58.4	58.2	67.2

Q=Quantity in tonnes

V=Value in Rs. '000

Source: The Spices Export Promotion Council.

Pepper

8.16. During 1975-76 India exported more than 24 thousand tonnes of pepper valued at Rs. 33.8 crores registering decline both in terms of quantity and value compared with exports during 1974-75 which were to the tune of 26.3 thousand tonnes valued at Rs. 34.5 crores. Though the decline in terms of quantity exported was 8% the decline in respect of earnings was only about 2%. This was due to the higher unit price realisation from pepper during 1975-76. The price of pepper went up to Rs. 13.99 per kg. in 1975-76 from Rs. 9.33 per kg. in 1973-74 and Rs. 13.09 per kg. in 1974-75. During 1975-76 as usual East European countries were the major buyers of Indian Pepper. Considering individual countries U.S.S.R. was the most important buyer followed by U.S.A. Exports to U.S.S.R. have shown substantial increase during 1975-76 compared to 1974-75. Poland, Italy, Canada, Czechoslovakia, Rumania, etc., were the other important buyers of pepper from India in 1975-76. According to the spices export promotion council the present production of pepper in India is not adequate to meet the demand from Eastern Europe and from U.S.A., Canada and some of the West European Countries. Besides the internal demand is also on the increase. Ninety-six per cent of the quantum of pepper exported from India during 1975-76 was through the ports of Kerala.

Cardamom

8.17. Cardamom exports attained an all time record in 1975-76. The exports during 1975-76 were to the tune of 1861 tonnes valued at Rs. 18.66 crores as against 1626 tonnes valued at Rs. 13.32 crores in 1974-75. The increase in terms of quantity was 14 per cent while in terms of value 40 per cent. The year witnessed the highest ever unit value realisation. The unit value realised was Rs. 100.26 per kg. for cardamom (small) as against Rs. 81.92 per kg. in 1974-75. As usual this year also Middle East Countries accounted for the grand share of cardamom exports from India. As U.S.S.R. purchased substantial quantity of cardamom during the year, East European countries ranked as the second important zone for cardamom. When we consider individual countries, Kuwait, Saudi Arabia, Bahrain and U.S.S.R. were the important buyers of Indian cardamom during 1975-76. It is interesting to note that India has recaptured the Bahrain cardomom market in 1975-76. In respect of Kuwait also the performance during 1975-76 was very encouraging. The increase in exports is accounted for by the Arabian countries which are the core markets for cardamom. Kerala contributed 23.4 per cent of the quantity and 21.4 per cent of the value of India's cardamom exports in 1975-76.

Ginger

8.18. Exports of Ginger from India have shown increase both in terms of quantity and earnings to

4775 tonnes valued at Rs. 4.06 crores in 1975-76 from 4681 tonnes valued at Rs. 3.51 crores in 1974-75. According to the spices export promotion council, the earnings would have been much higher had there been enough crop available for exports to meet the pressing demand from abroad. The unit price in 1975-76 rose to Rs. 8.50 per kg. from Rs. 7.50 per kg. during 1974-75 and Rs. 5.22 per kg. in 1968-69. The middle East continued to be the major importing zone of Indian Ginger during 1975-76 also. Saudi Arabia was the most important importer followed by Aden, Yemen, Morocco, U.S.A., U.K. Holland, Sudan etc. Kerala State accounts for almost the entire dry ginger exports from India.

Turmeric

8.19. Exports of Turmeric from India during 1975-76 accounted for more than 12 thousand tonnes valued at Rs. 4.25 crores as against 9.2 thousand tonnes valued at Rs. 4.1 crores in 1974-75, registering increase both in terms of quantity and earnings. Though the export price in respect of many important spices registered substantial increase during 1975-76, there has been a considerable decline in the export price of Turmeric. This may be due to the increase in production of this item during the year under report. It is interesting to note that turmeric exports have shown continuous increase both in terms of quantity and value since 1972-73. Kerala contributed nearly 18 per cent of the value of India's turmeric exports in 1975-76.

Cashew Kernels

8.20. According to the Cashew Export Promotion Council, Cochin, 55721 tonnes of Cashew Kernels valued at Rs. 110.32 crores were exported during January to December 1976. Compared to the corresponding period of the previous year the quantity exported was lower by about 6 per cent though the value increased by nearly 5 per cent. The higher earnings was due to the higher unit value realisation during the period. The major importers of Cashew kernels were U.S.A., U.S.S.R., Japan, Canada and Australia. U.S.A. alone imported 20499 tonnes of cashew kernels during the period which comes to nearly 37 per cent of India's total export of cashew Kernels. While exports to U.S.A., Canada, Japan and Australia increased during January - December 1976 compared to the corresponding period of the previous year, exports to U.S.S.R. and Hongkong recorded a decline.

8.21. Kerala has contributed more than 95 per cent of India's total exports of Cashew kernels during 1976, thus maintaining her foremost position among other States. The export figures of Cashew Kernels from India to different countries during January to December 1976 with comparative figures for the corresponding period of 1975 are given in Table 8.9.

TABLE 8.9
Export of Cashew Kernels from India
(in tonnes)

Countries	Export during January-December	
	1975	1976
(1)	(2)	(3)
U.S.S.R.	24797	15579
U.S.A.	18458	20499
Canada	2830	4005
Japan	3768	5443
Australia	2220	2379
Netherlands	1402	1717
U.K.	807	1037
Hongkong	858	540
Total including other countries	59174	55721
Value in Rs. crores	105.34	110.32
Unit Value Rs./kg.	17.80	19.80

Source: Cashew Export Promotion Council, Cochin.

Cashewnut shell liquid

8.22. India exported cashew shell liquid amounted to 6142 tonnes valued at Rs. 132.14 lakhs during January to December 1976 as against 5207 tonnes valued at Rs. 127.74 lakhs during the corresponding period of the previous year. Kerala's contribution to India's export of this item formed more than 85 per cent.

8.23. Regarding country-wise export of cashewnut shell liquid it can be seen that U.K. topped the list with 2543 tonnes followed by Japan with 1685 tonnes. The comparative figures of exports for the above period are given in Table 8.10.

TABLE 8.10
Export of Cashewnut Shell Liquid from India
(tonnes)

Countries	Export during January-December	
	1975	1976
(1)	(2)	(3)
U.K.	1628	2543
U.S.A.	1065	406
Japan	1809	1685
Czechoslovakia	133	67
Rumania	100	330
Total including other countries	5207	6142
Value in Rs. lakhs	127.74	132.14
Unit value Rs. per M.T.	2453	2151

Source: Cashew Export Promotion Council, Cochin.

Import of Raw Cashewnut

8.24. India imported 74583 tonnes of raw cashewnuts worth Rs. 17.68 crores during January - December 1976 as against 135839 tonnes valued at Rs. 33.26 crores during the corresponding period of the previous year. The average unit price of raw nuts during January - December 1976 was Rs. 2371 per tonne compared to Rs. 2448 per tonne during the same period

in 1975. This year's import of raw nuts was only about 55 per cent of the quantity imported last year. It may be observed that due to the development of cashew processing industry in East African Countries particularly Tanzania and Mozambique and due to the emergence of China and Brazil as Cashew exporters India is facing acute shortage of raw nuts to feed her factories running more than 300. According to the Cashew Corporation of India the raw material availability may be only about one lakh tonnes during 1976-77. Table 8.11 shows the details of import of raw nuts to India.

TABLE 8.11
Import of Raw Nuts

Period	Quantity (tonnes)	Value (Rs. lakhs)
(1)	(2)	(3)
1950-51	54819	284
1955-56	63154	484
1960-61	118321	961
1965-66	150636	1506
1966-67	141021	2124
1967-68	168218	2508
1968-69	195528	3138
1969-70	163426	2760
1970-71	169359	2941
1971-72	169985	2791
1972-73	197930	3181
1973-74	150249	2880
1974-75	160358	3660
1975-76	135693	3329

8.25. The State Government have recently issued a notification authorising the State Co-operative Marketing Federation for the monopoly procurement of raw nuts within the State thus ending the sale and purchase of raw nuts hitherto being done by private agencies. It is likely to procure one lakh tonnes of raw nuts during the current season. The export of cashew products from India and Kerala and the respective import figures for January-December 1976 are given in Table 8.12.

TABLE 8.12
Export and Import of Cashew Products

Name of products	January-December 1975		January-December 1976	
	Quantity (tonnes)	Value (Rs. crores)	Quantity (tonnes)	Value (Rs. crores)
(1)	(2)	(3)	(4)	(5)
A. Export of Cashew products				
Cashew Kernels				
India	59174	105.34	55721	110.32
Kerala	55865	100.66	53197	104.78
Cashew shell liquid				
India	5207	1.28	6142	1.32
Kerala	4921	1.18	5250	1.06
B. Import of Raw Cashewnuts				
India	135839	33.26	74583	17.68
Kerala	120469	29.31	71867	17.02

Source: Cashew Export Promotion Council, Cochin.

Coir and Coir products

8.26. India exported coir and coir goods worth Rs. 19.35 crores during 1975-76 as against Rs. 17.54 crores during 1974-75 i.e. an increase of Rs. 1.81 crores in value over the previous year. The increase in export earnings is due to the rise in unit value during the year. But in terms of quantity the exports during the year declined by nearly 11% as compared to the previous year. During 1975-76 India exported only 37284 tonnes of coir and coir goods while she was able to export 41834 tonnes during 1974-75. It may be particularly mentioned that in quantity our exports have been showing a declining trend since 1972-73. Table 8.13 show the item-wise export of coir and coir products from India for the year 1971-72 to 1975-76

TABLE 8.13
Item-wise Export of Coir and Coir Goods from 1971-72 to 1975-76

Items	1971-72		1972-73		1973-74		1974-75		1975-76	
	Q	V	Q	V	Q	V	Q	V	Q	V
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Coir Fibre	392	6.25	298	4.62	276	3.77	161	3.05	266	6.94
Coir Yarn	30642	722.42	31924	818.58	29373	822.01	24401	826.71	22970	1002.20
Coir Mats	13498	507.50	127.42	526.60	12302	573.28	11322	646.53	7488	562.50
Coir Matting, Rugs and Carpets	7101	240.40	3648	132.53	3457	140.40	5049	263.29	5276	337.08
Coir Rope	238	9.85	104	1.64	140	2.84	138	3.47	269	6.70
Curled Coir	441	5.32	773	9.81	1208	15.49	762	10.40	1014	19.52
Rubberised Coir Goods	..	..	..	0.01	9	0.39	1	0.17	1	0.26
Total	52312	1485.94	49489	1493.79	46759	1558.18	41834	1753.62	37284	1935.20

*Negligible

Q=Quantity in tonnes

V=Value in Rs. lakhs

Source: India's Production, Exports and Internal Consumption of Coir - 1976.

8.27 In India, Kerala State leads other States in the manufacture of coir and coir goods. She accounts for 95% of the total production of coir in the country. The natural facility of lakes and lagoons which line the Western Coast of Kerala is the key to Kerala's superiority in the production of quality coir fibre and in turn the yarn from retted husks. The industry has developed to some extent in the Kanyakumari district of Tamil Nadu also. The development of mechanical extraction of coir fibre in recent years has accelerated the growth of the industry in other parts of the country also where the coconut husks are available. Coir from the producing countries enters the World market in the form of fibre, yarn, door mats, mattings, rugs, carpets, rope, curled coir and rubberised coir. As far as coir yarn supply is concerned India holds a virtual monopoly controlling about 99 per cent of the World Trade. Of the total exports the share of coir yarn alone works out to 60%. The West European countries top the list in the matter of consumption of coir yarn, followed by countries in East Europe, America and West Asia. There has been a tendency for coir yarn exports to dwindle during the recent past. The stiff competition coir yarn has to face in all its end uses in the importing countries from synthetics and other substitute fibres like sisal etc., contributes to the decline in the yarn export.

Coffee

8.28 According to the Coffee Board, Coffee exports in 1975-76 totalled 59386 tonnes valued at Rs. 66.65 crores as against 49500 tonnes valued at Rs. 51.36 crores during the previous year. The target of 57000 tonnes fixed for export has been exceeded during the current year. Coffee not roasted constituted the bulk of the exports with foreign exchange earnings of Rs. 64.12 crores. The main varieties were plantation (Rs. 38.13 crores) Arabica Cherry (Rs. 14.62 crores) and Robusta (Rs. 11.37 crores). In 1975-76 India's exports of Coffee were higher by 30 per cent in terms of value and 20 per cent in terms of quantity compared to last year's performance. U. S. S. R. was the best importer of Indian Coffee followed by U. S. A. Table 8.14 contains details of coffee exported from India and foreign exchange earned for the years 1963-64 to 1975-76. It is estimated that the production of coffee in 1976-77 will reach a level of 1 lakh tonnes. The exports are therefore expected to increase further. It may be mentioned that during the four months commencing from April 1976 alone India exported coffee valued at Rs. 42.84 crores.

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TABLE 8.14
Exports of Coffee

Year	Quantity in tonnes	Value realised in Rs. crores
(1)	(2)	(3)
1963-64	23336	8.30
1964-65	30691	13.35
1965-66	26505	12.94
1966-67	25833	14.44
1967-68	33966	18.18
1968-69	28741	17.96
1969-70	32383	19.62
1970-71	32189	25.11
1971-72	35695	22.07
1972-73	50855	32.93
1973-74	52688	46.01
1974-75	49500	51.36
1975-76	59386	66.65

Tea

8.29 India's earnings from the export of tea came to about Rs. 237 crores in 1975-76 as compared to Rs. 228 crores in 1974-75. India exported only 212.3 million Kgs. of tea in the current year, while the quantity exported was 229.5 million Kgs. in the previous year. Though there was a decline in the quantity of tea exported by 7.5 per cent, the value of earnings went up by 4 per cent during the year on account of higher unit value realisation. Table 8.15 compares the export figures for 1975-76 with the corresponding figures for the past few years.

TABLE 8.15
Quantity and Value of Tea Exported from India during 1968-69 to 1975-76

Year	Quantity (in tonnes)	Value (in Rs. Crores)
(1)	(2)	(3)
1968-69	200824	156.51
1969-70	174112	124.50
1970-71	199139	148.25
1971-72	214317	160.92
1972-73	198229	150.99
1973-74	190268	144.85
1974-75	229500	228.06
1975-76	212300	236.81

Imports

8.30 Data on imports through Cochin Port during 1975-76 indicate that total imports during the year declined by 7.50% to 3320811 tonnes from 3589888 tonnes in 1974-75. Of this, 29.13 lakh tonnes or 87.7% were foreign imports as against 92.9% in the preceding year. While imports from coastal ports, adjacent

countries, Far Eastern Countries, Japan, U. K., European Countries, U. S. A. and Canada increased, those from other regions declined during the year. There was a substantial fall in the import of P. O. L. which could not be offset by even substantial increases in the imports of foodgrains, coal and miscellaneous cargo.

8.31 The value of foreign imports increased during the year by Rs. 27.53 crores or by 8.5% and that of total imports by 29.53 crores or by 9.0% compared to the preceding year. The foreign import value of raw cotton, cashewnuts, iron, steel, and machinery including other metals decline in 1975-76 when compared to the preceding year, while that of chemicals, aluminium, vegetable oils and miscellaneous cargo which also includes P. O. L., Fertilisers and foodgrains increased.

Table 8.16 gives details of principal imports at Cochin Port for the years 1974-75 and 1975-76 and the percentage to total imports.

TABLE 8.16
Principal Imports at Cochin Port
Quantity in tonnes

Commodities	1974-75		1975-76	
	Quantity (1)	% to total (2)	Quantity (3)	% to total (4)
1. Rice and paddy	7111	0.20	23318	0.70
2. Other grains	200914	5.59	326174	9.82
3. Coal	66261	1.85	105935	3.19
4. Cashewnuts	137590	3.83	97677	2.95
5. Machinery	12854	0.36	5969	0.18
6. Iron & Steel	5942	0.17	9953	0.30
7. Salt	30585	0.85	19244	0.58
8. Chemicals & Chemical Preparations	3763	0.11	1110	0.03
9. Oil Seeds including Copra and Groundnuts	180	..	310	0.01
10. Rock Phosphate and Fertilizers	199294	5.55	194911	5.87
11. P.O.L. items	2739352	76.31	2306736	69.46
12. Others	186042	5.18	229474	6.91
13. Total	3589888	100.00	3320811	100.00

Source: Administration Report of the Cochin Port Trust, 1975-76.

SOCIAL SERVICES

Education

Judged on the basis of indicators such as percentage of literacy, enrolment ratio and the proportion of state income devoted to education, Kerala's achievement in the field of educational development may be described as unique. The high proportion of budget outlay on education is perhaps the most striking index of the educational advancement made by the State. The State allocates as much as 38 per cent of its budget funds for the maintenance and development of education. The upward trend in the number of institutions and enrolment continued unabated in school education during the year under review. In the sphere of higher education also there was increase in the number of students. There has been no slackening of efforts to improve the quality of education inspite of the large scale diversion of resources to expansion of education.

General School Education

9.2 There has been steady expansion of educational facilities in the State, as evidenced by the increasing trend in the number of schools. The total number of schools increased from 11102 to 11349 during the year 1976-77. The number of High Schools increased from 1521 to 1666 and Upper Primary Schools from 2606 to 2742. The number of Lower Primary Schools however decreased from 6975 to 6941 in spite of the fact that Government sanction was issued for starting 157 new L. P. Schools during the year. The fall in the number of L. P. Schools is the result of upgrading of a larger number of L. P. Schools than the number newly started, and does not represent any diminution in educational facilities. Government have sanctioned 521 new schools to be started in the academic year 1976-77, the details of which are presented in Table 9.1.

TABLE 9.1

Distribution of New Schools Sanctioned to be Opened during 1976-77

Type of Schools	Government	Private Aided	Private Unaided	Total
(1)	(2)	(3)	(4)	(5)
L. P. Schools	6	143	8	157
U. P. Schools	35	156	15	206
High Schools	26	117	15	158
Total	67	416	98	521

9.3 The share of private sector in the total number of schools is 62%. This share has remained more or less constant all through the past years of educational expansion, even after the State started meeting the

entire running costs of the Schools. Now, the private agencies are opening more and more private unaided schools which depend on fee collections for their maintenance. These schools attract children of the well-to-do classes in increasing numbers. This is a recent development which is likely to exert an unwholesome influence on the standards and efficiency of education in ordinary schools.

9.4 The total enrolment in schools during 1976-77 was 53.54 lakhs which was 0.69 lakh more than the previous year's figure. The variation in enrolment in the different stages of schools education between 1975-76 and 1976-77 is shown in Table 9.2

TABLE 9.2
Enrolment in Schools Stage-wise

Educational level	Enrolment		Variation	
	1975-76	1976-77		
(1)	(2)	(3)	(4)	
Lower Primary	2670817	2608089	(-)	62728
Upper Primary	1706644	1741927	(+)	35283
Secondary	907896	1008665	(+)	95769
Total	5285957	5353681	(+)	68324

9.5 Table 9.2 indicates that there has been a fall of 0.63 lakh in enrolment in the Lower Primary Stage during the current academic year. The decrease in enrolment was much higher (1.97 lakhs) during the previous year. These inter-stage variations are largely the result of changes effected from time to time in promotion policy.

9.6 The trend in enrolment in standard I, especially after the introduction of wholesale promotion in that standard, is of some significance. In the Kerala context a persistent fall in enrolment in standard I cannot but be a reflection of falling birth rates. Table 9.3 depicts the annual variation of enrolment in Standard I between 1970-71 and 1976-77. The trend appears to be rather erratic, so much so that it is not safe to make any inference on the basis of it.

TABLE 9.3
Trend of Enrolment in Standard I

Year	Enrolment in Standard I (lakhs)	Variation (lakhs)
(1)	(2)	(3)
1970-71	8.00	..
1971-72	8.48	(+) 0.48
1972-73	6.86	(-) 1.62
1973-74	6.46	(-) 0.40
1974-75	6.59	(+) 0.13
1975-76	6.54	(-) 0.05
1976-77	6.76	(+) 0.22

9.7 Between 1956-57 and 1975-76, the total enrolment in primary stage (L.P. and U.P. together) increased from 24.92 lakhs to 42.50 lakhs showing an increase of 74 percent, while in the secondary stage the total enrolment increased from 2.16 lakhs to 10.04 lakhs, showing an increase of 365 per cent. This is because primary education had almost reached the saturation point as early as 1956-57 whereas facilities and demand for secondary education witnessed a spurt only in more recent past.

