



GOVERNMENT OF KERALA

# ECONOMIC REVIEW KERALA-1975

Prepared by:

THE STATE PLANNING BOARD  
TRIVANDRUM

1976

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## P R E F A C E

This document prepared in the State Planning Board presents an economic review covering important trends and activities in the different sectors of the State's economy during the year 1974-75. While the period covered by the review generally relates to the financial year, in the case of agriculture the reference period is the agricultural year. Wherever official data were available for the full calendar year 1975, they have been taken into account while discussing activities of particular sectors. The chapter on 'General Review' has attempted to summarise the major trends both in the national as well as in the State economy. This chapter has also briefly dealt with the progress achieved by the State Government in the implementation of important items covered by the Twenty Point Economic Programme.

## CONTENTS

	<b>PAGE</b>
Chapter 1. General Review	1
„ 2. Population and Income	28
„ 3. Agriculture	47
„ 4. Plantations	115
„ 5. Industry and Power	123
„ 6. Transport and Communications	164
„ 7. Export Trade	173
„ 8. Prices and Cost of Living	186
„ 9. Social Services	197
„ 10. Employment and Manpower	208
Statistical Appendix	217

## CHAPTER I

### GENERAL REVIEW

#### **Trends in the National Economy:**

The general economic situation that prevailed in the country during the year 1975 reflected an easing of the stresses and strains through which the economy has been passing in recent times. For the first time after many years, the ominous shadows of inflation that had enveloped the economy seem to be fast receding. While during the first half of the year (end June 1975) the wholesale prices registered an overall increase of only 0.6 percent over the corresponding period of 1974, in the latter half of 1975, when National Emergency was declared, prices showed a declining trend. At the beginning of January 1976, the overall price level was lower by 7.7 percent as compared with the level a year ago. Following a good kharif crop, and with bright prospects of a good rabi harvest, the indications are that prices would show further decline during 1976.

1.2 While a better performance of agriculture was, no doubt, one of the factors instrumental in bringing about the containment of inflationary pressures, during the latter half of 1975. Government's monetary and fiscal policies restricting aggregate demand in the economy supported by a variety of administrative measures to curb speculative and illegal activities impinging on prices also contributed to the improvement in price situation. In the monetary area, credit expansion was held under check through restriction of commercial advance by the banking sector, and an increase in interest rate. On the fiscal side, mobilisation of resources on a substantial scale helped to siphon off excess purchasing power. This was accompanied by immobilisation of part of the additional incomes through compulsory deposits and restrictions on dividend distribution.

1.3 Though the performance on the agricultural front during 1974-75 was not particularly good, market supplies of agricultural commodities benefited from larger imports and stringent steps taken to curb hoarding of stocks. In the industrial sector, significant improvements in supply of power, coal and steel were evident as a result of increased production as well as better transport. On the export front also, there was a substantial pick-up. As a result of all these, the gap between demand and available supply of goods has narrowed down thereby imparting stability to the price structure.

1.4 However, as the Reserve Bank of India's latest economic review has pointed out, the balance achieved in regard to the supply and demand of food and other essential consumer goods has been somewhat tenuous, and as such any major shift in supply or demand could again generate pressures on prices. According to the Reserve Bank, "while it should be possible to add substantially to investment expenditures in the coming year, it is essential that such augmentation be based on a large mobilisation of domestic saving rather than on extension credit creation. Likewise, programmes for increasing the demand for capital and investment goods have to be supported by equally effective programmes for increased production and proper distribution of wage goods, particularly food articles."

1.5 The success of future policy for containment of inflationary pressures would depend on the ingenuity with which production and investment policies are fashioned and implemented. The emergency and the twenty-point economic programme have created an environment in which purposive action in this direction should be possible. A brief review of the trends in major sectors of the economy, is given in the following paragraphs.