9.8 In the matter of girls' education, the State continues to be in the forefront. Girls constitute 47.6 percent of the total enrolment in schools. Stage-wise the proportions are 48.2 per cent in the L. P. Section 46.9 percent in the U. P. Section and 47.2 per cent in the Secondary stage.

9.9 It is estimated that 3.18 lakhs of students (both regular and private) will appear for the S. S. L. C. examination to be conducted in March-April 1977 as against 3.6 lakhs of students in the previous year. The out-turn of S. S. L. C. holders during 1975-76 (September and March) was 1.14 lakhs as against 1.17 lakhs in 1974-75.

9.10 The total number of teachers in schools was 1.62 lakhs during 1975-76, consisting of 0.34 lakh in the High School Section, 0.52 lakh in the Upper Primary Section and 0.76 lakh in the Lower Primary Section. There was an increase of 4000 teachers compared to the previous year.

Higher Education (General)

9.11 The number of Arts and Science Colleges remains unchanged at 130 (99 First Grade Colleges and 31 Junior Collges) of which 105 Colleges are in the Private Sector. The University of Kerala has 79 Arts and Science Colleges (58 First Grade Colleges and 21 Junior Colleges) affiliated to it. The remaining 51 Arts and Science Colleges (41 First grade Colleges and 10 Junior Colleges) are affiliated to the University of Calicut. There are no affiliated or constituent colleges under the University of Cochin at present.

9.12 The enrolment in Arts and Science Colleges during 1975-76 was 1.67 lakhs as against 1.55 lakhs in the previous year which indicates an increase of 8 per cent. Out of the total number of university students for general education, 101546 students were undergoing Pre-degree course, 59255 students first Degree course and 5770 students Post-graduate course.

9.13 The total enrolment in Arts and Science Colleges increased from 0.29 lakhs in 1956-57 to 1.67 lakhs in 1975-76. This shows that within a period of two decades, the enrolment in University education has increased by 476 percent. The fact that the annual growth rate of enrolment at the University

level has exceeded the growth rate in primary and secondary education is an indication of the spread of higher education among the masses. As in the case of general school education, progress of girls, education at the University level is a prominent feature of educational advancement in Kerala. Out of the total number of students in colleges, girls constitute 46.7 per cent. Stage-wise, the proportions are 47.5 per cent for Pre-degree, 45.7 per cent for first Degree and 46.1 percent at the Post Graduate level. The total number of teachers in Arts and Science Colleges in the State has increased to 7892 during 1975-76 as against 7542 in 1974-75.

Professional and Special Education

9.14 There are 18 Polytechnics in the State (12 Government and 6 Private) including three Women's Polytechnics. The total enrolment in Polytechnics was 6477 in 1975-76 as against 5812 in the year 1974-75. The number of Junior Technical Schools remained constant at 21, all in the Government sector.

9.15 There are 41 Industrial Training Institutes in the State. Out of the 41 Industrial Training Institutes, 29 Institutes are run by Private agencies. The total enrolment in Industrial Training Institutes increased from 8547 in 1974-75 to 9504 in 1975-76. The student strength in the 6 Engineering Colleges (3 Government and 3 Private) was 3823 during 1975-76 as against 3537 in the previous year. The four Medical Colleges in the State (all in the Public Sector) imparted instruction to 3697 students during 1975-76 as against 3303 students in the previous year. The three Ayurveda Colleges (2 Government and 1 Private) in the State had a student strength of 509 during 1975-76 as against 470 in 1974-75. There are 19 Teachers Training Colleges in the State consisting of 4 Colleges in the public sector and 15 in the private sector. The total strength in these colleges was 1959 during 1975-76 as against 1969 in the previous year. The Four Law Colleges in the State imparted instruction to 1992 students during 1975-76. The enrolment in the previous year was 1816.

Expenditure on Education

9.16 Government expenditure on education which was Rs. 16.16 crores in 1960-61 has now increased to Rs. 130.17 crores in 1975-76 indicating an eight-fold increase over the fifteen year period. The per capita Government expenditure on education has increased from Rs. 9.56 in 1960-61 to Rs. 52.48 in 1975-76. The increase of total expenditure on education was 26 per cent (from Rs. 103 crores to Rs. 130 crores) between 1974-75 and 1975-76. The per capita expenditure increased from Rs. 44.38 to Rs. 52.48 during the year. Educational sector claimed 37.2 per cent of the State's budgeted expenditure in 1975-76. The corresponding percentage for all India was only 23 percent. None

of the States in India spends such a high proportion of its resources on education. The total expenditure and its percentage distribution among different stages of education for the years 1975-76 and 1976-77 are presented in Table 9.4.

TABLE 9.4.
Expenditure and percentage Distribution among Different Levels (1975-76 & 1976-77)

Educational Stage	Expenditure (Rs. lakhs)		Expenditure as Percentage to total	
	1975-76 (Revised Estimate)	1976-77 (Budget Estimate)	1975-76	1976-77
(1)	(2)	(3)	(4)	(5)
University Education	1525	1668	11.72	11.59
Secondary Education	3281	3653	25.20	25.32
Primary Education	7451	8258	57.24	57.26
Special Education	128	105	0.98	0.72
Technical Education	432	508	3.32	3.52
Others	200	229	1.54	1.59
Total	13017	14421	100.00	100.00

9.17 Kerala spends about 6.5 per cent of the State income on education while the corresponding percentage is around 3 for India as a whole. In respect of the proportion of State income devoted to education Kerala is on a par with many of the advanced countries of the world. Cost per pupil of primary education increased from Rs. 117.52 in 1974-75 to Rs. 170.02 in 1975-76. Cost per pupil of secondary education was Rs. 638 in 1975-76 as against Rs. 512 in 1974-75.

Welfare of Scheduled Tribes

9.18 The tribal people are the most depressed and under-privileged group in the country. Normally they do not get a fair share of benefits flowing from the development outlays in the general sector. A new strategy has therefore been evolved to ensure speedy development of the tribal people. Under this new strategy Tribal sub plans and integrated tribal development projects have been prepared for major tribal areas. All development activities of Government and semi-Government organisations and financing and credit institutions as also special programmes launched by Government are fully integrated and fitted into the Projects so as to ensure all-round development of the areas. Integrated area development approach aims at quickening the pace of development of the tribal areas with special emphasis on the advancement of scheduled tribes. This is sought to be achieved through intensification of development efforts on a well-planned basis pooling all the resources available under various development sectors. The details of the tribal sub-plan areas within Kerala are given in Table 9.5.

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TABLE 9.5
Tribal Sub-Plan Areas

Sub Plan Area	Area sq.km.	Total Population	Tribal Population
(1)	(2)	(3)	(4)
I Punalur	2648.37	26510	13480
II Idukki	1062.10	15786	13565
III Nilambur	1173.96	15117	15117
IV Mananthody	503.06	18549	15244
V Attappady	740.65	39183	16536
Total	6142.22	115145	73942

9.19 The progress of implementation of the major Tribal Welfare Scheme during 1975-76 is indicated below. Scholarships and stipends were given to 12,000 scheduled tribe students. An amount of Rs. 1.55 lakhs was disbursed by way of special incentives to 1646 parents of tribal children admitted in the G.R. B. S. and Welfare Hostels. Boarding grants were given to 102 boarders. Three new tribal hostels were started. Three tribal settlements were taken up for development under the scheme for development of tribal pockets. Thirty tribal people were given training in wood works, mechanical sawing, logging etc. Grants for the construction of new houses were given to 253 tribal families. Three medical units were newly started with a view to improving medical facilities in tribal areas. A new production-cum-training centre was also started during the year.

Welfare of Scheduled Castes and other Backward Classes

9.20 The question of improving the living conditions of the under-privileged sections of the society and making them self-reliant has received special attention ever since independence. Government have recently issued a clear directive to the effect that at least 10% of the development outlay in each sector should be earmarked for schemes benefiting scheduled castes and scheduled tribes. The eligibility criteria in respect of subsidy bearing schemes have been relaxed in the case of these sections.

9.21 Educational Schemes such as 'Scholarships and Stipends', Boarding Grants', Special Incentive to Talented Students' and 'Welfare Hostel' were continued during the year under review. Scholarships and stipends worth Rs. 152 lakhs were given to about 4 lakh students of pre-metric classes. Special incentive was given to 68 talented students belonging to the scheduled castes. Two new welfare hostels were opened during the year and boarders were given boarding grants. One new Harijan Colony was started at Chithalvetty. Five nursery schools were started in the existing colonies. House construction Works taken up under the general housing schemes and under the Twenty Point Programme benefited 614 families. Grants at varying rates

were given to 260 technically trained and qualified persons for settling themselves in the trades in which they were proficient. Grants worth Rs. 1.03 lakhs were given to 86 couples who lived under hard circumstances having entered into intercaste marriages. Two training centres were started at Trivandrum and Palghat for giving Training to 80 scheduled caste girls per year in mid wifery.

9.22' Educational concessions worth Rs. 65.60 lakhs were given to students belonging to other backward classes. Boarding grants were also given to 67 boarders belonging to these classes.

Health

Allopathy

9.23 Steady progress was recorded in medical and public health activities during the past few years. The pace of progress in this field got accelerated as a result of a shift of emphasis in favour of prevention of disease and extension of health care facilities to the villages. Steps have also been taken for providing more beds and constructing more pay wards in the District and Taluk hospitals. This all round improvement in health services has had its impact on the health and longevity of the people. This expectation of life and at birth in Kerala is 62 which is the highest in the country. The death rate has reached the low level of 8 per thousand which is comparable with that in some of the most advanced countries.

9.24 The number of beds available per lakh of population has gone up in the State in spite of the rapid increase in population. The total number of beds available in the State has gone up from 25,312 in 1974-75 to 27,568 in 1975-76 and the number of beds per lakh of population has increased from 105 to 107 during the same period. Data relating to the number of medical institutions and beds under the allopathic system of medicine for the period 1966-67 to 1975-76 are presented in Table 9.6.

TABLE 9.6
Medical Institutions and Beds in Kerala

Year	Total No. of Medical and public health institutions	No. of beds	No. of beds per lakh of population
(1)	(2)	(3)	(4)
1966-67	503	19850	101
1967-68	518	20116	100
1968-69	529	20279	98
1969-70	534	21167	100
1970-71	553	21777	102
1971-72	571	23386	107
1972-73	783	24184	108
1973-74	874	24106	106
1974-75	881	25312	105
1975-76	885	27568	107

9.25 The District-wise break up of medical institutions and number of beds per lakh of population is given in Table No. 9.7. Trivandrum District continues to have the maximum number of beds per lakh of population followed by Trichur and Alleppey. The bed population ratio is the lowest in Idukki and Malappuram Districts. The Districts of Palghat and Quilon are also comparatively backward in this respect. The position of these backward districts except Quilon has slightly deteriorated during the year owing to growth of population unaccompanied by a proportionate increase in bed strength.

TABLE 9.7
Bed population Ratio

District	No. of beds per lakh of population	
	1974-75	1975-76
(1)	(2)	(3)
Trivandrum	205	201
Quilon	64	64
Alleppey	135	139
Kottayam	117	134
Idukki	30	29
Ernakulam	107	102
Trichur	131	143
Palghat	65	61
Malappuram	37	35
Kozhikode	133	134
Cannanore	70	77
Kerala	105	107

Indigenous Medicine.

9.26 The total number of hospitals and beds under the Ayurvedic system of medicine remained at 65 and 1282 respectively without any further increase during 1975-76. But a large number of rural dispensaries were started during this period with the object of making available health care facilities even in the remote villages. As many as 100 rural dispensaries were started during the last one year pushing up the total number of Ayurvedic dispensaries to 482. The district-wise distribution of institutions under Ayurvedic system of medicine is given in Appendix 9.24. There are altogether 121 institutions, 8 hospitals and 113 dispensaries under the Homoeopathic system. Quilon, Idukki and Malappuram Districts do not have any Homoeo hospital. All the other districts have one hospital each. The details are given in Appendix 9.25. However, with the establishment of rural dispensaries under "Special Employment Programme", the medical care facilities have now been extended to every Panchayat of the State, in the form of an Allopathic, Auyurveda or Homoeo dispensary.

Medical Practitioners

9.27 The number of medical practitioners under the major systems of medicine as on 31-3-1976 is given in Table 9.8. The number of A Class Medical Practitioners under Allopathy, Ayurveda and Homoeopathy registered substantial increase when compared to the previous year. Among the three major systems of medicine the increase in the number of medical practitioners has been the highest under Allopathy.

TABLE 9.8
Medical Practitioners

System	Class of Registration	1974-75	1975-76
(1)	(2)	(3)	(4)
I. Allopathy	A	7269	8052
	B	635	635
	Listed	204	204
	Sub-total:	8108	8891
II. Homoeopathy	A	999	1214
	B	1489	1489
	Listed	279	279
	Sub-total:	2767	2982
III. Ayurveda	A	3454	3618
	B	6101	6101
	Listed	595	599
	Sub-total	10150	10318
IV. Sidha	A	37	38
	B	1218	1218
	Listed	41	41
	Sub-total:	1296	1297
V Unani	A	Nil.	Nil.
	B	51	51
	Listed	5	5
	Sub-total:	56	56
Grand total		22377	23544

Family Planning

9.28 The various programmes undertaken in the State under family planning have shown marked progress during 1976 compared to the previous year. There has been a sharp increase in the number of sterilisation operations conducted. Substantial progress has been recorded in the number of induced abortions and I.U.C.D insertions also. The numbers of vasectomy and P. P. S. operations conducted during the year were 94270 and 62,352 respectively as against 18,330 and 43,386 respectively during the previous year. As many as 19,969 induced abortions were effected during the period under

review compared to 9564 in 1975. The number of I.U.C.D. insertions also increased from 22,082 to 28,305 over the period. District-wise details of achievements under family planning are given in Appendix 9.26.

9.29 Even with the remarkable improvement in physical achievements, the expenditure incurred for family planning during the year is slightly less than the amount spent in the previous year. Expenditure incurred on family planning programme for the last few years is given in Table No. 9.9.

TABLE 9.9
Expenditure on Family Planning Programmes

Year	Total expenditure on family planning (Rs. in lakhs)
(1)	(2)
1966-67	88.58
1967-68	131.84
1968-69	184.72
1969-70	198.88
1970-71	227.43
1971-72	333.33
1972-73	324.27
1973-74	260.50
1974-75	259.54
1975-76	252.33

9.30 As a result of the relatively high tempo of activity in the field of family planning during the past decade there has been a sharp fall in the birth rate in the population of the State. The birth-rate which stood at 34.3 per thousand in 1968 came down to 27.8 per thousand in 1975. This fall was not fully reflected in the rate of population growth since death-rate also fell from 10.4 per thousand to 8.3 per thousand during the same period. Now that the death rate has reached almost the minimum level, future reductions in birth rate will lead to a corresponding fall in the rate of growth of population.

9.31 In view of the very high density of population in Kerala, the State should aim at a static, if not declining, population. As the population problem will become more and more acute with the passage of time, it has to be dealt with on a war footing. There is thus a strong case for further intensifying the family planning programme of the State.

Water Supply

9.32 Both the urban and rural water supply schemes have registered substantial progress during 1975-76. The number of towns having water supply at the end of 1974-75 was only 19. In the year under reference 6 more water supply schemes were completed, raising the total number of towns having protected water supply to 25. Under rural water supply, 490 schemes

were in operation at the end of 1974-75. In the course of 1975-76, 90 more rural water supply schemes were completed and there were 289 schemes under various stages of construction. Tables indicating the progress made under water supply and sanitation are given in Appendix 9.27 and 9.28.

9.33 This high pace of progress in the water supply programme was largely the result of liberal supply of credit for the purpose by the Life Insurance Corporation of India. In fact almost all the water supply schemes completed during the year were financed by the L. I. C. A total sum of Rs. 625 lakhs has so far been advanced by the L. I. C. for the water supply schemes.

Housing

9.34 Eventhough the State Government has been operating a large number of schemes to solve the housing problem of the rural poor, no other scheme has made such a profound impact as the 'One Lakh Houses' Scheme. The merit of this scheme is not confined merely to meeting one of the basic needs of the rural poor. It was perhaps the first ever successful attempt to execute a State-wide development programme with massive popular support and co-operation including monetary contribution.

9.35 Construction of 57,000 houses have been completed and 33,000 house sites have been distributed under the "One Lakh Houses Scheme". When the huge magnitude of the Programme and financial limitations of the State are taken into account the achievement, though short of target, is highly encouraging.

9.36 In addition to the 'One Lakh Houses' Scheme, the Government have a number of continuing schemes to give financial assistance to the people, particularly those in the lower income groups, for the construction of houses. The 'Low Income Group Housing Scheme', the 'Middle Income Group Housing Scheme' and the 'Village Housing Project' are some of the important schemes financed by the Government. They are implemented through the Board of Revenue. The Number of houses constructed and the amounts disbursed so far under these schemes are shown below:

TABLE 9.10
Progress Under Housing Schemes

Items	Low income group	Middle income group	Village housing project
(1)	(2)	(3)	(4)
1. Number of houses sanctioned upto 3/76	6447	1266	7791
2. Number of houses completed upto 3/76	5880	1065	6449
3. Total amount disbursed upto 3/76 (Rs. in lakhs)	409.67	190.54	121.06

9.37 The Housing Board is also taking up public housing schemes and Rental Housing Schemes besides making available financial assistance for construction of houses to the Economically Weaker Sections (EWS) throughout the State. The Rental Housing Scheme is intended mainly to provide housing facilities to the police personnel and other Government servants.

9.38 One of the novel schemes started by the Board during the year 1976 was the EWS Housing Scheme. Under this scheme it has been proposed to give financial assistance for the construction of 10,000 houses every year to the economically weaker sections of the community. As a first instalment 3851 applications for loan assistance have been received out of which 969 have been rejected since they were not eligible for the loan according to the norms prescribed. Under this scheme a person is entitled to get the loan only if his annual income is less than Rs. 4,200 and the land under his possession does not exceed 10 cents. An applicant satisfying the above conditions can get a loan of Rs. 3,500 at 5% interest. The beneficiaries will have to repay the loan amount in monthly instalments of Rs. 25 within a period of 19 years.

9.39 The Board has also started units for the production of building materials at cheaper costs. The factory at Beypore to produce roofing sheets from coir wastes is expected to go into production early in 1977.

9.40 During the year 1976 the Housing Board has taken up the construction of 877 houses in the various public housing schemes started at different parts of the State. The expenditure incurred by the Board on public housing schemes, during 1975-76 is given below:

Sl. No.	Item	Amount spent (Rs. lakhs)
1.	Land	10.75
2.	Development of land	8.86
3.	Construction of buildings	162.17
	Total	181.78

Activities of the Kerala Rural Development Board

9.41 The Kerala Rural Development Board was constituted mainly for executing rural water supply and Sewerage schemes as well as development schemes of remunerative nature in the rural areas of the State. The Board completed 165 Rural Water Supply Schemes by November 1976. Another 29 schemes are in various stages of execution. Implementation of these schemes was made possible because of loan assistance from the L. I. C. An amount of Rs. 488 lakhs was spent by the Board till 30-11-1976.

9.42 The Rural Development Board has made rapid strides in its second area of activity namely the execution of remunerative development projects launched

in February 1973. This is financed by debentures floated with the permission of the Reserve Bank of India. A sum of Rs. 305.5 lakhs has so far been raised for these schemes. The entire amount will be spent by the end of current financial year. One hundred schemes were completed by 31-3-1976. Another 60 are expected to be completed during the course of the current financial year. These schemes, in addition to providing

permanent assets to the Panchayats enable them to augment their revenues without resorting to additional taxation or Governmental aid. On an average the schemes if properly implemented would fetch a return of 12½% of the capital cost of the Panchayats. This rate of returns will enable the Panchayats to pay back interest charges as well as the capital of the loan without strain on their resources.

APPENDIX
STATISTICAL TABLES

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APPENDIX 2.1

Area Population and Density of Population of States in India—1971

State	Population 1971 Census (in lakh)	Percent- age of area	Percent- age of population	Sex ratio (females per 1000 males)
(1)	(2)	(3)	(4)	(5)
1. Andhra Pradesh	435.03	8.44	7.94	977
2. Assam	149.58	3.04	2.73	897
3. Bihar	563.53	5.30	10.28	954
4. Gujarat	266.97	5.97	4.87	934
5. Haryana	100.37	1.35	1.83	867
6. Himachal Pradesh	34.60	1.70	0.63	958
7. Jammu and Kashmir	46.17	6.77	0.84	878
8. Kerala	213.47	1.18	3.90	1016
9. Karnataka	292.99	5.85	5.35	957
10. Madhya Pradesh	416.54	13.50	7.60	941
11. Maharashtra	504.12	9.38	9.20	930
12. Manipur	10.73	0.68	0.20	980
13. Meghalaya	10.12	0.69	0.18	942
14. Nagaland	5.16	0.50	0.09	871
15. Orissa	219.45	4.75	4.00	988
16. Punjab	135.51	1.54	2.47	865
17. Rajasthan	257.66	10.43	4.70	911

	(1)	(2)	(3)	(4)	(5)
18. Tamilnadu		411.99	3.96	7.52	978
19. Tripura		15.56	0.32	0.28	943
20. Uttar Pradesh		883.41	8.97	16.12	879
21. West Bengal		443.12	2.68	8.09	891
Union Territories		63.42	3.00	1.18	..
India		5479.50	100.00	100.00	930

APPENDIX 2.2

Decadal Variation in Population Since 1901—Kerala

(Persons in lakhs)

Year	Persons	Decade variation	Percentage decade variation
(1)	(2)	(3)	(4)
1901	63.96	..	..
1911	71.48	7.52	11.75
1921	78.02	6.54	9.16
1931	95.07	17.05	21.85
1941	110.32	15.25	16.04
1951	135.49	25.17	22.82
1961	169.04	33.55	24.76
1971	213.47	44.43	26.29

APPENDIX 2.3

Sex-wise Distribution of Workers According to Industry—Kerala

(No. in lakhs)

Industry	Rural			Urban			State		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Cultivators	10.04	0.64	10.68	0.35	0.03	0.38	10.39	0.67	11.06
2. Agricultural Labourers	11.35	6.80	18.15	0.61	0.32	0.93	11.96	7.12	19.08
3. Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied Activities	3.11	0.78	3.89	0.45	0.01	0.46	3.56	0.79	4.35
4. Mining and Quarrying	0.25	0.02	0.27	0.02	0.01	0.03	0.27	0.03	0.30
5. Manufacturing, Processing, Servicing and Repairs									
(a) Household Industry	1.27	1.05	2.32	0.21	0.13	0.34	1.48	1.18	2.66
(b) Other than Household Industry	3.86	1.50	5.36	1.47	0.29	1.76	5.33	1.79	7.12
6. Construction	0.82	0.03	0.85	0.21	0.01	0.22	1.03	0.04	1.07
7. Trade and Commerce	3.74	0.18	3.92	1.63	0.11	1.74	5.37	0.29	5.66
8. Transport, Storage and Communication	1.39	0.10	1.49	0.89	0.04	0.93	2.28	0.14	2.42
9. Other Services	4.26	1.62	5.88	1.71	0.85	2.56	5.97	2.47	8.44
Total workers	40.09	12.72	52.81	7.55	1.80	9.35	47.64	14.52	62.16

Source: 1971 Census.

APPENDIX 2.4

District-wise Mid-Year Population

(In lakhs)

District	Population as on 1st July of						
	1975	1976	1977	1978	1979	1980	1981
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Trivandrum	24.18	24.67	25.11	25.54	25.96	26.36	26.76
Quilon	26.53	27.06	27.55	28.02	28.48	28.92	29.36
Alleppey	23.39	23.85	25.48	24.70	25.10	25.49	25.88
Kottayam	16.93	17.27	17.58	17.88	18.17	18.45	18.73
Idukki	8.43	8.60	8.75	8.90	9.05	9.19	9.33
Ernakulam	23.81	24.29	24.72	25.15	25.55	25.95	26.34
Trichur	23.41	23.88	24.31	24.73	25.12	25.50	25.90
Palghat	18.53	18.90	19.24	19.57	19.88	20.19	20.50
Malappuram	20.40	20.80	21.19	21.55	21.90	22.24	22.58
Kozhikode	23.17	23.64	24.06	24.48	24.87	25.26	25.64
Cannanore	26.02	26.54	27.01	27.48	27.92	28.35	28.78
State	234.80	239.50	243.90	248.00	252.00	255.90	259.80

Source: Reserve Bank of India: Currency and Finance 1975-76, Mid-year population of States.

APPENDIX 2.5

District-wise Vital Rates

District	1971		1974	
	Birth rate (per 1000 population)	Death rate (per 1000 population)	Birth rate (per 1000 population)	Death rate (per 1000 population)
(1)	(2)	(3)	(4)	(5)
Trivandrum	29.25	7.39	24.94	7.36
Quilon	28.16	7.51	22.59	6.23
Alleppey	28.66	8.41	24.39	7.82
Kottayam	27.31	7.20	21.14	6.96
Idukki	30.91	8.20	31.14	7.32
Ernakulam	27.81	6.53	21.57	7.08
Trichur	31.09	9.03	23.93	7.28
Palghat	32.82	13.75	32.84	12.12
Malappuram	39.10	11.84	32.69	10.06
Kozhikode	33.91	9.12	29.60	7.49
Cannanore	32.10	8.86	26.01	6.74
State	31.64	9.71	26.96	8.00

Source: Bureau of Economics and Statistics, Kerala, Sample Registration Report No. 13.

APPENDIX 2.6

Age-Specific Fertility Rates for Kerala

Age Group (years)	1971	1974
15-19	48.4	44.7
20-24	210.8	178.7
25-29	223.3	189.7
30-34	173.2	134.7
35-39	116.7	86.4
40-44	42.8	25.6
45-49	6.9	6.9

Source: Bureau of Economics and Statistics, Kerala, Sample Registration Report.

APPENDIX 2.7

Net Domestic Product at Factor Cost by Industry of Origin—Kerala 1960-61 to 1974-75 (Current Prices)

(Rs. in lakhs)

Sector/Industry	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1. Primary Sector	24196	25097	25806	27022	33078	39736	41630	51838	53641	59977	67392	62060	74563	101365	112423
2. Secondary Sector	6585	7476	7539	8102	9504	10286	11221	13741	14539	16062	16321	17791	18871	19180	20315
3. Transport & Communications	5769	6947	7668	8388	9373	10340	11717	12687	15860	17582	20064	21617	25180	28255	32157
4. Finance & Real Estate	1573	1674	1934	2261	2516	2812	2971	3300	3485	3795	4244	5044	5544	6964	7167
5. Community and Personal Services	5099	5521	5801	6087	6643	7895	8957	10372	11878	13679	14920	16371	17861	20723	25869
6. Total: Net Domestic Product at Factor Cost	43222	46715	48748	51860	6114	71069	76496	91938	99403	111095	122941	122883	142019	176467	197931
7. Per-capita Income (Rs.)	259	273	279	290	334	379	399	469	496	541	585	572	646	785	861

Source: Bureau of Economics & Statistics, Kerala.

APPENDIX 2.8

Net Domestic Product at Factor Cost by Industry of Origin—Kerala 1960-61 to 1974-75 (At 1960-61 prices)

(Rs. in lakhs)

Sector/Industry	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1. Primary Sector	24196	23413	24145	24327	24727	24696	26233	27624	28809	30009	31636	32039	32260	32324	33291
2. Secondary Sector	6585	7066	7554	7908	8767	8710	9030	10169	9953	10715	10680	12007	12582	12687	13593
3. Transport & Communications	5769	6290	6483	6607	6994	7073	7468	7988	9338	9711	10128	10447	10698	10940	11225
4. Finance & Real Estate	1573	1646	1744	1872	1968	2004	1998	2044	2143	2168	2304	2648	2728	2869	2694
5. Community & Personal Services	5099	5410	5522	5643	5987	6356	6649	6963	7204	7362	7827	8096	8476	9431	9686
6. Total: Net Domestic Product at Factor Cost	43222	43825	45448	46357	48353	48839	51378	54788	57447	59965	62575	65237	66744	68251	70489
7. Per-capita Income (Rs.)	259	256	260	259	264	261	268	279	286	292	298	304	304	303	307

Source: Bureau of Economics & Statistics, Kerala.

APPENDIX 2.9

Net Domestic Product at Factor Cost by Industry of Origin—India (At Current Prices)

(Rs. in crores)

Industry/Sector	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71*	1971-72*	1972-73*	1973-74*	1974-75*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1. Primary Sector	6965	7202	7369	8543	10410	10194	12142	15013	14635	16049	17300	17805	19436	25976	29167
2. Secondary Sector	2549	2751	3007	3478	3898	4218	4692	5135	5548	6392	7015	7488	8173	9273	11592
3. Transport, Communication & Trade	1870	2026	2213	2484	2927	3173	3696	4235	4463	4859	5382	5768	6293	7693	9537
4. Finance & Real Estate	552	593	669	759	845	920	983	1057	1121	1207	1360	1525	1707	1944	2202
5. Community & Personal Services	1399	1513	1645	1825	2068	2296	2565	2872	3095	3370	3689	4037	4336	4834	5987
6. Total: Net Domestic Product at Factor Cost	13335	14085	14903	17089	20148	20801	24078	28312	28862	31877	34746	36623	39945	49720	58485
7. Net National Product at Factor Cost	13263	13987	14795	16977	20001	20637	23848	28054	28607	31606	34462	36332	39643	49396	58137
8. Per Capita Income (Rs.)	306	315	326	366	422	425	482	554	552	597	637	657	702	856	989

* Provisional

Source: Central Statistical Organisation, National Accounts Statistics, 1960-61—1974-75, October 1976.

APPENDIX 2.13
Indices of Net Domestic Product—Kerala and India

(1960-61 = 100)

Year	At current prices		At 1960-61 prices	
	Kerala	India	Kerala	India
(1)	(2)	(3)	(4)	(5)
1960-61	100	100	100	100
1961-62	108	106	101	104
1962-63	113	112	105	106
1963-64	120	128	107	112
1964-65	141	151	112	120
1965-66	164	156	113	114
1966-67	177	181	119	115
1967-68	213	212	127	125
1968-69	230	216	133	128
1969-70	257	239	139	136
1970-71	284	261	145	145
1971-72	284	275	151	146
1972-73	329	299	154	144
1973-74	408	373	158	152
1974-75	458	439	163	152

APPENDIX 2.14

Indices of Per capita Income—Kerala and India

(1960-61 = 100)

Year	At current prices		At 1960-61 prices	
	Kerala	India	Kerala	India
(1)	(2)	(3)	(4)	(5)
1960-61	100	100	100	100
1961-62	105	103	99	101

(1)	(2)	(3)	(4)	(5)
1962-63	108	106	100	101
1963-64	112	120	100	104
1964-65	129	138	102	109
1965-66	146	139	101	102
1966-67	154	157	103	100
1967-68	181	181	108	106
1968-69	191	180	110	107
1969-70	209	195	113	111
1970-71	226	208	115	115
1971-72	221	215	117	114
1972-73	249	229	117	110
1973-74	303	280	117	114
1974-75	332	323	118	112

APPENDIX 2.15

Per capita Income Differences—India and Kerala

Year	At Current Prices			At 1960-61 prices		
	India	Kerala	Income difference	India	Kerala	Income difference
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1960-61	306	259	47	306	259	47
1965-66	425	379	46	311	261	50
1968-69	552	496	56	327	286	41
1973-74	856	785	71	349	303	46
1974-75	989	861	128	343	307	36

APPENDIX 2.16

District Income at Current Prices 1970-71 to 1974-75

District	1970-71		1971-72		1972-73		1973-74		1974-75	
	Amount (Rs. lakh)	Percentage to State Income	Amount (Rs. lakhs)	Percentage to State Income	Amount (Rs. lakhs)	Percentage to State Income	Amount (Rs. lakhs)	Percentage to State Income	Amount (Rs. lakhs)	Percentage to State Income
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8)	(10)	(11)
1. Trivandrum	12010	9.8	12769	10.4	14390	10.1	18072	10.2	20227	10.2
2. Quilon	15118	12.3	14893	12.1	18133	12.8	21686	12.3	23908	12.1
3. Alleppey	11865	9.6	11546	9.4	13858	9.7	16652	9.4	18173	9.2
4. Kottayam	10142	8.2	10293	8.4	11780	8.3	14899	8.4	16813	8.5
5. Idukki	4683	3.8	4465	3.6	4973	3.5	6371	3.6	7926	4.0
6. Ernakulam	13518	11.0	14079	11.5	15713	11.1	18418	10.5	21112	10.7
7. Trichur	11504	9.3	11459	9.3	13253	9.3	15725	8.9	17803	9.0
8. Palghat	9317	7.6	10276	8.4	12165	8.5	15738	8.9	18692	9.4
9. Malappuram	8940	7.3	9024	7.3	10316	7.3	12879	7.3	13742	6.9
10. Kozhikode	12741	10.4	11771	9.6	13571	9.5	18283	10.4	19493	9.9
11. Cannanore	13103	10.7	12318	10.0	14140	9.9	17744	10.1	20042	10.1
KERALA	122941	100.0	122883	100.0	142019	100.0	176467	100.0	197931	100.0

SOURCE: Bureau of Economics and Statistics: District Income of Kerala (1970-71 to 1974-75) January 1977.

APPENDIX 2.19

Sectoral Distribution of District Income-1970-71 and 1974-75

(Per cent)

District	1970-71				1974-75			
	Primary	Secondary	Tertiary	Total	Primary	Secondary	Tertiary	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Trivandrum	48.1	11.9	40.0	100.0	50.8	8.4	40.8	100.0
2. Quilon	62.5	12.1	25.4	100.0	63.1	9.9	27.0	100.0
3. Alleppey	56.0	9.8	34.2	100.0	55.5	7.2	37.3	100.0
4. Kottayam	59.5	11.0	29.5	100.0	61.1	9.5	29.4	100.0
5. Idukki	69.1	12.0	18.9	100.0	73.3	8.8	17.9	100.0
6. Ernakulam	38.7	27.2	34.1	100.0	42.2	22.9	34.9	100.0
7. Trichur	49.2	17.1	33.7	100.0	50.8	12.2	37.0	100.0
8. Palghat	59.4	10.6	30.0	100.0	68.7	6.4	24.9	100.0
9. Malappuram	62.6	6.7	30.7	100.0	62.9	5.0	32.1	100.0
10. Kozhikode	53.9	11.8	34.3	100.0	52.6	9.8	37.6	100.0
11. Cannanore	56.2	11.3	32.5	100.0	55.9	9.2	34.9	100.0
KERALA	54.8	13.3	31.9	100.0	56.8	10.3	32.9	100.0

APPENDIX 3.1

Index Numbers of Wholesale Prices—All India

Base 1961-62=100)

Items	1975			1976									
	December	January	February	March	April	May	June	July	August	September	October	November	December*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
All Commodities	294.4	290.0	288.3	282.9	288.5	292.3	296.3	308.6	310.0	313.5	312.1	311.9	314.3
(i) Food articles	328.4	318.1	315.4	304.9	314.0	318.4	322.6	340.1	342.1	345.2	344.3	341.6	343.8
(ii) Industrial raw materials	255.6	256.1	248.8	240.0	253.9	266.0	282.4	309.5	312.8	329.8	319.0	324.9	332.5
(iii) Machinery & transport equipment	259.2	259.8	261.3	261.6	259.3	258.1	257.5	258.2	258.4	258.3	258.0	257.4	256.4
(iv) Manufacturers	253.4	253.2	253.5	253.7	255.5	257.0	258.2	263.5	263.4	263.5	264.7	266.0	268.0

Source: Reserve Bank of India Bulletin.

* Provisional figures.

APPENDIX 3.2

Index Number of Wholesale Prices All India—December 75
and December 76.

(Base: 1961—62 = 100)

Commodity	December 1975	December 1976	Percentage variation over the year
(1)	(2)	(3)	(4)
All Commodities	295.6	314.9	+6.5
I. Food Articles	330.4	344.5	+4.3
1. Rice	309.7	309.2	-0.2
2. Wheat	332.7	326.0	-2.0
3. Jowar	308.6	300.6	-2.6
4. Bajra	229.1	237.3	+3.6
5. Pulses	409.1	366.5	-10.5
6. Sugar	238.4	252.4	+5.9
7. Gur	372.7	423.4	+13.6
8. Milk and Milk products	339.7	327.2	-3.7
9. Edible Oils	271.9	376.4	+38.4
II. Liquor and Tobacco	325.9	331.5	+1.7
III. Fuel, Power, Light and Lubricants	367.7	371.8	+1.1
1. Coal	331.6	331.6	..
2. Mineral Oils	421.1	422.5	+0.3
IV. Industrial Raw Materials	259.3	333.9	+28.8
1. Cotton Raw	264.3	422.5	+59.9
2. Jute Raw	168.5	182.4	+8.2
3. Ground nuts	273.6	319.6	+16.8
V. Chemicals	322.5*	291.5	-9.6
VI. Machinery and Transport equipment	258.9	257.4	-0.6

	(1)	(2)	(3)	(4)
VII. Manufactures		254.0	268.4	+5.7
1. Intermediate products		308.5	339.6	+10.1
2. Finished products		240.9	251.2	+4.3
(i) Cotton Manufactures		223.3	236.7	+6.0
(ii) Jute Manufactures		213.9	213.5	-0.2

Source: Reserve Bank of India.

APPENDIX 3.3

Relative Price Indices of Agricultural Commodities and Non-Agricultural Commodities—All India

Item	Year (July—June)		
	1973-74	1974-75	1975-76
(1)	(2)	(3)	(4)
General index of wholesale prices			
Index	271.0	316.8	297.8
Percentage variation	+25.3	+16.9	-6.0
Index for agricultural commodities			
Index	299.5	353.0	302.5
Percentage variation	+27.8	+17.9	-14.3
Index for non-agricultural commodities			
Index	256.8	298.8	295.5
Percentage variation	+23.9	+16.4	-1.1
Index of agricultural commodities as percentage of the Index for non-agricultural commodities	116.6	118.1	102.4

Source: Currency and Finance, 1975-76, Reserve Bank of India.

APPENDIX 3.4

Consumer Price Index Numbers for Industrial Workers in India—1976

Centre	January	February	March	April	May	June	July	August	September	October	November	December
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Ahmadabad	281	273	268	273	269	269	276	279	283	281	N.A.	N.A.
2. Bangalore	322	312	304	302	299	301	312	312	319	326	..	..
3. Bombay	292	288	286	291	290	294	298	294	298	297	..	..
4. Calcutta	277	271	276	286	288	293	296	293	298	306	..	..
5. Coimbatore	299	293	289	281	283	285	300	312	313	315	..	..
6. Delhi	325	326	324	323	320	324	328	334	335	334	..	..
7. Hyderabad	308	294	289	289	293	295	301	303	304	311	..	..
8. Madras	286	280	272	272	273	276	281	280	283	289	..	..
9. Madhavaram	327	311	311	312	301	304	309	303	305	305	..	..
10. Nagpur	304	286	277	281	293	289	298	294	305	305	..	..
11. Alleppy	359	342	339	341	337	345	345	337	337	N.A.	..	..
12. Alwaye	333	318	322	325	313	321	326	318	322	322	..	..
All India	298	290	286	289	290	291	297	298	302	304	..	..

APPENDIX 3.5

Consumer Price Index (Cost of Living Index) Numbers for Agricultural and Industrial Workers—Kerala 1976

(Base 1970=100)

Index Numbers for the month of January to December 1976

Sl.No.	Centre	January	February	March	April	May	June	July	August	Sept.	October	Nov.	Dec.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Trivandrum	173	166	164	164	163	163	166	164	161	161	162	162
2.	Quilon	173	167	166	167	165	166	169	167	165	164	165	164
3.	Punalur	173	167	165	165	163	163	167	165	163	163	163	163
4.	Alleppey	173	166	164	164	162	163	167	164	162	161	162	162
5.	Kottayam	166	159	157	158	156	156	160	158	156	159	157	157
6.	Mundakayam	177	170	169	170	167	167	169	166	163	162	162	162
7.	Munnar	181	175	173	175	173	174	177	176	174	174	175	175
8.	Ernakulam	169	162	161	162	160	160	164	161	159	159	160	160
9.	Chalakudy	169	164	164	166	164	164	167	164	162	161	161	161
10.	Trichur	168	162	162	164	163	164	167	164	162	161	161	161
11.	Palghat	168	163	162	164	162	162	165	163	162	162	163	163
12.	Malappuram	168	162	161	162	160	160	164	162	160	160	161	161
13.	Kozhikode	171	166	165	167	165	166	169	166	164	163	164	164
14.	Meppadi	173	169	168	169	166	166	170	167	165	164	165	165
15.	Cannanore	167	161	160	162	160	161	164	161	158	157	159	158

APPENDIX 3.6

Statement Showing the State Average of Retail Prices of Essential Commodities

(Rs.)