*National Income, Savings and Investment:*

1.6 In contrast to a fall of 1.5 per cent in national income during 1972-73, according to the latest estimate of the C. S. O., national income during 1973-74 registered an increase of 5 per cent in real terms. However, during the year 1974-75, quick estimates indicate that there was a substantial fall in the growth rate which has been reckoned at a nominal 0.2 per cent. The main reason for this fall has been the unsatisfactory growth of the agricultural sector which recorded a decline of about 3 per cent. Industrial production during 1974-75, however, registered a growth rate of 2.5 per cent as against a fall of 0.2 per cent in the previous year. For the year 1975-76, thanks to the improvement in the agricultural performance, the overall growth rate of the economy is estimated at 5.5 per cent. Trends in national income in recent years are indicated in Table 1.

TABLE 1.

Year	National income		Per capita income	
	at current prices (Rs. crores)	at constant prices (Rs. crores)	at current prices (Rs.)	at constant prices (Rs.)
1972-73	39573	19077	700	338
1973-74	49148	20034	852	347
1974-75	60120	20075	1022	341

1.7 According to the provisional data compiled by the Central Statistical Organisation, domestic savings as a ratio of national income declined from 14.8 per cent in 1972-73 to 13.6 per cent in 1973-74 and to 13.2 per cent in 1974-75. While savings of the public sector and private corporate sector as a proportion of national income did show increases during 1974-75, there was a marked fall in the savings ratio of the household sector. According to the Reserve Bank of India, this decline was primarily due to the inflationary pressures which affected the saving capacity of the households. It is also worth noting that the decline in household savings took place mainly with regard to the savings in the form of currency. According to the latest 'Economic Survey' of the Government of India, the available data on financial assets would indicate some increase in the savings ratio in 1975-76.

1.8 The estimates made by the CSO also show a decline in the investment ratio from 15.5 per cent in 1972-73 to 14.4 per cent in 1973-74 and to 14.2 per cent in 1974-75. It is hoped that the recent improvements in output trends in major capital goods industries as well as in the behaviour of prices of machinery and equipments would result in a better plan implementation during 1975-76 which in turn would lead to an increase in the ratio of investment to national income.

#### *Agricultural Sector:*

1.9 The output of foodgrains of 101 million tonnes in 1974-75 was lower than the level of 104.7 million tonnes achieved during 1973-74, though the target set for 1974-75 was as high as 118 million tonnes. For 1975-76, the target of foodgrains production has been reduced to 114 million tonnes after due consideration of the level of production actually achieved and taking note of the feasibility of step up in various inputs. During 1974-75 there also took place shortfalls in respect of oilseeds, as the data given in Table 2 would show:

TABLE 1.2.

<i>Unit.</i>	1974-75		1975-76
	<i>Target</i>	<i>Estimated achievement</i>	<i>Target</i>
1. Foodgrains mill. tonnes	118.0	101.01	114.0
2. Oil Seeds	10.0	8.4	10.0
3. Sugar cane	41.0	143.1	145.0
4. Cotton mill. bales	6.8	7.1	6.8
5. Jute & Mesta	6.9	5.8	6.7

The inability of the agricultural sector to grow adequately has had a pervasive influence on the growth of the economy as a whole, in so far as it affects industrial production through availability of raw material, balance of payments through lower exports of agricultural and agro-based commodities and higher imports of foodgrains, and the price situation in general. Though the 1974-75 agricultural situation was not bad as compared with the previous years, it was not that satisfactory from the point of view of the requirements of the economy. If the price situation is to be held under control, under the increased investment programmes visualised in future, agricultural production has to show a better pick-up. It should be able to hit at least the target of 114 million tonnes.

1.10 In the matter of foodgrains distribution, during 1974, quantity distributed through the public distribution system amounted to 10.5 million tonnes which was lower than the quantity of 11.4 million tonnes distributed during 1973. In the first half of 1975, the quantum of public distribution was 5.7 million tonnes. With the rabi wheat procurement showing a better performance in that year, the overall quantum of public distribution of foodgrains during 1975 was better than that of the previous year.