Commodity	Unit	30.1 1976	27.2 1976	26.3 1976	30.4 1976	28.5 1976	25.6 1976	30.7 1976	27.8 1976	30.9 1976	29.10 1976	26.11 1976	31.12 1976	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1.	Rice (O.M.)	Kg.	2.77	2.70	2.80	2.74	2.60	2.79	2.72	2.69	2.44	2.35	2.48	2.38
2.	Greengram	Kg.	2.42	2.37	2.17	2.52	2.53	2.59	2.67	2.67	2.39	2.32	2.36	2.52
3.	Black gram	Kg.	2.54	2.46	2.39	2.64	2.75	2.81	3.01	3.30	3.13	2.88	2.85	2.86
4.	Redgram	Kg.	2.30	2.11	1.99	2.11	2.17	2.13	2.19	2.27	2.22	2.19	2.23	2.19
5.	Dhall	Kg.	3.04	2.84	2.54	2.57	2.54	2.50	2.48	2.55	2.58	2.62	2.73	2.92
6.	Coconut Oil	Kg.	8.61	8.25	8.14	8.78	8.18	8.64	9.28	9.80	12.27	13.24	14.84	14.89
7.	Groundnut oil	Kg.	6.94	6.41	6.24	6.26	6.06	6.62	8.18	8.90	10.61	10.19	9.50	9.37
8.	Gingelly Oil	Kg.	8.84	8.68	8.55	9.28	9.40	9.04	9.06	9.13	11.10	11.06	10.84	10.84
9.	Tapioca	Kg.	0.57	0.57	0.59	0.61	0.59	0.57	0.56	0.53	0.54	0.55	0.54	0.50
10.	Chennai	Kg.	0.66	0.69	0.71	0.78	0.83	1.06	1.07	0.89	0.77	0.74	0.75	0.70
11.	Banana	Kg.	2.17	2.15	2.02	2.04	2.93	3.01	2.50	2.52	2.39	2.23	2.28	2.07
12.	Milk (Cows)	Litre	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32
13.	Egg (Hen)	Dozen	4.24	3.99	3.97	3.66	4.06	4.40	4.72	4.67	4.35	4.58	4.86	4.80
14.	Mutton	Kg.	11.30	11.10	11.10	10.70	10.50	10.50	10.90	10.28	10.28	10.28	10.28	10.13

Contd.....

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
15.	Potato	Kg.	1.19	1.21	1.11	1.09	1.28	1.33	1.28	1.24	1.28	1.31	1.30	1.24
16.	Corriander	Kg.	5.82	4.63	4.42	4.90	5.04	6.02	6.87	7.25	7.29	8.53	9.43	10.17
17.	Chillies	Kg.	11.47	7.91	8.54	9.81	9.20	8.59	8.91	8.44	7.88	7.75	9.29	9.11
18.	Onion	Kg.	1.00	0.80	0.79	0.96	0.92	0.79	0.87	0.88	0.91	0.99	1.05	1.14
19.	Tamarind	Kg.	2.48	2.41	2.45	2.57	2.62	2.75	3.30	3.57	3.69	3.84	4.13	3.76
20.	Tea (Brooke Bond A1)	Kg.	17.12	17.12	17.14	17.16	17.16	17.13	17.15	17.15	17.15	17.15	17.15	17.15
21.	Coffee Powder	Kg.	16.71	16.71	16.71	16.71	16.71	16.71	16.71	16.71	16.69	16.69	16.69	16.70
22.	Sugar	Kg.	4.35	4.31	4.37	4.64	4.67	4.80	4.48	5.14	4.97	5.02	4.74	4.42
23.	Coconut (with Husk)	100 Nos.	77.90	74.70	76.35	80.10	73.70	76.55	81.30	85.50	101.50	105.50	117.50	115.95
24.	Tobacco	Kg.	17.18	17.58	17.43	17.48	17.48	16.33	16.03	15.48	15.13	14.98	14.65	13.78
25.	Firewood	Qtl.	18.28	18.08	18.08	17.78	17.78	17.90	17.90	17.80	17.80	17.85	17.80	17.80
26.	Mundu (Mull)	each	7.60	7.70	7.71	7.77	7.75	7.91	7.88	8.16	8.26	8.78	8.80	8.83
27.	Mundu (Kora)	"	6.26	7.70	6.14	6.26	6.29	6.39	6.39	6.38	6.41	6.60	6.49	6.49
28.	Paper (Nos.)	24	1.76	1.69	1.68	1.68	1.63	1.63	1.64	1.64	1.62	1.62	1.62	1.61
29.	Washing Soda	Kg.	2.11	2.05	2.00	1.94	1.93	1.91	1.87	1.84	1.80	1.77	1.78	1.79
30.	Washing Soap (Sunlight Bar)	each	1.73	1.54	1.53	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
31.	Toilet Soap (Lux)	each	1.34	1.30	1.29	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28
32.	Razor Blade (Prince)	5 Nos.	0.58	0.59	0.58	0.58	0.58	0.61	0.61	0.61	0.62	0.62	0.62	0.62
33.	Tooth Paste (Colgate Large)	each	2.60	2.56	2.56	2.56	2.57	2.59	2.60	2.60	2.60	2.60	2.60	2.60
34.	Anacin	each	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
35.	Electric Bulb (40w Osram)	each	2.82	2.80	2.79	2.78	2.78	2.77	2.77	2.78	2.78	2.78	2.80	2.80
36.	Aluminium Cooking Pot	Kg.	25.30	25.00	25.00	24.29	24.24	24.24	24.24	23.84	23.79	23.69	23.85	23.80
37.	Cement	Bag.	20.18	20.12	19.92	20.01	20.20	20.16	20.41	20.38	20.38	20.38	20.21	20.24
38.	Babyfood Amul	Kg.	19.20	19.20	19.19	19.19	19.19	19.21	19.21	19.21	19.21	19.21	19.21	19.21
39.	Torch Battery (Eveready 950)	each	1.67	1.67	1.66	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.68	1.68

Source: Bureau of Economics and Statistics.

APPENDIX 3.7

Wholesale Price Index of Agricultural Commodities—Kerala 1976

(Base 1952—53=100)

Sl. No.	Group	January	February	March	April	May	June	July	August	September	October	November	December
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Foodgrains (Rice)	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7
2.	Molasses	415.5	394.7	357.9	420.8	414.7	408.6	426.2	451.4	438.7	436.9	466.1	446.0
3.	Condiments and Spices	209.9	223.0	246.9	300.0	354.5	453.2	504.2	354.1	300.6	295.8	299.0	278.1
4.	Fruits and Vegetables	384.7	369.8	370.5	363.6	377.2	382.5	391.7	386.5	383.8	386.0	391.4	375.3
5.	Food crops	315.2	314.2	317.0	326.5	337.5	354.3	364.8	338.7	330.6	330.1	332.5	325.7
6.	Oil Seeds	480.1	459.9	459.5	487.1	457.8	441.5	481.7	486.9	555.5	622.0	670.4	699.0
7.	Plantation crops	238.1	237.0	235.8	236.6	232.3	234.2	235.7	235.4	234.4	232.8	239.1	238.5
8.	Non-food crops	407.0	392.6	391.9	411.4	389.7	378.9	407.4	410.9	458.5	504.5	540.1	559.9
9.	All crops	348.7	342.8	344.3	357.5	356.6	363.3	380.3	365.1	377.3	393.8	408.3	411.2

Source: Bureau of Economics and Statistics.

APPENDIX 3.8

Wholesale Price Index of Agricultural Commodities, Kerala

(Base: 1952-53=100)

Sl. No.	Group	1961	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Foodgrains (Rice)	131	149	155	181	208	209	209	209	233	297	319	319
2.	Molasses	82	153	256	289	175	172	239	272	280	282	416	423
3.	Condiments and Spices	125	158	179	179	212	234	171	139	161	222	218	318
4.	Fruits and Vegetables	95	167	185	214	195	217	208	234	306	402	385	380
5.	Food Crops	122	154	167	190	205	213	203	204	235	302	317	332
6.	Oil Seeds	141	244	272	273	263	369	303	287	466	617	479	525
7.	Plantation Crops	112	130	118	123	133	141	138	139	154	215	247	236
8.	Non-food Crops	132	209	226	228	223	300	253	242	372	496	409	438
9.	All Crops	126	174	188	204	212	245	222	218	285	373	350	371

Source: Bureau of Economics and Statistics.

APPENDIX 3.9

Availability of Food in the State (1971-76)

Particulars	Unit	1971	1972	1973	1974	1975	1976
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Population of the State as on 1st April	lakhs	214.7	219.7	224.7	229.8	234.8	239.5
2. Production of rice in the State	(lakh tonnes)	12.98	13.52	13.76	12.57	13.34	13.65
* 2. (a) Availability of rice for consumption from production within the State	„	12.93	12.84	13.07	11.94	12.67	12.97
3. Import of rice on State Account**	„	7.47	7.74	7.20	7.44	5.12	8.98
4. Import on wheat on State Account	„	0.55	0.83	1.98	2.42	5.18	2.55
5. Production of raw tapioca	„	46.17	54.29	56.92	56.60	56.25	51.83
† 5 (a) Availability of tapioca for consumption in rice equivalent	„	15.60	18.34	19.23	19.12	19.00	17.51
6. <i>Per capita Availability</i>							
(i) of rice from internal production in the State	gm.	157	160	159	142	148	148
(ii) of rice from import	„	95	97	88	89	60	103
(iii) of wheat from import on the State Account	„	7	10	24	29	60	29
(iv) of rice equivalent of tapioca	„	199	229	234	228	222	200
(v) of rice in the State	„	252	257	247	231	208	251
(vi) of food grains	„	259	267	271	260	268	280
(vii) of food	„	458	496	505	488	490	480

* Five per cent of production is set apart for seed, feed and wastage and the rest alone is accounted for as available for consumption.

† Twentyfive per cent of the production is set apart for industrial uses such as sago and starch manufacturing and animal and poultry feed and rest alone is accounted for as available for consumption 1 tonne of rice=2.22 tonnes of raw tapioca.

** Firm data is not available on the import of rice into the State by private trade. Hence availability through this source is not included.

APPENDIX 3.10
Exports of Foodgrains on State Account*

Month	(in '000 tonnes)			
	Rice		Wheat	
	1975	1976	1975	1976@
(1)	(2)	(3)	(4)	(5)
January	40.4	49.5	44.6	28.5
February	37.1	49.6	41.0	20.1
March	34.3	55.9	42.0	23.5
April	34.2	56.9	43.0	25.4
May	38.3	68.2	44.8	23.2
June	37.3	71.5	33.2	18.7
July	59.9	85.8	50.9	25.2
August	53.9	93.7	49.5	30.0
September	38.3	94.6	47.6	21.2 ¹²
October	42.6	87.7	40.0	14.7 ¹³
November	45.6	88.8	39.4	11.5
December	49.6	95.3	42.1	12.7
Total	511.5	897.5	518.1	254.7

* Quantity issued from the F. C. I. Depots.

@ Including quantity issued by F. C. I. to Flour Mills from the F. C. I.

Source: Director of Civil Supplies.

APPENDIX 3.11
Distribution of Rice and Wheat through the Public Distribution System

Month	Rice Distributed		Wheat Distributed*	
	(in tonnes)		(in tonnes)	
	1975	1976	1975	1976
January	41539	57412	43846	27700
February	37278	57756	38207	21888
March	41093	61802	45710	21949
April	40154	60432	41854	21288
May	41836	73349	42991	19581
June	47672	74745	42033	17193
July	54914	77826	43108	20411
August	55696	83506	41175	20103
September	37548	86419	41310	15512
October	41065	88742	38946	12849
November	40348	84176	37019	11043
December	58918	98012	33302	10947
Total	531061	904177	489501	220464
Monthly average	44255	75348	40792	18372

* Allotment of wheat for conversion to wheat products not included.

Source: Director of Civil Supplies.

APPENDIX 3.12
Public Distribution Network in Kerala

Sl.No.	Particulars	Unit	1975	1976
1.	No. of ration card and permits (as on 1st April)	No.		
(a)	Ration cards for families	No.	36,16,108	38,73,229
(b)	Ration permits for institution	"	7,634	6,829
2.	No. of F.C.I. Sub Depots	"	22	24
3.	No. of wholesale shops			
(a)	Co-operatives	"	41	44
(b)	Others	"	215	214
(c)	Total wholesale shops	"	256	258
4.	No. of retail shops			
(a)	Co-operatives	No.	3037	2856
(b)	Others	"	8354	8713
(c)	Total	"	11391	11569
5.	Quantity of Coarse Clothes (Allotted)	('000 sq metres)	30630	14499
6.	Wheat products distributed	(M. tonnes)	29933	30000
7.	Sugar	"	96636	85592
8.	Kerosene	"	107336	112025

Source: Director of Civil Supplies

APPENDIX 3.13
Essential Commodities Distributed by the Kerala State Civil Supplies Corporation

Sl. No.	Items	1974-75 (6/74 to 3/75)		1975-76 (4/75 to 3/76)	
		Quantity in tonnes	Value in lakhs Rs.	Quantity in tonnes	Value in lakhs Rs.
		(3)	(4)	(5)	(6)
1.	Wheat	54587	825.21	20702	299.17
2.	Wheat products				
	Produced	19257	..	34062	..
	Purchased	..	..	5340	110.79
3.	Rice-Outside State	4576	..	20155	465.76
4.	Rice-within the State	574	..	11970	287.36
5.	Pulses	392	8.34	2494	48.59
6.	Cocoonut Oil	..	..	148	12.44
7.	Chillies	..	..	15	1.16
8.	Soaps	..	..	..	4.14
9.	Sugar	..	..	8	0.35
10.	Tapioca	..	..	44	0.43
11.	Paper for Note Books	..	..	1199	36.00
12.	Petrol Lubricants	..	..	..	14.37
13.	Baby milk food	..	..	..	0.07

Source: Kerala State Civil Supplies Corporation, Cochin.

APPENDIX 3.14
Procurement of Paddy

Month	Quantity in tonnes	
	1974-75	1975-76
(1)	(2)	(3)
July	75.7	107.5
August	123.9	51.9
September	1009.8	3074.5
October	12841.0	13802.3
November	12419.7	8556.3
December	3635.7	3797.3

(1)	(2)	(3)
January	2066.9	2180.2
February	4381.5	5564.5
March	13787.9	13592.6
April	6612.1	5130.4
May	2066.0	2066.6
June	577.7	1272.0
Total	59597.9	59196.1
Proportion of rice procured to total internal production in per cent.		
	2.93	2.89

Source: Director of Civil Supplies

APPENDIX 4.1

District-wise Average Monthly Rainfall

(in mm.)

District	July 1975	August 1975	September 1975	October 1975	November 1975	December 1975	January 1976	February 1976	March 1976	April 1976	May 1976	June 1976	Total for 1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Trivandrum	206.8	217.7	178.5	335.6	362.7	33.3	..	..	20.1	57.0	62.8	59.4	1533.9
Quilon	396.0	427.4	350.4	411.2	313.1	20.9	0.4	..	37.0	143.9	98.3	155.6	2354.2
Alleppey	519.8	622.0	521.8	598.3	235.1	60.3	..	..	33.8	77.0	91.2	181.6	2940.9
Kottayam	378.9	535.1	515.8	550.7	319.3	45.1	..	..	22.3	188.5	121.6	209.8	2887.1
Idukki	420.2	966.3	507.1	383.7	249.4	31.0	..	..	21.4	224.2	83.2	147.5	3034.0
Ernakulam	567.5	678.0	458.3	485.9	243.5	24.5	..	8.7	33.2	159.7	110.2	200.0	2969.5
Trichur	574.6	685.7	537.7	431.0	286.7	1.3	..	..	9.6	105.9	84.7	219.3	2936.5
Palghat	495.2	610.6	362.7	247.4	148.3	..	..	..	20.0	153.3	62.5	118.1	2218.1
Malappuram	510.4	716.5	480.0	341.9	186.2	1.8	..	..	3.4	158.1	41.0	186.3	2625.6
Kozhikode	829.4	1032.4	638.6	366.9	143.9	31.3	..	..	10.7	90.0	66.5	218.1	3427.8
Cannanore	847.9	835.9	530.7	265.3	89.5	..	..	..	6.3	33.9	66.3	411.1	3086.9
STATE	522.4	666.1	462.0	401.6	234.3	22.7	..	0.8	19.8	126.5	80.8	191.5	2728.5
Normal	703.9	426.3	238.2	301.7	184.6	49.3	17.5	17.3	41.4	109.3	238.2	676.1	3003.8

N.R.—Not Reported.

Source: Bureau of Economics and Statistics.

APPENDIX 4.2

Land Use Pattern in Kerala during 1975-76

(Area in hectares)

District	Total Geographical area according to Village papers	Forest	Land put to agricultural uses	Barren and uncultivable land	Pastures and grazing land	Land under crops included in net area sown	Culti- misc. tree waste	Fallow land other than current fallow	Current fallow	Net area sown	Area sown more than once	Total cropped area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	218600	49861	17293	1509	86	578	1208	1288	1304	145473	101856	247329
Quilon	474290	236048	22229	3939	100	752	1557	787	1313	207565	170055	377620
Alleppey	182270	518	26965	638	76	457	2311	735	1475	149095	95617	244712
Kottayam	219550	8141	17696	2293	531	1720	2524	1300	1421	183924	91601	275525
Idukki	515048	260993	13517	17005	9861	19886	33184	2340	2074	156188	19684	175872
Ernakulam	235319	8123	30460	2020	968	4005	4740	2399	4815	177789	49419	227208
Trichur	299390	103619	18029	3957	668	2401	4027	1593	3583	161513	84295	245808
Palghat	438980	136257	32147	12226	1709	8498	18374	3924	6342	219503	129354	348857
Malappuram	363230	103417	13925	6756	1182	3788	12943	2317	5445	213457	48488	261945
Kozhikode	371150	90876	20620	5110	569	10143	8421	983	1615	232813	47156	279969
Cannanore	567670	83656	46349	23041	4165	32022	24125	5288	7172	341852	13883	355735
STATE	3885497	1081509	259230	78494	199115	84250	113414	22954	36559	2189172	851408	3040580

Note: Figures are provisional based on Timely Reporting Survey 1975-76.

Source: Bureau of Economics and Statistics.

APPENDIX 4.3

Area Production and Average Yield of Principal Crops in Kerala

Crops	Area (Hectares)		Production (Tonnes)		Average Yield (Kg./Hect.)	
	1974-75	**1975-76	1974-75	1975-76	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Food Crops						
1. Rice	881466	884969	1333931	1364867	1513	1542
2. Pulses	37262	33699	12674	13949	340	396
3. Sugarcane (Gur)	9506	9352	53912	50628	5671	5414
4. Pepper	118408	117516	27228	27564	230	235
5. Ginger	12201	12140	26040	28524	2134	2350
6. Turmeric	4263	4273	4480	4256	1051	996
7. Cardamom	46630	46630	2050	2050	44	44
8. Betlenuts*	93042	92747	13777	13731	148072	148048
9. Banana and other Plantains	47143	47159	356583	356707	7564	7564
10. Cashewnut	104885	105944	117679	118869	1122	1122
11. Tapioca	317880	316103	5625116	5183215	17696	16306
12. Other food crops	213190	224590	..	..	..	..
Total food crops	1885876	1895122	..	..	..	..
II. Non-food crops						
1. Ground nut	17510	17510	19471	23148	1112	1322
2. Sesamum	11782	10993	3264	2856	277	260
3. Coconut*	748174	751143	3719	3734	4971	4971
4. Cotton	7551	7551	1714	1744	227	231
5. Tobacco	762	755	1327	1530	1741	2026
6. Tea	37572	36348	48899	43264	1301	1190
7. Coffee	36589	36589	15784	N.A.	431	N.A.
8. Rubber	202318	205383	121558	125750	601	612
9. Other non-food crops	79941	79186	..	..	..	..
Total non-food crops	1142199	1145458	..	..	..	..
Total Cropped area	3028075	3040580	..	..	..	..

* In million nuts

** Figures are provisional based on forecast reports.

Source: Bureau of Economics and Statistics.

APPENDIX 4.4

Consumption of Fertilisers in Kerala

(In tonnes)

Year	Nutrients			
	Nitrogen (N)	Phosphorous (P ₂ O ₅)	Potash (K ₂ O)	Total
(1)	(2)	(3)	(4)	(5)
1956-57	2425	1052	68	3545
1957-58	3604	1049	508	5161
1958-59	3892	2238	508	6658
1959-60	4935	2262	1118	8315
1960-61	5314	4703	2032	12049
1961-62	6264	8461	2248	16973
1962-63	8296	9033	7948	25277

(1)	(2)	(3)	(4)	(5)
1963-64	10148	9452	8853	28952
1964-65	12746	11210	10252	34208
1965-66	15251	12773	11305	39329
1966-67	21016	13373	11030	45419
1967-68	24000	15689	14853	54542
1968-69	28574	20442	21514	70330
1969-70	30120	20347	21543	72010
1970-71	26335	14183	16139	56655
1971-72	31257	15670	18044	64971
1972-73	31484	22314	20470	74268
1973-74	31691	22609	24546	78846
1974-75	32143	17187	18032	67362
1975-76	31654	14374	16643	62671

Source: Department of Agriculture.

APPENDIX 4.5

Area, Production and Productivity of High Yielding Varieties of Rice in Kerala 1975-76

District	Autumn (1975)			Winter (1975)			Summer (1976)			Total		
	Area (Hect.)	Production (Tonnes) (Rice)	Productivity (Kg./Hect.) (Rice)	Area (Hect.)	Production (Tonnes) (Rice)	Productivity (Kg./Hect.) (Rice)	Area (Hect.)	Production (Tonnes) (Rice)	Productivity (Kg./Hect.) (Rice)	Area (Hect.)	Production (Tonnes) (Rice)	Productivity (Kg./Hect.) (Rice)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	2450	4014	1638	2043	3280	1605	1371	1530	1116	5864	8824	1505
Quilon	4592	8417	1833	1904	2735	1436	140	205	1464	6636	11357	1711
Alleppey	12213	22924	1877	2491	4650	1867	36032	76843	2133	50736	104417	2058
Kottayam	2464	4538	1842	9784	15730	1608	9869	24853	2518	22117	45121	2040
Idukki	1625	2374	1461	149	176	1181	..	..	..	1774	2550	1437
Ernakulam	16777	25396	1514	3302	3996	1210	3096	4410	1424	23175	33802	1459
Trichur	3927	5310	1352	14469	21760	1504	10062	18457	1834	28458	45527	1600
Palghat	31511	70120	2225	9610	21277	2214	1184	2415	2040	42305	93812	2217
Malappuram	9836	16362	1664	7860	10147	1291	3466	6296	1817	21162	32805	1550
Kozhikode	2992	3257	1089	5657	7459	1319	2654	4071	1534	11303	14787	1308
Cannanore	10144	14829	1462	4904	7842	1599	1523	2400	1576	16571	25071	1513
STATE:	98531	177541	1802	62173	99052	1593	69397	141480	2039	230101	418073	1817

Source—Bureau of Economics and Statistics.

APPENDIX 4.6

Area, Production and Productivity of Rubber in Kerala

Year	Area (hectares)	Production (Tonnes)	Yield per hectare (Kg.)
(1)	(2)	(3)	(4)
1973-74	199604	118016	591
1974-75	202318	121558	608
1975-76	205383	128769	627

Source: Rubber Board.

APPENDIX 4.7

Price of Natural Rubber in Kottayam Market (Rs./Quintal for RMA 3,4 & 5 Grades)

Month	1974	1975	1976
(1)	(2)	(3)	(4)
January	599.58	904.40	696.31
February	647.92	874.37	676.67
March	650.31	826.40	656.20
April	689.40	831.72	654.70
May	836.40	793.70	591.73
June	899.40	807.12	585.19
July	986.67	795.77	628.89
August	1003.80	764.78	592.71
September	957.50	763.02	565.50
October	777.30	701.39	536.30
November	716.85	721.75	595.10
December	718.35	715.00	..
Average	782.79	791.52	..

Source: Rubber Board

APPENDIX 4.8

Area, Production and Yield per hectare of Tea in Different States

State	Area in hectares as on 31st March			Production in Tonnes			Average yield per hectare in Kg.		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Assam	185113	187408	188792	251825	265281	263055	1360	1416	1393
West Bengal	89025	88224	88785	110489	118028	111860	1241	1388	1260
Tripura	5463	5421	5467	3857	4166	3674	706	768	672
Bihar	459	459	459	23	37	18	50	81	39
Uttar Pradesh	1810	1817	1817	840	908	580	464	500	319
Himachal Pradesh	4183	4183	4183	1127	1388	1991	269	332	333
Tamil Nadu	35044	35370	35481	56020	54676	60452	1599	1546	1704
Karnataka	1865	1874	1774	2873	2830	2892	1540	1510	1630
Kerala	37146	36907	36347	44898	42161	43215	1209	1142	1189
Total	360108	361663	363105	471952	489475	487137	1311	1353	1342

APPENDIX 4.9

Tenancy and Kudikidappu—Details as on 31-12-1976

Item	Total No. of applications received	Disposal of cases			Total	Balance to be disposed of	No. of certificates of purchase issued
		Allowed	Rejected	Other Disposals			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Section 72 (Tenancy)	3148927	1819941	462735	318029	2600705	548222	1282066
Section 80 B (Kudikidappu)	401573	247551	133094	16836	397481	4092	210132

Source: Land Board, Kerala.

APPENDIX 4.10

Ceiling Laws—Details as on 31-12-1976

(1)	(2)	(3)
I. Total Ceiling returns filed	No.	45516
II. Total Ceiling returns decided	No.	36834
III. Balance to be decided	No.	8632
IV. Area ordered to be surrendered	Acres	106430
V. Area already taken possession of	Acres	52083
VI. Stay against taking possession	Acres	34475
VII. Possession being taken over	Acres	19872
VIII. Area already assigned	Acres	26270
IX. Stay against assignment	Acres	4589
X. Area covered by assignment Proceedings	Acres	13354
XI. Area reserved for public purposes	Acres	7870

Source: Land Board, Kerala.

APPENDIX 4.11

Number of Beneficiaries and Area Covered by Various Land Reform Measures as on 31-12-1976

Item	Scheduled Castes and Tribes	Total number benefited	Area involved (acres)
1. Tenancy Cases	..	1819941	1327009
2. Kudikidappu cases	..	247551	19485
3. Ceiling laws	17454	39449	26270
4. Land assignment	72935	369735	350627
5. Arable forest land assignment	3682	8434	10850
6. Miscellaneous enfranchisements:			
(i) Thiruppuvaram	..	92123	2683
(ii) Sree Pandaravaka	..	75000	12630
(iii) Sree Padam	..	40892	15000
(iv) Edavagai	..	51376	123595
(v) Pattazhi Devaswom	..	12802	7805
(vi) Jenmikaram	..	347436	N.A.
(vii) Kanam lands in Cochin Area	..	11583	N.A.
Total	94071	3116322	..

Source: Land Board, Kerala.

APPENDIX 4.12

Marine Fish Landings in Kerala

Species	1973		1974		1975	
	Quantity (Tonnes)	Percentage	Quantity (Tonnes)	Percentage	Quantity (Tonnes)	Percentage
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Oil Sardine	122.8	27.4	102.1	24.3	97.2	23.1
2. Other Sardines	62.4	13.9	31.3	7.4	33.7	8.0
3. Mackerel	19.8	4.4	10.3	2.5	14.9	3.5
4. Prawns	86.0	19.2	60.8	14.5	78.0	18.5
5. Eleasmobranch	8.8	1.9	10.3	2.5	10.3	2.5
6. Catfish	17.3	3.9	33.5	8.0	32.6	7.8
7. Soles	8.6	1.9	12.8	3.0	6.9	1.6
8. Tunnies	2.7	0.6	5.9	1.4	5.8	1.4
9. Lactarius	6.7	1.5	2.9	0.7	1.0	0.2
10. Ribbon fish	23.9	5.3	30.2	7.2	15.2	3.6
11. Caranx	14.2	3.2	5.3	1.3	7.2	1.7
12. Scombrida	11.8	2.6	9.2	2.2	16.8	4.0
13. Others	63.7	14.2	105.7	25.0	101.2	24.1
Total	448.7	100.0	420.3	100.0	420.8	100.0

Source: CMFRI, Cochin.

APPENDIX 4.13

Fishermen Co-operatives in Kerala

Category	1974-75			1975-76		
	Number of Societies	Membership	Paid up share capital (Rs. in lakhs)	Number of Societies	Membership	Paid up share capital (Rs. in lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Credit Societies	189	37027	5.75	153	29837	6.12
M.U.C.S.	849	71906	21.25	728	64562	20.19
Regional Marketing Societies	19	1098	31.58	18	1537	48.87
Total	1057	..	58.58	899	..	75.18

Source: Fisheries Department, Kerala.

APPENDIX 4.14

Export of Fish Products

Year	Kerala		India		Percentage of Kerala to India	
	Quantity (Tonnes)	Value (Rs. in crores)	Quantity (Tonnes)	Value (Rs. in crores)	Quantity	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1966-67	13175	14.64	21116	17.37	62.4	84.3
1967-68	15246	16.75	21907	19.72	69.6	84.9
1968-69	18482	20.25	26811	24.70	68.9	82.0
1969-70	22273	27.23	31695	33.46	70.3	81.4
1970-71	23896	27.57	35883	35.07	66.6	78.6
1971-72	21892	33.70	35523	44.55	61.6	75.6
1972-73	25797	41.97	38903	59.72	66.3	70.3
1973-74	31561	57.75	52279	89.51	60.4	64.5
1974-75	25340	39.58	45099	68.41	56.2	57.9
1975-76	31683	67.62	54463	124.53	58.2	54.3

Source: Marine Products Export Development Authority.

APPENDIX 4.15

Division-wise Area of Forests as on 31-3-1975

Sl. No.	Division	Area (in hectares)
(1)	(2)	(3)
1.	Trivandrum	56571
2.	Thenmala	56761
3.	Punalur	28154
4.	Konni	33359
5.	Ranni	97947
6.	Kottayam	79082
7.	Malayattur	67952
8.	Munnar	89682
9.	Chalakydy	86091
10.	Trichur	52261
11.	Wild Life Division, Thekkady	56461
12.	Nenmara	48410
13.	Nilambur	32478
14.	Palghat	37308
15.	Kozhikode	37014
16.	Wynad	45945
17.	Special Division, Kozhikode	11
Total		899487

Source: Forest Department, Kerala.

APPENDIX 4.16

Forest Plantations in Kerala

Sl. No.	Species	1974-75 (Hectares)	1975-76 (Hectares)
(1)	(2)	(3)	(4)
1.	Teak	62044	63824
2.	Soft wood	19219	20021
3.	Hardwood	1533	1533
4.	Cashew	3335	2995
5.	Bamboo	886	930
6.	Wattle	498	532
7.	Mixed	1094	1094
8.	Rubber	1190	1190
9.	Eucalyptus	31342	32090
10.	Cardamom	186	186
11.	Kongu	20	20
12.	Balsa	56	68
13.	Mahagony	87	143
14.	Fuel	223	555
15.	Other plantations	1936	1362
Total		129048	126543

Source: Forest Department, Kerala.

APPENDIX 4.17

Item-wise Out-turn of Forest Produce in 1974-75 and 1975-76

Sl. No.	Items	Units	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)
1.	Timber-Round logs	Cum.	452224	640609
2.	Timber-Round poles	Nos.	812535	1159153
		cum.		4154
3.	Sawn and squared timber	Cum.	46	1105
4.	Firewood	Tonnes	238475	218793
5.	Charcoal	Tonnes	4640	313
6.	Cardamom	Kg.	7021	10600
7.	Honey	Kg.	29995	26625
8.	Wax	Kg.	392	760
9.	Scrivellos	Kg.	2260	..
10.	Reeds	Nos.	2677940	23625602
		Tonnes	8994	
11.	Rattans	Nos.	408471	244083
12.	Bamboos	Nos.	3811754	514963
	do.	Tonnes	3286	..
13.	Jungle wood posts	Nos.	7655	4415
14.	Sleepers B.G.	Nos.	160564	208767
	M.G.	Nos.	34817	52407
	Special	Nos.	5840	4870
	Sandalwood	Kg.	..	4242

Source: Forest Department, Kerala

APPENDIX 4.18

Abstract of Revenue for the Years 1974-75 & 1975-76
(in Rs.)

Sl. No.	Head	1974-75	1975-76
(1)	(2)	(3)	(4)
13.	Forest		
(a)	Sale of timber and other produce		
1.	Timber	157372064	183932682
2.	Firewood and charcoal	4300759	3812974
3.	Livestock	674966	483159
4.	Other items	8682932	16196798
	Total of (a)	171030721	204425613
(b)	Other receipts		
1.	Interest on arrears of forest revenue	967138	583615
2.	Wild Life Division	8315	..
3.	Receipt from wild life department amount recoverable from the Government of Tamil Nadu on account of establishment charges of Parambikulam project division	160012	..
	Amount recoverable from the Kerala State Electricity Board on account of clearance of forest lands at Pamba	1095575	..
4.	Other items	8112612	15138465
	Scheme for provision of house site and house in rural areas-free supply of timber	1042492	..
	Total of (b)	11386144	15722080
	Grand Total	182416865	220147693
	Deduct Refunds	709676	940686
	Total (Net)	181707189	219207007

Source: Forest Department, Kerala.

APPENDIX 5.1

Statistics Relating to Kerala Power System (as on 31-3-1976)

Sl. No.	Item	Unit	Achievement during		As at
			1974-75	1975-76	the end of 1975-76 (cumulative)
(1)	(2)	(3)	(4)	(5)	(6)
1.	Installed generating capacity	M.W.	..	130	751.5
2.	Maximum demand	M.W.	571	571	571
3.	Units generated	M.K.W.H.	2659	2783	..
4.	Units purchased	M.K.W.H.	1	3	..
5.	Units sold (including internal sales)	M.K.W.H.	2203	2318	..
6.	Revenue per annum	In lakhs	2657	2981	..
7.	No. of consumers of the system	No.	49358	87949	1188705
8.	Total connected load	M.W.	69	104	1405
9.	Towns and villages electrified	No.	14	20	1202
10.	Transmission and distribution lines (at kms) KV lines	220 K. V. lines	—	123	724
		110 K.V.lines	..	11	1569
		66 K.V.lines	..	119	2036
		11 K.V.lines	306	1334	11087
	L.T. Lines	L.T. Lines	886	6109	32965
11.	Per capita consumption	Units/year	80	86	86

APPENDIX 5.2

Financial Position of the Kerala State Electricity Board
(Rs. in lakhs)

Item	1973-74	1974-75	1975-76	
1.	Gross revenue	2,379.13	2,656.77	2,981.48
2.	Expenditure	2,030.77	2,374.91	2,793.32
3.	Net operating surplus	348.36	281.86	188.16
4.	Capital investment of the Board	23,448.52	25,920.05	28,184.79
5.	Total loans outstanding	21,334.99	23,197.69	25,372.65
6.	Loans raised during the year	1,761.09	2,044.47	2,642.04
7.	Loans repaid during the year	81.35	181.77	467.08
8.	Total interest payable	1,198.23	1,320.83	1,492.20
9.	Interest available for repayment during the year	413.46	492.96	568.16

Note: During the years 1973-74, 1974-75 and 1975-76 Rs. 140 lakhs, Rs. 290 lakhs and Rs. 440 lakhs have been received from the State Government towards subsidy for loss incurred on rural electrification works.

APPENDIX 5.3

Consumption of Power and Revenue collected (1975-76)

Sl.No.	Category	No. of consumers as on 31-3-1976	Connected load as on 31-3-1976 (M.W.)	Energy consumed		Revenue collected	
				Million K.W.H.	Percentage to total	Rs. lakhs	Percentage to total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Domestic lights and fans	640114	396.38	200.85	9.96	468.64	20.92
2.	Domestic heat and small power						
3.	Commercial lights and fans	189619	104.64	89.63	4.45	380.45	16.98
4.	Commercial heat and small power	12132	24.73	14.86	0.74	32.39	1.45
5.	Industrial (low and medium voltage)	25139	264.10	178.29	8.85	329.90	14.73
6.	Industrial (high voltage) + EHT	340	355.11	1282.76	63.65	692.33	30.91
7.	Irrigation	41237	160.84	120.32	5.97	137.45	6.14
8.	Public lighting (No. of street lights)	279718	13.56	34.25	1.70	121.52	5.42
9.	Waterworks and sewage pumping	401	10.50	17.58	0.87	20.36	0.91
10.	Bulk supply to licensees and others	5	64.97	76.75	3.81	56.97	2.54
	Total	1188705	1394.83	2015.29	100.00	2240.01	100.00

APPENDIX 5.4

Statement Showing Total Quantity of Power Sold and Receipts by the Sale of Electricity

Particulars of receipts	During 1973-74			During 1974-75			During 1975-76		
	Power sold (in MKWH)	Income (in Rs. lakhs)	Average revenue per KWH	Power sold (in MKWH)	Income (in Rs. lakhs)	Average revenue per KWH	Power sold (in MKWH)	Income (in Rs. lakhs)	Average revenue per KWH
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Net revenue by sale of electricity for cash and credit									
I. Domestic									
(a) Light and fans	144.41	492.23	34.08	168.46	620.93	36.84	200.85	468.64	23.33
(b) Small power									
II. Commercial									
(a) Light and fans	71.64	301.89	42.13	76.23	332.24	43.58	89.63	380.45	42.45
(b) Small power	12.76	28.40	22.25	13.76	30.52	22.18	14.86	32.39	21.80
III. Industrial									
(a) Low & medium voltage	151.64	271.86	17.93	158.07	291.92	18.46	178.29	329.90	18.50
(b) High voltage	1213.44	530.27	4.37	1204.38	567.58	4.71	1282.76	692.33	5.40
IV. Public lighting	28.88	123.18	42.65	31.19	134.69	43.18	34.25	137.45	29.09
V. Irrigation agricultural dewatering	92.12	111.87	12.14	101.89	120.12	11.79	120.32	121.52	10.10
VI. Public water works & sewage pumping	17.21	15.14	8.79	17.06	18.34	10.75	17.58	20.36	11.58
VII. Bulk supply	70.50	65.14	9.24	68.28	63.71	9.33	76.75	56.97	7.42
VIII. Total sale and receipt by sale of electricity	1802.60	1939.98	10.76	1839.32	2180.05	11.85	2015.29	2240.01	11.12

APPENDIX 6.1

District-wise and Industry-wise Distribution of Registered Working Factories and Workers in Kerala (31-12-1975)

Sl.No.	Name of Industry	Trivandrum		Quilon		Alleppey		Kottayam		Idukki		Ernakulam	
		A	B	A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Oil	21	117	19	114	50	411	17	62	9	59	44	252
2.	Tea	5	150	7	204	..	..	3	20	74	3381	..	..
3.	Cashew	21	8030	228	103272	4	5171	..	..	..	..	4	928
4.	Beedi	—	..	..	..	..	—	..	..	..	..	3	27
5.	Cotton textiles	8	1474	1	1250	4	599	1	264	1	10	5	1262
6.	Coir	5	75	1	53	176	2892	3	41	..	..	18	392
7.	Saw mills	7	46	68	439	25	142	42	295	2	29	131	1052
8.	Plywood & splints & veneers	5	190	32	1223	9	343	20	897	1	50	27	798
9.	Printing	43	1840	32	407	27	174	59	780	3	25	93	1288
10.	Rubber	4	493	18	480	3	171	111	1829	11	197	15	226
11.	Chemical & chemical products	6	823	3	95	8	340	12	504	2	49	33	5237
12.	Matches	5	86	14	180	5	56	2	37	..	..	3	104
13.	Soaps	1	5	..	..	2	21	2	5	..	..	16	1080
14.	General engineering	9	527	9	277	11	100	12	80	1	12	65	622
15.	Tiles	4	91	44	2243	4	81	14	141	..	..	28	582
16.	Automobile repairing	25	2587	13	221	13	365	43	610	6	156	51	832
17.	Other industries	83	1956	170	4935	121	3133	166	2022	12	305	476	18110
Total		252	18490	659	115393	462	13999	507	7587	122	4273	1012	32792

APPENDIX 6.1—(Contd.)