#### *Industrial Sector:*

1.11 Industrial growth in 1974-75 showed a distinct improvement over the performance in the previous year. As against a decline of 0.2 per cent in 1973-75, the growth rate during 1974-75 has been estimated at around 2.5 per cent. What is noteworthy perhaps is that the revival in industrial production came about at a time when a number of problems continued to plague the industrial growth: continued constraints like power and fuel shortages, transport bottlenecks which affected normal movements of coal and end-products of various industries and shortages of indigenous raw materials. With the improvements that started taking place in the situation, industrial production in key sectors also began to register good growth as the data presented in Table 1.3 would show:



TABLE—1.3

Industry	Months covered	Unit	Output				Percentage variations	
			1973	1974	1975	(5) over (4)	(6) over (5)	(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1. Coal	January-June	Million tonnes	41.13	42.43	49.62	+3.2	+16.9	
2. Steel ingots	January May	Lakh tonnes	26.3	26.3	29.3	..	+11.4	
3. Saleable steel	"	"	19.3	21.1	22.3	+9.3	+5.7	
4. Cement	January-August	'000 tonnes	9682	8750	10308	-9.6	+17.8	
5. Vanaspathi	"	"	283	232	287	-18.0	+23.7	
6. Petroleum refinery	January-July	'000 metric tonnes	10530	11722	11642	+11.3	-0.7	
7. Cotton cloth	January-May	Million metres	1688	1651	1744	-2.2	+5.6	
8. Electricity generated	January-March	Million K. Watts	15464	16993	18195	+9.9	+7.1	

According to the Reserve Bank of India, due to the considerable improvement that took place in industrial expansion during the latter half of 1975, especially in the wake of National Emergency, the growth rate of the industrial sector may have gone up to 6 per cent over the corresponding period of the previous year. Taking the year 1975-76 as a whole growth in industrial production has been estimated around 4.5 per cent.

1.12 A worthy feature of the development in the industrial sector was the considerable improvement that took place in the functioning of public enterprises. The total net profits (before tax) of 118 public sector undertakings increased from Rs. 148.5 crores in 1973-74 to an estimated Rs. 250 crores in 1974-75. While a part of this improvement may be attributed to changes in their pricing policies, factors such as improved capacity utilisation and tight inventory control also contributed towards better financial performance.

#### *Monetary Sector:*

1.13 The most notable feature of the year 1974-75 was the deceleration in monetary expansion. Money supply with the public recorded a remarkably slower rate of expansion of 6.3 per cent (Rs. 727 crores) in 1974-75 as compared with an expansion of 14.9 per cent (Rs. 1487 crores) in 1973-74. This was the lowest rate of growth recorded since 1962. Aggregate money supply with the public at the end of June 1975 stood at Rs. 12,177 crores. The slow-down in the growth of money supply reflects the cumulative impact of credit and fiscal policies both of which were geared to demand management. The two major factors in this were the much slower rate of increase in currency with the public and the restrictions on banking sector's credit to the commercial sector. Expansion of bank credit to commercial Sector was less than half of that in the previous year. As against an increase of Rs. 2134 crores in 1973-74, the increase in 1974-75 was only Rs. 1228 crores.

1.14 Currency expansion in 1974-75 at Rs. 163 crores was barely one-fifth of the expansion of Rs. 773 crores witnessed during the previous year. This is attributed mainly to the significant drawing down of the foreign exchange assets of the banking system. A sizeable part of the foreign exchange was utilised for financing imports of food, fuel and fertilisers. The eventual sale of these commodities to the public helped in siphoning off a sizeable amount of currency in circulation. The raising of domestic retail prices during the year, of food, fertilisers, petrol and kerosene further assisted the process of withdrawal of currency. In brief, the drawing down of foreign exchange not only assisted in slowing down monetary growth in general, but more specifically, as a consequence of the use to which the bulk of foreign exchange was put, it also brought about a sharp fall in the rate of expansion of currency.

1.15 In the context of the inflationary-price trends which continued upto the end of June 1975, the credit policy pursued during 1974-75 emphasised the need to restrain growth in bank credit. Qualitatively, distinct progress was evident in the development of credit to priority sectors. The Credit Authorisation Scheme was streamlined to ensure a more judicious use of bank credit as also to oversee the end-use of such credit. The tempo of branch expansion by commercial banks was maintained during the year so that there was further improvement in the spread of banking facilities, especially in the rural and hitherto unbanked areas. As many as 1803 new branches were opened during the year as against 1593 offices opened in the previous year. The decision of the Government of India to establish a chain of regional rural banks marked another significant step towards institutional coverage of rural credit requirements.