(1)	(2)	Trichur		Palghat		Malappuram		Kozhikode		Cannanore		State	
		A	B	A	B	A	B	A	B	A	B	A	B
(1)	(2)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
1.	Oil	87	632	11	61	9	60	33	206	19	128	319	2102
2.	Tea	1	60	3	127	..	..	13	790	5	136	111	4868
3.	Cashew	5	2567	..	..	..	..	2	1095	3	1402	267	122465
4.	Beedi	3	58	15	543	..	..	1	25	10	279	32	932
5.	Cotton textiles	7	2588	12	973	1	162	42	1929	333	9250	415	19761
6.	Coir	8	66	1	5	2	18	32	612	4	44	250	4198
7.	Saw mills	106	759	81	471	23	123	102	1317	68	825	655	5500
8.	Plywood & splint & veneers	28	682	47	1181	12	224	56	1322	94	2103	271	9013
9.	Printing	57	801	29	357	9	64	63	1117	41	295	456	7143
10.	Rubber	14	332	8	94	6	121	23	308	4	59	217	4310
11.	Chemical & chemical products	20	396	12	260	..	..	19	618	8	48	118	8370
12.	Matches	26	309	13	277	1	14	11	139	2	21	82	1223
13.	Soaps	5	26	..	..	..	..	12	286	2	14	40	1437
14.	General engineering	40	660	17	283	2	24	31	372	24	195	221	3152
15.	Tiles	134	4383	11	587	3	328	35	3437	8	646	285	12519
16.	Automobile repairing	34	401	34	291	7	41	90	1102	51	363	367	6969
17.	Other industries	252	5243	337	4585	37	335	401	7505	156	2098	2211	50227
Total		827	19963	631	10095	112	1516	966	22180	767	17906	6317	264194

A—Number of registered working factories.

B—Average daily employment.

APPENDIX 6.2

Government Owned Companies—Main Features and Major Products

(Rs. in lakhs)

Name of Company	Autho- rised Capital in 1975-76	Paid up capital in 1975-76	Number of emp- loyees in 1975-76	Major Products	Unit of Produc- tion	Insta- lled capacity	Production in 1974-75		Production in 1975-76		Total sale proceeds in 1975-76	Net Profit/ loss in 1975-76 (+) Profit (-) loss
							Quantity	Value	Quantity	Value		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Kerala Minerals and Metals Ltd.	500.00	83.55	433	Ilmenite	Tonnes	16000	19324	19.32	21565	21.56	45.20	(+) 12.28
				Rutile	"	2200	1449	18.83	1633	27.76		
				Zircon	"	300	731	4.75	377	3.39		
				Monozite	"	240	126	0.41	90	0.45		
				Lucoxene	"	144	128	0.44	237	2.13		
				Sillimanite	"	1200	8	0.05	225	1.53		
2. Kerala Soaps and Oils Ltd.	200.00	138.53	288	Soaps	"	4300	729	74.62	504	41.59	57.53	(-) 4.96
				Shark liver oil Products	"	300	62	15.13	53	26.54		
				Vanaspathi and refined oil	"	4500	Nil	..	Nil	..		
3. Travancore Plywood Industries	50.00	48.58	447	Plywood and allied articles	Lakh Sq. metres of 4 m.m. basis	22.8	12.39	137.05	10.72	110.43	94.59	(+) 2.11
4. Kerala Ceramics Ltd.	200.00	107.95	N.A.	Porcelain	Tonnes	450	558	27.46	602	N.A.	59.32	(-) 42.99
				China clay Spray dried Kaolin	"	5000	5641	28.44	5939	..		
					"	18000	..	..	1559	..
5. Trivandrum Rubber Works Ltd.	75.00	57.70	412	Cycle tyres	Nos.	1500000	466650	N.A.	288918	23.68	116.15	(-) 34.11
				Cycle rims	"	300000	230727	..	85816	12.86		
				Rubber hoses	Metres	Nil	28065	..	24765	0.96		
				Sheetings	Kgs.	..	408339	..	300630	13.03		
				tread rubber	"	..	295625	..	378243	36.71		
				Latex goods	"	..	N.A.	8.49	34161	6.68		
				Cycles	Nos.	..	Nil	..	372	1.56		
				Channels	Kgs.	..	N.A.	..	31100	1.79		
6. Kerala State Drugs and Phar- macructicals Ltd.	100.00	30.00	285	Tablets	Nos. Lakhs	2514.00	972.00	44.64	1940.72	58.31	154.50	(+) 2.17
				Capsules	do.	149.00	42.63	12.01	119.84	34.11		
				Liquids	Lakh litres	2.25	0.60	14.55	1.85	40.24		
				Injectibles								
				(1) Bottles	Nos. Lakhs	4.50	0.43	2.32	2.63	15.17		
				(2) Vials	do.	15.00	0.72	0.69	5.18	6.23		
				(3) Ampoules	do.	60.00	0.77	0.46	21.52	8.15		
7. Kerala Premo Pipe Factory	50.00	42.91	311	Prestressed concrete pipes			5895	67.19	2814	49.93	42.91	(-)9.94
				R. C. C. Pipes			3902	4.66	6374	8.49		
				R. C. C. Collars			1426	0.23	5437	0.77		
8. Kerala Electrical and Allied Eng- ineering Company	200.00	95.82	461	Distribution transformers	K.V.A.	120000	34916	32.24	63695	60.59	143.65	(-)44.64
				Electric motors	Nos.	500	258	..	172	3.29		
				Meter compo- nents	"	252000	260832	27.43	284035	4.90		
				Electrical wiring acces- sories	"	133000			24353			
				C.I. Specials and Pipes	Tonnes	240	187	..	138	9.17		
				Contractors/ starters	Nos.	12000	5626	9.41	3326	5.18		
				Steel Structures	Tonnes	1200	600	31.50	707	40.02		

APPENDIX 6.3

Government Majority Companies—Main Features and Major Products

(Rs. in lakhs)

Name of company	Authorised capital	Paid up capital	No. of employees	Major products	Unit of production	Installed capacity	Production in 1974-75		Production in 1975-76		Total sale proceeds in 1975-76	Net profit/loss in 1975-76 (+)profit (-)loss		
	in 1975-76	in 1975-76	in 1975-76				Quantity	Value	Quantity	Value				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
1. Transformers and Electricals Kerala Ltd.	500.00	313.89	882	Power transformers, current and potential transformers	M.V.A. Nos.	3000	1370	533.60	1359	603.76	756.52	(+)	71.96	
						1000	557	138.07	487	133.24				
2. Tranco Cable Company Ltd.	200.00	114.92	215	AAC and ACSR PVC covered and bare copper conductors Telephone cables	Tonnes Lakh crore metres Lakh KM	1500	416	81.99	577	168.63	210.75	(+)	13.81	
						109.73	11.37		7.42					
						1000	80		543					
3. Chalakudy Potteries Ltd.	10.00	6.62	168	Refractories	Tonnes	5000	2308	12.89	2200	12.00	10.01	(-)	4.29	
4. Forest Industries (Travancore) Ltd.	20.00	17.71	163	Wooden doors, windows allied articles and wooden furniture	Man hours	726000	290400	14.56	256096	32.09	58.68	(+)	4.81	
5. United Electrical Industries Ltd.*	50.00	43.90	494	K.W.H.metres	{Nos.	200000	128805	54.52	122620	64.12	103.62	(-)	13.02	
						Motor control gears	11800	5838	62.92	4469				32.43
						L.T. switch gear	600	129	4.28	81				3.26
						Magneto generator	Not fixed	1019	1.25	254				0.25
						11 K.V. switch gear	" "	" "	" "	11				2.98
						Plastic film capacitor	Million Nos.	10	" "	0.71				3.84
						Electronic items	Nos. Not fixed	" "	" "	878				0.45
6. Travancore Titanium* Products	500.00	93.24	1152	Titanium dioxide	Tonnes	24500	7611	738.26	5377	594.54	595.16	(+)	2.56	
7. Travancore Cochin Chemicals Ltd.	800.00	564.75	1069	Caustic soda Sulphate	Tonnes	66000	22574	317.16	21468	358.85	417.17	(-)	134.18	
						Sodium hydro-sulphate	3000	800	128.06	387				64.46
						Sodium sulphide	2100	521	15.11	695				21.23
						Chlorine	58080	19865	34.39	18892				43.60
8. Pallathara Bricks and tiles	100.00	17.56	103	Sand lime bricks	Nos	120 lakhs	" "	" "	50.41	6.59	6.59	(-)	2.51	

APPENDIX 6.4

Government of India Companies in Kerala—Main Features and Major Products

(Rs. in lakhs)

Name of Company	Authori- sed Capital in 1975-76	Paid up Capital in 1975-76	No. of employees in 1975-76	Major Products	Unit of Produc- tion	Installed capacity	Production in 1974-75		Production in 1975-76		Total Net Pro- fit or loss Proceeds in 1975- 76 (+) Profit (-)/Loss	
							Quantity	Value	Quantity	Value		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Modern Bakeries (India Limited)	..	..	124	Bread	Lakhs of Standard loaves	123	115.63	140.16	194.35	161.16	161.14	+16.14
2. Cochin Refineries Ltd.*	1500.00	700.00	441	Liquified pe- troleum gas Naphtha Motor spirit-83 Superior Kerosene High speed diesel Light diesel oil Furnace oil Asphalt	Tonnes "	10000 267000 184000 735000 707000 1110000 118000	3763 152045 158229 336660 667147 21081 882150 35476	32.18 462.91 944.57 2023.65 3396.00 93.00 2244.35 101.38	10020 187450 131027 275332 775227 23970 926331 1196	100.08 754.75 1050.33 2341.37 5051.85 146.41 3146.16 107.24	19047.59	(-)/196.80
3. Hindustan Machine Tools Ltd., Kalamassery	..	..	2437	Machine tools accessories Printing machines & accessories	Nos. " Not fixed	1200	503+25	449.18	938+30	662.46	777.32	(-)/67.51
4. Hindustan Insecticides Ltd.	800.00	208.47	491	Technical D.D.T. Formulated D.D.T. Technical B.H.C. Formulated B.H.C.	Tonnes " " " " " " " "	1944 2688 3000 3000	1958 3006 1693 2284	129.10 164.60 76.20 94.70	1450 2784 1752 2570	173.00 182.40 76.20 108.60	456.31	(-)/80.91
5. The Fertilizers and Chemicals Travancore Limited	10000.00	7386.19	6444	Ammonium Sulphate Ammonium Phosphate 16:20 Ammonium Phosphate 20:20 Super Phos- phate Urea Sulphur di- oxide Oleum Ammonium Chloride	Tonnes " " " " " " " " " " " " " " " "	198000 132000 49500 44000 330000 8250 6600 24750	93313 68231 23803 23450 65059 1345 2380 9661	788.26 1549.70 584.42 198.00 1175.10 93.62 19.04 129.94	125819 66866 30194 15355 146646 1060 2436 7089	1025.71 1327.29 636.05 120.39 2506.90 26.49 19.48 98.33	6528.17	(-)/1284.48
6. Hindustan Latex Limited	300.00	130.00	529	Nirodh Contraceptive condoms) High altitude balloons	Million pieces Nos.	144	85.64	103.85	125.04	N.A.	224.46	(+)/20.18
7. Indian Rare Earths Ltd.	1000.00	323.50	895	Rare Earth Chloride Trisodium Phosphate Rare Earth Fluoride Ilminite Monosite Zircon Rutile Silliminate Zirconio-pacifier Products	Tonnes " " " " " " " " " " " " " " " " " "	5000 5600 180 200000 600 10000 9000 4000 ..	2607 3155 91 156683 4167 10986 6105 335 4010	94.5 59.7 10.9 175.1 11.0 176.7 80.6 3.3 74.3	4630 5669 144 119331 50 4327 3783 969 1859	257.6 159.4 23.0 170.45 0.16 23.7 59.7 10.3 36.9	470.92	(+)/253.83

* L. T. 20 by GKD arrangements with QET COS

* Year ending 31st August 1974 and 1975 as the case may be.

APPENDIX 6.5

State-wise Investment in Central Public Sector Units
(Rs. crores)

States	Investment (gross block) as on 31-3-1974	Investment (gross block) as on 31-3-1975
(1)	(2)	(3)
Andhra Pradesh	203.0	269.0
Assam	157.2	198.5
Bihar	1468.3	1671.8
Gujarat	249.8	301.3
Haryana	10.9	19.4
Himachal Pradesh	0.6	0.9
Karnataka	160.2	186.8
Kerala	173.2	202.2
Madhya Pradesh	729.5	837.6
Maharashtra	203.9	306.4
Orissa	530.6	577.0
Punjab	42.5	77.5
Rajasthan	115.5	160.2
Tamil Nadu	365.2	384.3
Uttar Pradesh	217.5	256.5
West Bengal	650.9	785.3
Jammu & Kashmir	6.2	6.9

APPENDIX 6.6

District-wise List of 100 Mini Industrial Estates proposed for 1975-76

District	Sl. No.	Name of estates
Trivandrum	1	Uloor
	2	Varkala
	3	Anad
	4	Vellanad
	5	Andoorkonam
	6	Kadinamkulam
	7	Kattakada
	8	Chemmaruthy
	9	Marukil
	10	Uzhamalakkal
Quilon	11	Chithara
	12	Trikkovilvattom
	13	Chadayamangalam
	14	Thevalakkara
	15	Perinad
	16	Chavara
	17	Kareepra
	18	Adoor
Alleppey	19	Kadakkarpally
	20	Mararikulam South
	21	Pandalam
	22	Mararikulam North
	23	Mannamcherry
	24	Mannar
	25	Pathiyoor
	26	Nooranadu
	27	Tamarakulam
Cottayam	28	Nattakom
	29	Ayarkunnam
	30	Pampady
	31	Kumaranalloor
	32	Pripad
	33	Madapally
	34	Muthoty

District	Sl. No.	Name of estates	
Idukki	35	Karukachal	
	36	Manimala	
	37	Erattupetta	
	38	Olamattom	
	39	Kodikulam	
	40	Mannamkandam	
	41	Rajakumari	
	42	Kattappana	
	43	Udumpannoor	
	44	Manakkad	
Ernakulam	45	Vazhakulam	
	46	Rayamangalam	
	47	Piravom	
	48	Puthenvelikkara	
	49	Kalady	
	50	Elamkunnappuzha	
	51	Vengola	
	52	Sreemoolanagaram	
	53	Angamaly	
	54	Kanjoor	
	55	Thiruvamkulam	
	56	Keezhmadu	
	57	Poothrika	
	58	Kothamangalam	
	59	Edathala	
Trichur	60	Mala	
	61	Kattoor	
	62	Arimpur	
	63	Choondal	
	64	Vallachira	
	65	Ollur	
	66	Chowghat	
	67	Pappinivattom	
	68	Ottappalam	
	69	Vaniamkulam	
Palghat	70	Pattambi	
	71	Koduvayoor	
	72	Kavassery	
	73	Muthalamada	
	74	Tharoor	
	75	Vadakkancherry	
	Malappuram	76	Edavanna
		77	Oorakam
		78	Kokkur
		79	Aliparamba
80		Pulamanthole	
81		Cherukavu	
82		Kottakkal	
Kozhikode		83	Sultan Battery
		84	Kadalundy
		85	Perambra
	86	Kunnamangalam	
	87	Kunnummel	
	88	Chathamangalam	
	89	Payyoli	
	90	Perruvayal	
	91	Naduvannoor	
	92	Baluserry	
Cannanore	93	Baliapattom	
	94	Kanhangad	
	95	Taliparamba	
	96	Payyannur	
	97	Nileshwar	
	98	Chengola	
	99	Kolacherry	
	100	Trikaripur	

APPENDIX 6.7

The Number of Mini-Industrial Estates Financed by each Bank

1. State Bank of Travancore	19
2. Canara Bank	16
3. Syndicate Bank	10
4. Union Bank of India	9
5. Indian Bank	8
6. Central Bank of India	8
7. State Bank of India	8
8. Indian Overseas Bank	5
9. Bank of Baroda	6
10. South India Bank	3
11. Federal Bank	2
12. United Commercial Bank	1
13. Bank of India	1
14. Bank of Cochin	1
15. Nedungadi Bank	1
Total	98
Kerala Financial Corporation (Term Loan)	2
Grand Total	100

APPENDIX 6.8

Statement showing the Type of Assistance given by the Kerala State Industrial Development Corporation

(Rs. in lakhs)				
Type of Assistance	Year	Applied	Sanctioned	Disbursed
(1)	(2)	(3)	(4)	(5)
Share Capital	1973-74	2.75	2.75	5.13
	1974-75	29.34	29.34	7.54
	1975-76	69.63	67.13	28.86
Loans	1973-74	167.00	162.00	110.10
	1974-75	231.93	231.93	188.23
	1975-76	148.85	139.25	110.23
Guarantees	1973-74	23.39	23.39	1.12
	1974-75	10.00	10.00	2.10
	1975-76	32.35	17.35	9.27

Note: Figures shown as disbursed under guarantee represents the actual amount paid by the Corporation on behalf of defaulting companies.

APPENDIX 6.9

Industry-wise Classification of Assistance Sanctioned (effective) by the Kerala State Industrial Development Corporation (1975-76)

(Rs. in lakhs)

Sl. No.	Type of Industry	Number of Companies	Financial assistance sanctioned (cumulative)				Total
			Loan	Under writing	Direct Subscription	Guarantee	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Cotton textiles		17	907.59	38.50	94.05	367.94	808.08
2. Steel		1	88.00	..	52.50	7.35	147.85
3. Iron and steel products		4	53.83	15.00	22.66	..	91.49
4. Non ferrous metals and manufactures		2	58.00	34.00	..	..	92.00
5. Electrical equipment including electronic components		10	156.00	33.37	116.38	125.00	430.75
6. Industrial instruments		3	22.40	5.00	9.36	4.00	40.76
7. Inorganic heavy chemicals		5	178.40	7.00	58.72	3.00	247.12
8. Miscellaneous chemicals		1	..	7.00	..	..	7.00
9. Drugs and pharmaceuticals		1	30.00	..	..	..	30.00
10. Fermentation industries		1	..	..	1.25	..	1.25
11. Vegetable oils		1	3.00	..	6.50	..	11.50
12. Rubber goods		3	3.50	9.00	1.55	20.39	36.44
13. Leather and leather goods		1	25.00	..	15.60	..	40.60
14. Glue and gelatine		1	..	..	35.00	..	35.00
15. Glass		1	27.00	..	23.06	..	50.06
16. Ceramics		2	4.75	7.35	..	..	12.10
17. Timber and timber products		1	16.00	..	6.50	..	22.50
18. Fibre glass boats		1	22.50	..	..	..	22.50
19. Others		4	25.00	..	1.85	..	26.85
Total		60	1024.97	156.22	444.98	527.68	2153.85

APPENDIX 6.10

Financial Highlights of the Kerala State Industrial Development Corporation

(Rs. in lakhs)

Item		1971-72	1972-73	1973-74	1974-75	1975-76
Resources:	Share capital	415.00	415.00	464.00	464.00	464.00
	Reserve	33.35	33.00	41.87	58.96	69.47
	Borrowings	403.77	511.22	465.67	516.00	571.00
	Total	852.12	959.22	971.54	1038.96	1104.47
Financial Assistance:	Sanctioned during the year	168.94	201.25	188.14	271.27	223.73
	Gross sanctions (cumulative)	1484.09	1685.34	1873.48	2144.75	2368.48
	Assistance not availed of or cancelled (cumulative)	177.87	214.13	214.63	214.63	214.63
	Net sanctions (cumulative)	1306.22	1471.16	1658.85	1930.12	2153.85
	Net assistance cleared (cumulative)	1094.82	1399.12	1546.89	1752.66	1909.10
Earnings:	Gross income	32.06	40.07	52.53	73.65	67.75
	Net income	0.73	0.06	13.98	30.55	21.60

APPENDIX 6.11

Summary of Applications Received/Sanctioned/Disbursed etc. upto the year ending 31st March, 1976
by the Kerala Financial Corporation

(Rs. in lakhs.)

Item	During the year			Since the inception of the Corporation								
	Small Industries		Others	Small Industries		Others	Total					
	No.	Amount	No.	Amount	No.	Amount	No.	Amount				
Applications received	592	963.91	19	244.80	611	1208.71	2532	4675.90	239	1814.69	2771	6490.59
Applications sanctioned	507	767.56	23	292.36	530	1059.92	1821	2835.30	201	1397.23	2022	4232.53
Applications rejected/withdrawn	114	348.05	3	53.03	117	401.08	303	1109.05	26	220.63	329	1319.68
Applications cancelled or reduced	34	81.43	2	11.61	36	93.04	65	124.04	19	131.02	84	255.06
Applications sanctioned (effective)	473	686.13	21	280.75	494	966.88	1756	2711.26	182	1266.21	1938	3977.47
Amount disbursed	395	408.62	10	5.51	405	504.13	1305	1384.27	153	866.18	1458	2250.45
Application pending	409	820.08	11	118.30	420	938.38	409	820.08	11	118.30	420	938.38

APPENDIX 6.12

Industry-wise Disbursement of Loans and Advances of the Kerala Financial Corporation during the year
1975-76

(Rs. in lakhs)

Sl.No.	Type of Industry	Small scale		Others		Total	
		No.	Amount	No.	Amount	No.	Amount
1.	Stone quarrying, clay and sand pits	1	6.22	..	..	1	6.22
2.	Food manufacturing industries	68	67.48	..	..	68	67.48
3.	Beverage industries	..	1.25	..	..	..	1.25
4.	Manufacture of textiles	9	5.15	1	6.30	10	11.45
5.	Manufacture of foot wear and other wearing apparels	6	2.25	..	..	6	2.25
6.	Manufacture of wood, cork except furniture	3	1.16	1	23.72	4	24.88
7.	Manufacture of furniture and fixtures	15	10.69	..	..	15	10.69
8.	Manufacture of paper products	3	1.58	..	..	3	1.58
9.	Printing publishing and allied industries	13	7.32	..	..	13	7.32
10.	Manufacture of rubber products	19	22.25	..	..	19	22.25
11.	Manufacture of chemical and chemical products	19	27.51	..	..	19	27.51
12.	Manufacture of non-metallic mineral products	6	7.66	..	..	6	7.66
13.	Basic metal industries	2	6.12	..	..	2	6.12
14.	Manufacture of metallic products	6	8.03	..	..	6	8.03
15.	Manufacture of machinery except electrical machinery	13	17.91	..	..	13	17.91
16.	Manufacture of electrical machinery	5	4.59	4	56.04	9	60.63
17.	Manufacture of transport equipments	5	5.89	..	..	5	5.89
18.	Motion picture production and distribution	2	9.40	..	..	2	9.40
19.	Hotels	..	..	4	9.45	4	9.45
20.	Transport	179	150.40	..	..	179	150.40
21.	Manufacture of jewellery, pen, pencil, plastic and ice manufacturing industries	21	45.76	..	..	21	45.76
22.	Industrial Estates	..	..	..	..	..	..
	Total	395	408.62	10	95.51	405	504.13

Appendix 6.13

District-wise Sanction and Disbursement of Loans and Advances by The Kerala Financial Corporation as on 31-3-1976.

Districts	Effective Sanction						Disbursements					
	Small Scale		Others		Total		Small Scale		Others		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
A. BACKWARD REGION												
1. Trivandrum	278	285.15	24	176.97	302	462.12	215	179.77	16	73.22	231	252.99
2. Alleppey	160	339.30	22	141.52	182	480.82	112	133.35	19	130.50	131	263.85
3. Trichur	181	306.58	18	120.87	199	427.45	126	160.86	16	85.93	142	246.79
4. Malappuram	131	204.26	3	34.50	134	238.76	94	88.43	2	3.00	96	91.43
5. Cannanore	98	171.83	8	65.70	106	237.53	64	65.10	7	52.92	71	118.02
Total	848	1307.12	75	539.56	923	1846.68	611	627.51	60	345.57	671	973.08
B. PROGRESSIVE REGION												
1. Quilon	305	331.62	21	118.04	326	449.65	246	186.57	15	67.72	261	254.29
2. Kottayam	103	178.92	25	142.89	128	321.81	75	102.72	25	137.42	100	240.14
3. Idukki	3	4.29	1	5.66	4	9.95	3	4.30	..	..	3	4.30
4. Ernakulam	299	634.53	43	305.31	342	939.84	226	327.07	38	201.00	264	528.07
5. Palghat	28	56.02	3	57.45	31	113.47	19	18.55	2	27.00	21	45.55
6. Calicut	166	195.64	14	97.30	180	292.94	121	114.49	13	87.47	134	201.96
7. Mahe and Other Areas	4	3.13	..	..	4	3.13	4	3.06	..	..	4	3.06
Total	908	1404.14	107	726.65	1015	2130.79	694	656.76	93	520.61	787	1277.37
Grand total (A+B)	1756	2711.26	182	1266.21	1938	3977.47	1305	1384.27	153	866.18	1458	2250.45

APPENDIX 6.14

Progress of Kerala Financial Corporation at a Glance

(Rs. in lakhs)

Year	Loans sanctioned (cumulative)	Loans disbursed (cumulative)	Loans outstanding (cumulative)	Net profit before taxation	Net profit after taxation
(1)	(2)	(3)	(4)	(5)	(6)
1966-67	532.70	391.64	230.37	7.64	4.32
1967-68	614.05	470.09	289.51	8.66	4.93
1968-69	705.41	571.24	378.94	9.45	5.30
1969-70	812.23	687.33	488.78	8.27	5.27
1970-71	1015.15	818.75	600.85	9.95	5.56
1971-72	1415.95	987.88	764.54	11.88	6.20
1972-73	1947.55	1271.73	1024.88	13.58	6.58
1973-74	2312.81	1480.78	1200.24	18.47	9.33
1974-75	3010.59	1746.32	1451.91	43.20	28.48
1975-76	3977.47	2250.45	1931.50	55.85	31.85

APPENDIX 7.1

Number of Motor Vehicles having Valid Registrations as on 31-3-1976 in Kerala State (District-wise)

S L.No.	District	Goods vehicles	Stage carriages	Taxi cabs	Cars	Jeeps	Motor Cycles	Auto rickshaws	Tractor trailer	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.	Trivandrum	2434	3781	1231	9645	1188	6235	252	81	259	25106
2.	Quilon	1874	362	1504	4900	413	1839	60	81	77	10510
3.	Alleppey	880	341	1079	3502	184	2032	164	24	161	8967
4.	Kottayam	1070	419	1116	1911	484	1393	259	6	188	6846
5.	Idukki	404	80	293	891	694	445	8	182	153	3150
6.	Ernakulam	2471	521	1548	7029	422	4736	653	314	501	18195
7.	Trichur	1422	733	1412	2708	187	2715	292	381	227	10077
8.	Palghat	878	332	1123	2742	267	2137	477	273	1242	9471
9.	Malappuram	597	308	669	1131	130	560	66	9	329	3799
10.	Kozhikode	2543	774	556	4395	1959	2906	661	97	515	14406
11.	Cannanore	1309	617	1051	2413	492	1112	842	..	313	8149
Total		15882	8268	11582	40667	6420	26110	3734	1448	3965	118076

APPENDIX 7.2

Number of Road Accidents in which Motor Vehicles were Involved in Kerala

Districts	No. of road accidents		No. of vehicles involved		No. of persons injured		No. of persons killed	
	1974-75	1975-76	1974-75	1975-76	1974-75	1975-76	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum City	415	279	432	293	317	251	28	28
Trivandrum Rural	590	356	611	373	605	441	89	53
Quilon	424	452	461	407	539	550	109	88
Alleppey	544	357	548	557	492	491	77	71
Kottayam	479	476	544	553	553	516	61	67
Idukki	108	114	108	118	171	142	52	19
Ernakulam City	576	690	594	713	551	549	56	47
Ernakulam Rural	305	291	335	310	284	301	67	43
Trichur	453	352	483	381	494	400	119	104
Palghat	353	407	361	416	304	415	65	78
Malappuram	352	393	385	430	348	404	57	64
Kozhikode	687	609	762	670	600	536	218	134
Cannanore	397	414	404	425	474	463	69	65
Total	5683	5390	6028	5836	5732	5459	1067	861

APPENDIX 7.3

Kerala State Road Transport Corporation
Routes, Route distance, Number of Passengers

Sl. No.	Transport District	No. of schedules as on		No. of routes as on		Route Km. as on		Gross distance operated (in lakhs) during		No. of passengers carried during	
		1974-75	1975-76	1974-75	1975-76	1974-75	1975-76	1974-75	1975-76	1974-75 (lakhs)	1975-76 (lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1.	Trivandrum Central	302	285	492	404	17011	18268	282.1	283.12	811.8	779.33
2.	Neyyattinkara	..	56	..	130	..	3258	..	38.42	..	157.58
3.	Trivandrum City	207	216	526	561	6041	6412	113.8	125.46	678.6	788.30
4.	Quilon	170	112	168	114	9346	6039	166.6	135.23	467.12	437.93
5.	Kayamkulam	..	69	..	88	..	3744	..	51.29	..	164.28
6.	Kottarakkara	103	121	188	213	7407	8319	97.6	112.93	284.5	355.13
7.	Kottayam	255	274	369	403	18063	19518	237.2	265.77	604.5	737.87
8.	Alleppey	111	113	107	107	3658	3658	101.1	109.99	319.4	389.67
9.	Ernakulam	117	117	117	121	8156	8412	123.0	142.07	211.5	255.07
10.	Alwaye	130	138	121	137	4631	5079	110.4	128.69	342.8	445.55
11.	Trichur	191	203	166	178	12582	13810	180.8	215.95	313.6	451.13
12.	Kozhikode	140	162	100	112	10378	13053	147.5	185.45	183.2	220.75
13.	Workshops and Offices	..	..	..	..	..	..	3.3	4.54	..	..
Total		1726	1866	2322	2538	93770	106069	1563.3	1798.91	4216.8	5183.37

APPENDIX 7.4

Tonnage of Principal Commodities of Imports into Cochin Port during the year 1975-76

Sl. No.	Commodities	Coastal	Foreign	Total
(1)	(2)	(3)	(4)	(5)
1.	Rice and paddy	90	23228	23318
2.	Other grains including pulses and flour	192002	134172	326174
3.	Coal	105935	..	105935
4.	Cashewnuts	..	97677	97677
5.	Machinery	180	5789	5969
6.	Iron and Steel	193	9760	9953
7.	Tin Plate	37	2542	2579
8.	Motor Vehicles and parts	4	6	10
9.	Chemicals and Chemical preparations	631	479	1110
10.	Oil seeds including copra and Groundnuts	310	..	310
11.	Drugs and Medicines	2	8	10
12.	Paper, Old Newspaper & Stationery	115	10567	10682
13.	Cotton, raw and waste	1	2208	2209
14.	Oilman stores, provisions & spices	38	26360	26398
15.	Sulphur	43	83763	83806
16.	Rock phosphate	8000	78350	86350
17.	Fertilisers	..	108561	108561
18.	Salt	19244	..	19244
19.	Zinc concentrate	..	36310	36310
20.	Calcined bauxite	8108	..	8108
21.	Soda	7969	..	7969
22.	Candles, parafin wax & tallow	6	..	6
23.	P. O. L.	38389	2268347	2306736
24.	Transshipment cargo	694	3613	4307
25.	Miscellaneous	25582	21498	47080
Total		407575	2913238	3320811

APPENDIX 7.5

Tonnage of Principal Commodities of Exports from Cochin Port during the year 1975-76

Sl. No.	Commodities	Coastal	Foreign	Total
(1)	(2)	(3)	(4)	(5)
1.	Coir products	90	38865	38955
2.	Tea	28	42287	42315
3.	Rubber	6349	331	6680
4.	Coffee	..	21455	21455
5.	Coconuts	75	..	75
6.	Copra	5245	..	5245
7.	Cashew Kernels	..	60413	60413
8.	Chemicals	3514	6865	10379
9.	Cotton, raw and waste	..	1888	1888
10.	Rice and other foodgrains	3268	..	3268
11.	Pepper	..	26978	26978
12.	Ginger	..	2896	2896
13.	Cardamom	..	587	587
14.	Turmeric	..	2131	2131
15.	Coconut oil	372	..	372
16.	Cashew shell liquid	462	6876	7338
17.	Lemongrass oil	..	383	383
18.	Timber	102	21736	21838
19.	Marine products	1	44558	44559
20.	Oil cakes	..	..	..
21.	Machinery	90	5516	5606
22.	Iron and Steel	1786	1579	3365
23.	Mineral sand including granite	1363	10202	11565
24.	Cement	5737	..	5737
25.	P. O. L.	566314	..	566314
26.	Transshipment cargo	2163	2144	4307
27.	Miscellaneous	5864	36579	42443
Total		602823	334269	937092
Bunkers		40382	9904	50486
Total (including bunkers)		643405	344173	987578

APPENDIX 7.6

Number and Tonnage of Steamers and Sailing Vessels which Called at the Intermediate and Minor Ports of Kerala during 1975-76

Ports	Coastal/Foreign	Steamers		Sailing vessels		Total	
		No.	Tonnage	No.	Tonnage	No.	Tonnage
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Alleppey	C	..	..	..	..	..	..
	F	20	108397	Nil	Nil	20	108397
Calicut (including Beypore)	C	27	8523	538	60015	565	68538
	F	7	50896	568	5140	575	56036
Neendakara	C	..	..	..	..	..	..
	F	10	39809	..	..	10	39809
Trivandrum	C	..	..	..	..	..	..
	F	1	4537	..	..	1	4537
Quilon	Nil	Nil	Nil	Nil	Nil	..	Nil
Ponnani	C	..	..	23	5028	23	5028
	F	..	..	..	..	..	..
Badagara	C	Nil	..	Nil	..	Nil	Nil
	F	..	..	..	..	..	..
Tellicherry	C	..	..	10	983	10	983
	F	..	..	..	..	..	..
Azhikka	C	..	..	164	17823	164	17823
	F	..	..	..	..	..	..
Cannanore	C	..	..	6	1612	6	1612
	F	..	..	..	..	..	..
Kasaragode	C	..	..	..	..	..	..
	F	..	..	..	..	..	..
All	C	27	8523	741	85461	768	93984
	F	38	203639	568	5140	606	208779
Total		65	212162	1309	90601	1374	302763
Total for 1975-76						1374	302763
Total for 1974-75						1027	267776
Total for 1973-74						1086	450091
Total for 1972-73						1014	312603

APPENDIX 7.7

Import and Export Tonnage of Cargo Handled at the Intermediate & Minor Ports of Kerala during 1975-76

Ports	Import			Export			Total			Revenue during	
	Coastal	Foreign	Total	Coastal	Foreign	Total	Coastal	Foreign	Total	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Alleppey	..	55469	55469	..	2672	2672	..	58141	58141	142104	334247
2. Calicut (including Beypore)	4992	113848	118840	42814	12589	55403	47736	126437	174173	465200	571576
3. Trivandrum	..	6337	6337	..	..	..	..	6337	6337	10004	11580
4. Quilon	..	..	..	..	..	..	..	..	..	18443	14553
5. Neendakara	..	27017	27017	..	41941	41941	..	68958	68958	747404	525917
6. Ponnani	88	..	88	..	..	..	88	..	88	2091	204
7. Badagara	Nil.	..	..	..	..	..	..	..	..	1856	881
8. Tellicherry	105	..	105	1466	..	1466	1571	..	1571	4321	5976
9. Azhikkal	5004	..	5004	9639	..	9639	14643	..	14643	42586	63838
10. Cannanore	112	..	112	202	..	202	314	..	314	2145	5163
11. Kasaragode	..	..	..	..	..	..	..	..	..	1613	692
Total	10901	202671	212972	54121	57202	111323	64352	259678	324225	1437707	1534027

APPENDIX 9.1
Progress of Educational Institutions—High Schools

Year	Government Schools	Private Schools	Total
(1)	(2)	(3)	(4)
1961-62	276	653	929
1962-63	312	703	1015
1963-64	315	705	1020
1964-65	345	801	1146
1965-66	345	806	1151
1966-67	391	884	1275
1967-68	394	888	1292
1968-69	440	941	1381
1969-70	441	941	1382
1970-71	442	942	1384
1971-72	446	947	1393
1972-73	448	951	1399
1973-74	452	952	1404
1974-75	536	952	1488
1975-76	566	955	1521
1976-77	590	1076	1666

APPENDIX 9.2
Progress of Educational Institutions—Upper Primary Schools

Year	Government Schools	Private Schools	Total
(1)	(2)	(3)	(4)
1961-62	576	1409	1985
1962-63	711	1574	2285
1963-64	705	1580	2285
1964-65	758	1670	2428
1965-66	761	1686	2447
1966-67	778	1697	2475

(1)	(2)	(3)	(4)
1967-68	782	1697	2479
1968-69	797	1738	2535
1969-70	797	1735	2532
1970-71	809	1734	2543
1971-72	811	1740	2551
1972-73	811	1739	2550
1973-74	809	1739	2548
1974-75	857	1731	2588
1975-76	880	1726	2606
1976-77	883	1859	2742

APPENDIX 9.3
Progress of Educational Institutions—Lower Primary Schools

Year	Government Schools	Private Schools	Total
(1)	(2)	(3)	(4)
1961-62	2835	3910	6745
1962-63	2985	3919	6904
1963-64	2928	3991	6919
1964-65	2838	4032	6930
1965-66	2904	4050	6954
1966-67	2801	4072	6933
1967-68	2864	4076	6940
1968-69	2805	4112	6917
1969-70	2805	4123	6922
1970-71	2804	4091	6895
1971-72	2804	4091	6895
1972-73	2798	4089	6887
1973-74	2807	4097	6904
1974-75	2900	4075	6975
1975-76	2910	4065	6975
1976-77	2832	4109	6941

APPENDIX 9.4
Standard-wise strength of Students—1976-77

Standard	Government Schools		Private Aided Schools		Private Unaided Schools		Total		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
I	149338	139370	196078	186054	2858	2769	348274	328193	676467
II	150877	135871	187586	180560	2883	2717	341346	319148	660494
III	148041	136107	177541	166575	2715	2514	328297	305196	633493
IV	149146	135510	180281	167900	2479	2319	331906	305729	637635
Total L. P. Section	597402	546858	741486	701089	10935	10319	1349823	1258266	2608089
V	123021	104770	208878	185813	2069	2168	339968	292751	626719
VI	118654	103505	210026	186986	1975	2098	330655	292589	623244
VII	90207	77322	168733	152084	1777	1841	260717	231247	491964
Total U. P. Section	331882	285597	587637	524883	5821	6107	925340	816587	1741927
VIII	81451	66997	135245	121756	1778	2458	218474	191211	409685
IX	70948	60095	113819	106460	1616	2079	186383	168634	355017
X	47899	40387	76011	72067	1061	1538	124971	113992	238963
Total High Schools	200298	167479	325075	300283	4455	6075	529828	473837	1003665
Total	1129582	999934	1654198	1526255	21211	22501	2804991	2548690	5353681

APPENDIX 9.5

Progress of Enrolment in the Different Stage of School Education

Year	No. of students in primary stage	Index of growth	No. of students in secondary stage	Index of growth	Total	Index of growth
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1960-61	2939408	100	330893	100	3270301	100
1961-62	3041388	103	416364	126	3457752	106
1962-63	3131503	107	490564	148	3622067	111
1963-64	3263617	111	554819	168	3818436	117
1964-65	3424765	117	585336	177	4010101	123
1965-66	3552693	121	615143	186	4167836	127
1966-67	3688679	125	639959	193	4328638	132
1967-68	3784864	129	666773	202	4451637	136
1968-69	3912830	133	702384	212	4615204	141
1969-70	3989363	136	709290	214	4698653	144
1970-71	4074808	139	724724	219	4799532	147
1971-72	4229533	144	750198	227	4979731	152
1972-73	4375389	139	780886	236	5156275	158
1973-74	4404716	150	865861	262	5270577	161
1974-75	4423247	151	936042	283	5125705	157
1975-76	4377461	149	907896	274	5285357	162
1976-77	4350016	148	1003665	303	5353681	164

APPENDIX 9.6

Number of Students that Passed S. S. L. C. Examination in the State—1962-63 to 1975-76

Year	Boys	Girls	Total
(1)	(2)	(3)	(4)
1961-62 (September & March)	37713	20862	58575
1962-63	47044	24542	71586
1963-64	50924	30103	81027
1964-65	54120	36711	90831
1965-66	52589	33904	86493
1966-67	55387	41117	96504
1967-68	49281	38685	87966
1968-69	51183	36956	88139
1969-70	53721	40060	93781
1970-71	50417	38591	89008
1971-72	48186	36720	84906
1972-73	34377	27767	62144
1973-74	29617	26734	56351
1974-75	59524	57759	117283
1975-76	.. .	..	114315