#### *Foreign Trade Sector:*

1.16 A significant feature of the country's foreign trade in 1974-75 was a sharp rise in exports as well as imports. The extent of the rise in imports exceeded that in exports with the result that India's trade deficit deteriorated; the trade deficit during 1974-75 was of the order of Rs. 1164 crores as compared with the deficit of Rs. 432 crores during the previous year. While exports benefited from the persistence of the world commodity boom, import bill went up because of larger imports of foodgrains and petroleum, the prices of which also showed considerable increases. Commodity-wise, the rise in exports was spread over a wide front with sugar recording the largest increase as the data given in Table 1.4 would show:

TABLE 1.4

(Rs. crores)

<i>Principal Commodities</i>		1973-74	1974-75	<i>Percentage increase</i>
1.	Engineering goods	176	299	+70
2.	Iron ore	133	160	+20
3.	Chemicals	58	104	+79
4.	Jute manufactures	227	296	+30
5.	Cotton manufactures	251	233	-7
6.	Tea	145	224	+54
7.	Cashew kernels	74	118	+59
8.	Spices	55	61	+11
9.	Fish	89	66	-26
10.	Sugar	42	339	+707
11.	Tobacco	68	80	+18
12.	Clothing	100	136	+36
Total (including others)		2523	3304	+31

Total exports at Rs. 3304 crores during 1974-75 showed an overall increase of 31 percent over the previous year's level. This increase was mainly due to a rise in unit value realisation in the wake of commodity price inflation. The rate of export growth in 1974-75 though significant, did not compare favourably with the trend in growth of world trade or the overall export growth of developing countries. During 1974, the value of world exports grew by 48 per cent while the exports of developing countries (excluding oil exporting developing countries) grew by 46 per cent. Actually India's share of world exports declined from 0.52 per cent in 1973 to 0.47 per cent in 1974.

1.17 Imports amounted to Rs. 4468 crores in 1974-75 showing a steep increase of 51 per cent over the level during 1973-74. The large expansion in imports was mainly due to higher import prices of a number of commodities, particularly of foodgrains, fertilisers and mineral oils, (See Table 1.5).

TABLE 1.5

(Rs. crores)

<i>Major import items</i>	1973-74	1974-75	<i>Percentage increase</i>
1. Food (excluding Cashewnuts)	518	848	+64
2. Mineral oils including petroleum	561	1157	+106
3. Chemicals including fertilisers	357	712	+99
4. Iron and steel	249	417	+67
5. Nonferrous metals	140	178	+27
6. Machinery and transport equipment	652	670	+ 3
Total (including others)	2955	4468	+51

The regional pattern of trade during 1974-75 revealed a sizeable widening of the trade deficit with the U. S. A., the E. C. M. countries including the U. K. and the oil producing countries.

1.18 Since on the one hand it is not possible to bring about a significant reduction in the import bill in view of the dominance of foodgrains and petroleum in the country's imports, and since on the other hand, due to the recessionary trends abroad, the pick-up in exports may be somewhat slow, the need to make vigorous efforts to raise export earnings assumes a sense of urgency.

#### **Plan outlays:**

1.19 The approved annual national plan outlay for 1975-76 was of the order of Rs. 5978 crores representing an increase of 23 per

cent. over the previous year's level. The broad sectoral distribution of the outlay is as shown in Table 1.6.