APPENDIX 9.7

*Details of Teachers—Section wise (1975-76) **

Category of School	Trained teachers No.	Untrained teachers No.	Total No. of teachers
(1)	(2)	(3)	(4)
(i) High School Section	33930	431	34361
(ii) Upper Primary School	47623	4034	51657
(iii) Lower Primary Section	72903	2977	75882
(iv) Training Schools Training Section	482	3	485
GRAND TOTAL	154940	7445	162385

*Provisional

APPENDIX 9.8

Progress of Expenditure on General School Education

Year	Rs. (Crores)	Index of Increase
(1)	(2)	(3)
1961-62	16.83	100
1962-63	17.11	102
1963-64	18.46	110
1964-65	19.88	118
1965-66	25.23	150
1966-67	29.33	174
1967-68	36.66	218
1968-69	42.21	251
1969-70	49.07	292
1970-71	52.53	312
1971-72	57.64	342
1972-73	59.71	355
1973-74	67.39	400
1974-75	86.17	512
1975-76*	107.32*	638

* Revised Estimate

APPENDIX 9.9

Cost Per Pupil in the Different Stages of School Education

Year	Primary Stage (Rs.)	Secondary Stage (Rs.)
(1)	(2)	(3)
1965-66	49.30	90.37
1966-67	54.17	103.81
1967-68	65.07	130.07
1968-69	73.23	139.71
1969-70	82.38	164.08
1970-71	85.91	176.23
1971-72	89.26	187.29
1972-73	94.51	194.15
1973-74	102.24	211.70
1974-75	117.52	217.90
1975-76	170.02	361.32

APPENDIX 9.10

Number of Arts and Science Colleges and Training Colleges in Kerala—District-wise 1976-77

Sl. No.	District	No. of Arts and Science Colleges			No. of Training Colleges		
		Government	Private	Total	Government	Private	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Trivandrum	5	11	16	1	2	3
2.	Quilon	--	13	13	..	2	2
3.	Alleppey	--	14	14	--	3	3
4.	Kottayam	1	16	17	--	4	4
5.	Idukki	-- ..	2	2	--	..	..
6.	Ernakulam	2	15	17	--	2	2
7.	Trichur	..	12	15	1	..	1
8.	Palghat	..	5	8	..	1	1
9.	Malappuram	..	4	6	..	..	..
10.	Kozhikode	..	7	12	1	1	2
11.	Cannanore	4	6	10	1	..	1
Total		25	105	130	4	15	19

APPENDIX 9.11

No. of Colleges Under the Different Universities of Kerala 1975-76

Sl. No.	Type of Colleges	Kerala University			Calicut University			Cochin University*			Total		
		Govt.	Private	Total	Govt.	Private	Total	Govt.	Private	Total	Govt.	Private	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Arts & Science Colleges (1st Grade)	7	51	58	11	30	41	..	..	..	18	81	99
2.	Junior Colleges	1	20	21	6	4	10	..	..	..	7	24	31
3.	Training Colleges	1	13	14	3	2	5	..	--	..	4	15	19
4.	Engineering Colleges	1	2	3	2	1	3	--	..	..	3	3	6
5.	Medical Colleges	3	..	3	1	..	1	--	..	..	4	..	4
6.	Ayurveda Colleges	2	..	2	1	..	1	..	..	..	3	..	3
7.	Law Colleges	2	1	3	1	..	1	..	..	..	3	1	4
Total		17	87	104	25	37	62	..	..	..	42	124	166

* No affiliated Colleges under the University of Cochin.

APPENDIX 9.12

Number of Students in Arts & Science Colleges in Kerala 1975-76

Course	No. of Students		
	Boys	Girls	Total
(1)	(2)	(3)	(4)
Pre Degree	53565	47981	101546
Degree	31743	27170	59255
Post-Graduate*	3101	2669	5770
Total	88409	77820	166571

Source: Department of Collegiate Education.

* Includes the No. of post graduate students in the University Teaching Departments.

APPENDIX 9.13

Number of Students in the University Department of Kerala 1975-76

Number of Post Graduate Students

Name of Department (1)	Kerala University			Calicut University			Cochin University			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Department of Economics	38	11	49	..	..	..	} 177	5	182	271	76	347
2. do. Politics	34	12	46	..	..	..			
3. do. Psychology	15	16	31	..	..	..			
4. do. Sociology	7	32	39	..	..	..			
5. do. Library Science	10	20	30	..	..	..	..	..	..	10	20	30
6. do. English	14	33	47	10	3	13	..	..	..	24	36	60
7. do. German	1	2	3	..	..	..	..	..	..	1	2	3
8. do. Russian	23	7	30	..	..	..	..	..	..	23	7	30
9. do. Malayalam	11	19	30	11	9	20	..	..	..	22	28	50
10. do. Tamil	3	13	16	..	..	..	..	..	..	3	13	16
11. do. Linguistics	11	24	35	..	..	..	..	..	..	11	24	35
12. do. Mathematics	12	18	30	..	..	..	..	..	..	12	18	30
13. do. Statistics	9	13	22	..	..	..	..	..	..	9	13	22
14. do. Physics	..	..	..	11	2	13	44	22	66	55	24	79
15. do. Chemistry	..	..	..	13	9	22	..	..	..	13	9	22
16. do. Bio-Chemistry	6	5	11	..	..	..	} 26	12	38	68	41	109
17. do. Botany	10	8	18	7	7	14						
18. do. Zoology	..	..	..	7	9	16						
19. do. Geology	12	..	12	..	..	..			
20. do. Education	13	18	31	7	7	14	..	..	..	20	25	45
21. do. Hindi	..	..	..	16	16	32	15	43	58	31	59	90
22. do. Arabic	..	..	..	15	..	15	..	..	..	15	..	15
23. do. Commerce	..	..	..	31	..	31	..	..	..	31	..	31
(i) M. Com.	..	..	..	..	..	..	..	..	..	..	..	..
(ii) M.B.A.	..	..	..	..	..	..	..	..	..	..	..	..
24. do. History	..	..	..	7	22	29	..	..	..	7	22	29
25. do. Marine Science	..	..	..	..	..	..	..	..	..	..	..	..
26. do. Law	..	..	..	..	..	..	71	9	80	71	9	80
Total	229	251	480	135	84	219	333	91	424	697	426	1123

APPENDIX 9.14

Number of Students in the Professional Colleges under the Different Universities of Kerala 1975-76

Type of College (1)	No. of Students											
	Kerala University			Cochin University			Calicut University			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1. Training Colleges	446	997	1443	..	..	..	248	268	516	694	1265	1959
2. Engineering Colleges	1481	228	1709	..	..	..	2000	114	2114	3481	342	3823
3. Medical Colleges	1499	918	2417	..	..	..	846	434	1280	2345	1352	3697
4. Ayurveda Colleges	256	134	390	..	..	..	86	33	119	342	167	509
5. Law Colleges	1483	229	1712	..	..	..	228	52	280	1711	281	1992
Total	5165	2506	7671	..	..	..	3408	901	4309	8573	3407	11980

Source: Universities of Kerala, Calicut and Cochin.

APPENDIX 9.15

Number of Teachers in the Different Colleges in Kerala under the Different Universities 1975-76

Type of Colleges (1)	No. of Teachers											
	Kerala University			Cochin University			Calicut University			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1. Arts & Science Colleges	3591	1687	5278	..	..	..	1886	728	2614	5477	2415	7892
2. Training Colleges	69	44	113	..	..	..	49	10	59	118	54	172
3. Engineering Colleges	288	31	319	..	..	..	258	9	267	546	40	586
4. Medical Colleges	371	218	589	..	..	..	166	77	243	537	295	832
5. Ayurveda Colleges	48	25	73	..	..	..	10	10	20	58	35	93
6. Law Colleges	34	4	38	..	..	..	5	1	6	39	5	44
Total	4401	2009	6410	..	..	..	2374	835	3209	6775	2844	9619

Source: Universities of Kerala, Calicut & Cochin.

APPENDIX 9.16

Polytechnics in Kerala 1976-77

Name of District (1)	Government (2)	Private (3)	Total (4)
1. Trivandrum	2	..	2
2. Quilon	..	1	1
3. Alleppey	..	2	2
4. Kottayam	1	..	1
5. Idukki	..	..	..
6. Ernakulam	1	..	1
7. Trichur	3	1	4
8. Palghat	1	..	1
9. Malappuram	1	1	2
10. Kozhikode	2	..	2
11. Cannanore	1	1	2
KERALA	12	6	18

APPENDIX 9.17

Students and Staff Strength in Polytechnics During 1975-76

Sl. No.	District	Number of institutions (3)	Students			Teachers (7)
			Boys (4)	Girls (5)	Total (6)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	2	671	277	948	110	
2. Quilon	1	404	26	430	53	
3. Alleppey	2	832	47	879	96	
4. Kottayam	1	226	10	236	47	
5. Idukki	..	..	..	..	..

37/1010/MC.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
6. Ernakulam	1	590	66	656	73	
7. Trichur	4	1010	387	1397	188	
8. Palghat	1	56	22	78	16	
9. Malappuram	2	513	23	536	109	
10. Kozhikode	2	652	220	872	120	
11. Cannanore	2	434	11	445	74	
KERALA	18	5388	1089	6477	886	

APPENDIX 9.18

Number of Industrial Training Institutes in Kerala 1976-77

Name of District (1)	Government (2)	Private (3)	Total (4)
1. Trivandrum	3	5	8
2. Quilon	1	5	6
3. Alleppey	1	6	7
4. Kottayam	1	2	3
5. Idukki	..	1	1
6. Ernakulam	1	8	9
7. Trichur	1	1	2
8. Palghat	1	..	1
9. Malappuram	1	1	2
10. Kozhikode	1	..	1
11. Cannanore	1	..	1
KERALA	12	29	41

APPENDIX 9.19

Number of Students in Industrial Training Institutes in Kerala 1975-76 and 1976-77

Name of Districts	1975-76						1976-77					
	Government		Private		Total		Government		Private		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Trivandrum	1482	196	951	81	1833	277	1461	210	413	126	1874	336
2. Quilon	669	11	525	10	1194	21	707	22	515	8	1222	30
3. Alleppey	664	7	971	76	1635	83	648	9	1102	77	1750	86
4. Kottayam	561	16	91	..	652	16	643	22	91	..	734	22
5. Idukki	..	..	34	..	34	..	..	..	34	..	34	..
6. Ernakulam	702	..	369	..	1071	..	708	..	399	..	1107	..
7. Trichur	689	16	60	..	749	16	652	48	60	..	712	48
8. Palghat	697	7	..	..	697	7	712	28	..	..	712	28
9. Malappuram	150	5	7	..	157	5	188	8	..	..	188	8
10. Kozhikode	390	..	..	..	390	..	440	21	..	..	440	21
11. Cannanore	645	22	..	..	645	22	687	28	..	..	687	28
KERALA	6640	280	2408	167	9057	447	6846	396	2614	211	9460	607

APPENDIX 9.20

Staff strength in Industrial Training Institutes in Kerala
1975-76 and 1976-77

Name of District	Number of Teachers					
	1975-76			1976-77		
	Govern-ment	Private	Total	Govern-ment	Private	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	308	44	352	312	49	361
2. Quilon	57	39	96	64	38	102
3. Alleppey	101	84	185	108	89	197
4. Kottayam	92	10	102	98	9	107
5. Idukki	..	3	3	..	3	3
6. Ernakulam	120	39	159	111	40	151
7. Trichur	50	10	69	57	10	67
8. Palghat	95	..	95	105	..	105
9. Malappuram	39	2	41	35	..	35
10. Kozhikode	68	..	68	67	..	67
11. Cannanore	124	..	124	118	..	118
KERALA	1063	231	1294	1075	288	1313

APPENDIX 9.21

Per capita Government Expenditure on Education in Kerala

Year	Population (lakhs)	Government expenditure on education (Rs. lakhs)	Expenditure per head (Rs.)
(1)	(2)	(3)	(4)
1961-62	173.02	1854.84	10.72
1962-63	177.02	1914.14	10.81
1963-64	181.26	2019.46	11.14
1964-65	185.52	2307.80	12.44
1965-66	189.88	2837.43	14.94
1966-67	194.35	3774.60	17.88
1967-68	198.92	4147.85	20.85
1968-69	203.48	4363.98	22.92
1969-70	208.15	5428.98	26.08
1970-71	212.80	6012.37	28.25
1971-72	218.29*	6614.87	30.30
1972-73	223.92*	7104.72	31.73
1973-74	228.18*	8234.58	36.07
1974-75	232.45*	10317.00	44.38
1975-76 (R.E)	248.02	13017.00	52.48

* Estimated population

APPENDIX 9.22

Medical Institutions and Beds in Kerala as on 31-3-1976

District	Hospitals		P.H. Centres and Medical College Units		Dispensaries		M.C.H. Centres and Clinics		T.B. Centres		Grant in aid institutions		Others		Total			
	Institutions	Beds	Institutions	Beds	Institutions	Beds	Institutions	Beds	Institutions	Beds	Institutions	Beds	Institutions	Beds	Institutions	Beds		
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Trivandrum	19	4568	18	188	21	27	116	1	20	1	12	2	430	..	..	89	5334
Quilon	12	1349	20	206	22	33	120	..	..	4	86	1	120	..	..	92	1881
Alleppey	12	2844	20	209	16	31	81	..	..	2	..	2	445	..	..	83	3579
Kottayam	13	2025	15	138	12	18	103	..	..	2	48	1	176	..	..	61	2490
Idukki	2	140	4	40	12	23	81	..	..	..	..	..	..	..	..	41	261
Ernakulam	18	1992	17	190	14	35	238	..	..	4	40	1	201	..	..	89	2661
Trichur	18	2834	18	175	17	29	63	..	..	1	..	2	620	2	..	87	3692
Palghat	10	944	11	111	16	33	135	..	..	1	52	..	..	1	..	72	1242
Malappuram	8	598	12	96	17	29	50	..	..	2	52	..	..	1	..	69	796
Kozhikode	10	3194	15	90	20	28	132	..	..	1	..	..	..	..	..	74	3416
Cannanore	13	1851	13	169	34	65	196	..	..	2	..	..	..	1	..	128	2216
Total	135	22339	163	1612	201	351	1315	1	20	20	290	9	1992	5	..	885	27568	

* Started under Special Employment programme.

APPENDIX 9.23

Number of Medical Institutions and Beds under Allopathic system of Medicine in Kerala—District wise

District	Number of Institutions		Number of Beds	
	1974-75	1975-76	1974-75	1975-76
(1)	(2)	(3)	(4)	(5)
1. Trivandrum	89	89	5125	5334
2. Quilon	90	92	1737	1881
3. Alleppey	82	83	3262	3579
4. Kottayam	61	61	2031	2490
5. Idukki	41	41	261	261
6. Ernakulam	89	89	2623	2661
7. Trichur	85	87	3171	3692
8. Palghat	78	72	1242	1242
9. Malappuram	68	69	784	796
10. Kozhikode	72	74	3188	3416
11. Cannanore	126	128	1888	2216
KERALA	881	885	25312	27568

APPENDIX 9.24

District-wise Distribution of Institutions and Beds under Ayurvedic system of Medicine as on 31-3-1976

District	Hospitals		Dispensaries		Remarks
	No. of Hospitals	No. of Beds	Started under special employ-ment programme	Others Total	
(1)	(2)	(3)	(4)	(5)	(6) (7)
1. Trivandrum	8	390	12	34	46
2. Quilon	4	70	7	35	42
3. Alleppey	7	96	11	39	50
4. Kottayam	6	86	5	18	23
5. Idukki	1	10	3	15	18
6. Ernakulam	9	154	5	29	34
7. Trichur	10	164	6	55	61
8. Palghat	3	60	9	35	44
9. Malappuram	6	96	11	34	45
10. Kozhikode	5	60	11	33	44
11. Cannanore	6	96	20	55	75
KERALA	65	1282	100	382	482

APPENDIX 9.25

District-wise Distribution of Institutions and Beds under Homoeopathic system of Medicine as on 31-3-1976

District	Hospitals		Dispensaries		Total
	No. of Hospitals	No. of Beds	Started under special employment programme	Others	
(1)	(2)	(3)	(4)	(5)	(6)
1. Trivandrum	1	50	1	8	9
2. Quilon	..	..	1	8	9

	(1)	(2)	(3)	(4)	(5)	(6)
3. Alleppey		1	25	8	8	16
4. Kottayam		1	50	5	7	12
5. Idukki		4	4	8
6. Ernakulam		1	25	5	4	9
7. Trichur		1	25	2	4	6
8. Palghat		1	25	5	6	11
9. Malappuram		5	5	10
10. Kozhikode		1	25	5	4	9
11. Cannanore		1	25	8	6	14
KERALA		8	250	49	64	113

APPENDIX 9.26

Achievements under Family Planning Programme for the year 1974-75 and 1975-76

District	1974-75				1975-76			
	Vasectomy	P.P.S.	Induced abortions	I.U.C.D.	Vasectomy	P.P.S.	Induced abortions	I.U.C.D.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Trivandrum	1518	7633	4977	2559	6257	15352	8126	2551
2. Quilon	783	5712	558	3635	9046	7329	1562	3810
3. Alleppey	4337	4488	275	3311	12435	4878	1167	5253
4. Kottayam	881	4508	526	2313	7047	5638	1864	2885
5. Idukki	474	618	..	717	5402	2534	396	999
6. Ernakulam	1203	4893	1578	2024	7388	6647	2739	3381
7. Trichur	1938	5134	260	1692	11481	6283	1123	2609
8. Palghat	501	1028	94	1978	3964	1620	575	1883
9. Malappuram	833	1274	89	1600	5273	1656	270	2022
10. Kozhikode	4242	5011	948	1049	13840	6733	1681	1167
11. Cannanore	1620	3087	259	1204	12137	3682	526	1745
KERALA	18330	43386	9564	22082	94270	62352	19969	28305

APPENDIX 9.27

District-wise Progress of Works under Urban Water Supply Schemes for the year 1975-76

District	No. of schemes in operation at the end of 74-75	No. of Schemes completed during 75-76	No. of schemes under construction at the end of 75-76	No. of Towns having protected water supply at the end of 1974-75	No. of Towns having protected water supply at the end of 1975-76
(1)	(2)	(3)	(4)	(5)	(6)
1. Trivandrum	2	1	1	2	3
2. Quilon	1	..	1	1	1
3. Alleppey	2	1	3	2	3
4. Kottayam	2	..	2	2	2
5. Idukki	..	..	..	..	..
6. Ernakulam	3	2	1	3	5
7. Trichur	4	..	1	4	4
8. Palghat	1	..	1	1	1
9. Malappuram	1	..	1	1	1
10. Kozhikode	1	1	..	1	2
11. Cannanore	2	1	..	2	3
Total	19	6	11	19	25

APPENDIX 9.28

District-wise Progress of Works under Rural Water Supply Schemes for the year 1975-76

District	Number of Schemes in operation at end of 1974-75	Number of Schemes completed during 1975-76	Number of Schemes under construction at the end of 1975-76	Coverage area %
(1)	(2)	(3)	(4)	(5)
1. Trivandrum	46	8	26	16.60
2. Quilon	36	5	38	11.40
3. Alleppey	48	8	48	14.80
4. Kottayam	83	10	30	18.10
5. Idukki	..	..	..	..
6. Ernakulam	54	6	27	15.90
7. Trichur	49	9	24	15.80
8. Palghat	57	8	23	20.30
9. Malappuram	19	9	24	8.35
10. Kozhikode	39	10	17	12.20
11. Cannanore	58	17	32	11.40
Total	489	90	289	14.50

APPENDIX 9.29

Water Supply Schemes taken up with Life Insurance Corporation Funds

District	Schemes in operation at the end of 1974-75		Schemes completed during 1975-76		Schemes under construction at the end of 1975-76		Expenditure during 1975-76 (Rs. in lakhs)	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Trivandrum	2	15	1	6	1	17	84.79	6.95
2. Quilon	..	6	..	4	1	34	14.92	25.29
3. Alleppey	2	11	..	5	3	24	87.08	10.69
4. Kottayam	1	20	..	7	2	25	59.47	8.17
5. Idukki	..	..	..	..	..	..	..	..
6. Ernakulam	4	16	1	3	1	15	164.08	7.55
7. Trichur	3	13	..	7	1	12	25.10	9.29
8. Palghat	..	12	..	3	1	19	14.95	4.57
9. Malappuram	1	11	..	6	1	23	34.71	13.47
10. Kozhikode	1	6	1	5	..	15	52.19	2.14
11. Cannanore	2	21	1	9	..	26	23.67	4.63
Total	16	131	4	55	11	210	560.86	92.75

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