TABLE 1.6

(Rs. crores)

<i>Head of Development</i>	<i>Approved Plan outlay</i>	
	1974-75	1975-76
1. Agriculture & Allied Programmes	638	691
2. Irrigation & flood control	385	468
3. Power	767	1102
4. Village and small industries	69	74
5. Industry & minerals	1093	1644
6. Transport and Communications	1027	1040
7. Social Services	699	783
8. Others	166	176
Total	4844	5978

### *Development priorities:*

1.20 There was a clear spelling out of the Government's future development priorities as embodied in the twenty-point economic programme. The three major objectives of the programme are (i) to give higher emphasis on schemes of production and distribution that would benefit the poorer sections of the society (ii) to expedite on going schemes particularly in the core sectors of irrigation and power and (iii) to remove various handicaps that have been standing in the way of speedy implementation of Government's egalitarian policies as well as economic programmes aimed at augmenting the productivity in key areas of the economy. The items in the twenty point programme are as follows:

1. Continuance of steps to bring down prices of essential commodities—streamlining production, procurement and distribution of essential commodities—strict economy in Government expenditure.
2. Implementation of agricultural land ceilings and speedier distribution of surplus land and compilation of land records.
3. Stepping up of provision of house sites for landless and weaker sections.
4. Bonded labour, wherever it exists, will be declared illegal.

5. **Plan for liquidation of rural indebtedness—Legislation for moratorium on recovery of debt from landless labourers, small farmers and artisans.**
6. **Review of laws on minimum agricultural wages.**
7. **Five million more hectares to be brought under irrigation—National programme for use of ground water.**
8. **An accelerated power programme—Super thermal stations under Central control.**
9. **New development plan for development of handloom sector.**
10. **Improvement in quality and supply of people's cloth.**
11. **Socialisation of urban and urbanisable land—Ceiling on ownership and possession of vacant land and on plinth area of new dwelling units.**
12. **Special squads for valuation of conspicuous construction and prevention of tax evasion—Summary trials and deterrent punishment of economic offenders.**
13. **Special legislation for confiscation of smuggler's properties.**
14. **Liberalisation of investment procedures—Action against misuse of import licences.**
15. **New schemes for workers' association in industry.**
16. **Introduction of National Permit Scheme for road transport.**
17. **Income-tax relief to middle class—Raising of exemption limit to Rs 8,000.**
18. **Supply of essential commodities at controlled prices to students in hostels.**
19. **Supply of books and stationery at controlled prices.**
20. **New apprenticeship scheme to enlarge employment and training, especially of weaker sections.**

### **Price Situation:**

**1.21** As mentioned at the beginning, on the whole, the price situation during 1975 remained well under control. At the beginning of the current year the general price level was lower by 7.7 per cent as compared with the level at the beginning of the year 1975. This decline in prices is in sharp contrast to the annual rate of inflation of about 26 per cent and 30 per cent respectively during the

years 1973 and 1974 respectively. The broad picture of the trends in prices in the important commodity sectors is given in Table 1.7.

TABLE 1.7

## Trends in Wholesale Price Index

(Base 1961-62=100)

Commodity Groups	Week ended		Percentage change over the year
	January 4, 1975	January 3, 1976	
I. Food articles—	368.2	320.1	(—) 13.1
Of which rice	406.5	299.6	(—) 14.3
II. Liquor and tobacco	305.0	319.1	+ 4.6
III. Fuel, power, light and lubricants	314.5	367.7	+ 16.9
IV. Industrial raw materials	317.3	258.8	(—) 18.1
V. Chemicals	309.6	325.5	+ 4.2
VI. Machinery & transport equipment	271.6	259.0	(—) 4.6
VII. Manufactures	253.7	253.3	(—) 0.2
All Commodities	315.5	291.2	(—) 7.7

The above data on the relative contribution of the various groups to the over-all decline in prices would highlight the crucial role of foodgrain prices in the Indian economy and the need to control them in any successful policy aimed at containment of inflation.

1.22 An important aspect of the price behaviour during 1975 was the stability that prevailed in the price structure during the slack season covering the months between April and September. This was in sharp contrast to rises of 15.6 per cent and 15 per cent during the comparable periods of 1974 and 1973. Among other things, the easiness of prices during last year could be attributed to the monetary and fiscal discipline and the impact of administrative measures taken to discourage hoarding and to curb black money.

## Trends in Kerala's Economy:

1.23 The overall improvement in the national economic situation has had its beneficial impact on the economy of Kerala also. As was the experience in the rest of the country, during the first half of 1975, there was some increase in consumer prices. Such increases ranged between 5 per cent and 7 per cent in the different regions within the State. However, with the declaration of Emergency in June 1975 which brought about a remarkable improvement in

national discipline, the consumer prices started registering a gradual decline. The fall in prices ranged between 9 and 13 per cent at different centres in the State.

1.24 The main reason in the price decline witnessed during last year was the significant price-falls in respect of essential commodities of consumption. The fall in prices of items such as rice, dhall, coconut etc., ranged between 16 per cent and 33 per cent during 1975 as the data presented in Table 1.8 would show:

TABLE 1.8  
Price Trends of Selected Essential Commodities

Commodity	Unit	Average price (in Rs.)		Percentage variation	
		December 1974	December 1975	December 1975 over December 1974	December 1974 over December 1973
1. Rice	kg.	3.85	3.08	-20	+53
2. Dhall	,,	4.48	3.02	-33	+74
3. Greengram	,,	2.94	2.42	-16	+23
4. Coconut oil	,,	12.57	9.28	-26	-25
5. Tamarind	,,	3.90	2.70	-31	-15
6. Coconut	100 Nos.	107.98	85.34	-21	+ 2

It will be seen from the foregoing data that in respect of important items of mass consumption, there has been a significant fall in price levels during the year under review. While the price of rice for example, increased by 53 per cent during 1974, it declined by 20 per cent during 1975. Such a salutary effect on the price situation in the State was the result of better management of supply and distribution, stringent administrative measures against hoarding and blackmarketing and imposition of a sense of discipline on the trading sector. The entry of the State Civil Supplies Corporation in a big way in the purchase of foodgrains, pulses and other essential commodities has indeed been responsible for a substantial part of the reduction in the prices of essential commodities in the market.

1.25 While from the point of view of the common man, the decline in prices was a matter of considerable relief, from the point of view of the agriculturists, the situation was somewhat adverse in as much as their parity price index (that is, the parity ratio



between prices received by the farmers and their expenditures) declined from 109 in 1974 to 95 in 1975 which only shows that the terms of trade turned unfavourable to the farmers. This was mainly because of the fall in prices of coconut. Important developments that took place in the State's economy during 1975 are summarised in the following paragraphs:

#### *Population and State Income:*

1.26 The current population of Kerala has been estimated at 232 lakhs. Over the figure of 213 lakhs as revealed by the 1971 Census, the average annual rate of growth would work out to 2.2 per cent. This represents the net effect of a higher decline in the birth rate consequent on the effective family planning drive and a stable death rate at a lower level thanks to improvements in medical and public health facilities.

1.27 The State Income of Kerala during 1973-74 has been estimated at Rs. 1764 crores in terms of current prices. This was higher by 24 per cent as compared with the State income estimated for 1972-73 (Rs. 1422 crores). Per capita income during 1972-73 and 1973-74 worked out to Rs. 647 and Rs. 785 respectively. In terms of constant prices, the State income for 1972-73 and 1973-74 have been computed as Rs. 664 crores and Rs. 676 crores respectively. A comparative picture of the sector-wise distribution of income in Kerala and India is indicated in Table 1.9.

TABLE 1.9

#### **Sector-wise Distribution of National Income 1973-74**

(Rs. crores)

<i>Sectors</i>	<i>Kerala</i>	<i>Percentage</i>	<i>India</i>	<i>Percentage</i>
1. Agriculture and allied services	1014	57.5	26186	52.8
2. Mining and manufacturing	192	10.9	9089	18.3
3. Transport, communication and trade	283	16.0	7470	15.1
4. Finance and real estates	67	3.9	1881	3.8
5. Community and personal Services	208	11.7	5002	10.0
<b>Total</b>	<b>1764</b>	<b>100</b>	<b>49628</b>	<b>100</b>

#### *Agricultural Production:*

1.28 The year 1974-75 recorded an overall increase in agricultural production which may be attributed to both increase in cultivated area as well as rise in per acre productivity. The index number

of agricultural production increased from 152.9 in 1973-74 to 156.3 in 1974-75 (over an average of the base period between 1959 and 1962). The trends in production of major crops are given in Table 1.10.

TABLE 1.10  
Production Trends of Major Crops

Crops	Production (in '000 tonnes)		Percentage change during the year
	1973-74	1974-75	
(1)	(2)	(3)	(4)
1. Rice	1257	1334	+6.1
2. Coconut*	3703	3719	+0.4
3. Arecanut*	13459	13777	+2.4
4. Tapioca	5660	5625	(-) 0.6
5. Tea	48	49	+2.1
6. Coffee	155	158	+1.9
7. Rubber	118	122	+3.4
8. Cashew	116	118	+1.7
9. Pepper	28	27	(-) 3.6

\* in million nuts.

1.29 It will be seen that rice production of 13.34 lakh tonnes registered at 6 per cent increase during 1974-75. The estimated production during 1975-76 is 14.19 lakh tonnes. The activities of the existing 289 units of Intensive Paddy Development showed considerable improvement during the year under review. As a result, the over-all per hectare productivity of rice could be increased from 1437 kilograms to 1513 kilograms. A special scheme has been prepared for the development of high lands and problem areas for paddy production. By the completion of the Thanneermukkam barrier, the first step in making the entire Kuttanad a double cropped area has been taken. The Pest and Disease Surveillance Organisation with a flying squad for plant protection activities equipped with 200 sprayers did systematic work in minimising the incidence of pest attacks during the year.

1.30 In view of the great importance of coconut to the State economy, coconut package units covering 93500 hectares have been created to provide financial assistance for pumpsets, fertiliser application and inter-cropping. On account of the commercial significance of coconut products, a Coconut Development Corporation has been set up, and it has already proposed some concrete price stabilisation measures for coconut prices.

1.31 In respect of cashew, a major effort has been under way for extending its cultivation so as to augment indigenous supply of raw nuts as a support to the cashewnut processing industry which has been hit hard due to their shortage. A scheme of 13700 hectares for cashew cultivation was launched, of which 8606 hectares could be covered during the year.

1.32 To cater to the needs of small farmers in the State, the term of the 'Small Farmers Development Agencies' in Quilon and Cannanore have been extended for another three years by the Government of India. Two new Units have also been started in Trivandrum and Trichur. The activities of these agencies cover not only the small and marginal farmers but also landless agricultural labourers. A major policy change was made during the year by integrating the small farmer and marginal farmer projects and thereby extending the operational area of the latter. In the programme content also, there has been a greater emphasis on the exploitation of the limited land resources of the small farmer.

1.33 The formation of three joint-farming co-operative societies of landless agricultural labourers in 1600 acres of Kuttanad Kayal Land has been a successful experiment. This has shown the way forward for landless agricultural labourers and small farmers with very small holdings to increase their income and yield by adoption of the latest scientific advances in methods of cultivation.

#### *Food Situation:*

1.34 The past year was characterised by an overall improvement in the situation on food front. The position regarding the availability of rice and wheat has been shown in Table 1.11.

TABLE 1.11

#### **Average Availability of Foodgrains during 1975**

	1974	1975
1. Production of rice in the State (in lakh tonnes)	12.57	13.34
2. Import of rice on State account (in lakh tonnes)	7.44	5.12
3. Import of wheat on State account (in lakh tonnes)	2.42	5.15
4. Per capita availability of rice (in grammes)	226	202
5. Per capita availability of wheat (in grammes)	29	61
6. Per capita availability of rice and wheat (in grammes)	255	263

It would be noted that reduction of rice imports was made good by the increase in wheat imports, and the overall import of foodgrains in 1975 stood more or less at the same level as in 1974. With

an improvement in internal rice production, the per capita availability of foodgrains during 1975 showed a marginal increase as compared with that of the previous year. From December 1975, the State Government was able to increase the scale of rice ration from 80 gms to 100 gms per adult per day and again to 110 gms from February, 1976. The Government also permitted people to obtain wheat at the rate of 10 kgs at a time from ration shops at controlled prices. At the end of the year 1975, all the ration cards in the State numbering about 36 lakhs were renewed and fresh ration cards issued to those eligible to get them.

1.35 The public distribution system with a network of nearly 11400 retail outlets had, on an average, handled 86300 tonnes of foodgrains every month during 1975 as against a monthly quantum of 82400 tonnes handled during the previous year.

#### *Land Reforms:*

1.36 Land reforms have been well under way in the State for the past few years. However, with the announcement of the Twenty Point Economic Programme in which land reforms have been assigned an important place, the State Government started implementing the programme with a sense of utmost urgency and expedition. The State Government took the following policy decisions fixing specific targets to be achieved within a period of one year:

- (i) All the Kudikidappu cases to be disposed of within a period of six months
- (ii) All the tenancy cases to be disposed of within a period of one year.
- (iii) All the Ceiling returns to be disposed of and the take over and distribution of excess lands completed within a period of one year.

Necessary additional staff was provided, targets and work load fixed at each stage of operation and procedures simplified. As a result of the stepped-up pace of operations the rate of monthly disposals by the Land Tribunals has gone up from around 23000 per month to over 92000 per month, while during the same period the rate of disposal of cases per month per Tribunal has increased from 161 to 368. Conferment of proprietary rights on cultivating tenants upto the end of December 1975 has been finalised in 997871 cases and conferment of purchase rights on Kudikidappukars in 351,566 cases. As much as 38354 acres of land have been declared surplus of which 22189 acres have been taken over for distribution. This is in addition to over 3.4 lakh acres of land already distributed under the Land Assignment Schemes which have so far benefited over

3.52 lakhs of landless families of which 67002 are those of Scheduled Castes and Scheduled Tribes. These measures are expected not only to hasten agrarian development but also to restructure the rural economy in favour of the vulnerable sections of the Community.

*Animal Husbandry and Dairying:*

1.37 With a view to upgrading the cattle stock in the State, massive efforts are being made by the Departments of Animal Husbandry and Dairy Development and also the Indo-Swiss Project through intensive programmes for cross breeding cows. The Animal Husbandry Department carried out 4.2 lakhs artificial inseminations through the Intensive Cattle Development Project, Key Village Centres and Veterinary Hospitals. A Jersey breeding cum cross bred farm was started in Vithura in Trivandrum District as part of the Cattle Development Programme.

1.38 In the field of dairying, a Dairy Advisory Service (the supporting scheme of the massive cross-breeding programmes) was started in 1974-75 for imparting knowledge and rendering assistance to farmers in various aspects of cattle husbandry practices, fodder production and economic milk production.

1.39 The Indo-Swiss Project set up in 1963 forged ahead with its activities in the field of livestock development and dairying with the basic objectives of evolving a new multi-purpose breed of medium type animal suitable for milk, meat and draught. The Project has also undertaken applied research for developing suitable techniques for ameliorating the natural grass land and introducing fodder species in the farming system of the State.

1.40 The infrastructural facilities set up for milk processing and marketing comprises 6 dairy plants at Trivandrum, Ernakulam, Kottayam, Palghat, Calicut and Alleppey and 12 milk chilling centres. The milk handled by the dairy plants in 1974-75 was about 108 lakh litres, the utilisation of installed capacity being 58 per cent.

*Fisheries:*

1.41 The fisheries sector supporting about 2 per cent of the total population of the State is of immense importance to the State's economy as a source of cheap protein food, and to the national economy as a valuable source of foreign exchange. With only about 7 per cent of the continental shelf of the country, Kerala is the leading maritime State in the Indian Union, presently accounting for over 35 per cent of the sea fish production and 58 per cent of the foreign exchange earnings from the country's exports of marine products.

1.42 The fishing craft in operation comprised over 2000 mechanised boats and 25000 canoes and catamarans in 1974. The mechanised boats, mainly undertaking shrimp trawling in the coastal waters, accounted for 20 per cent of the total sea fish landings. The A. R. C. sponsored fishing project at Pudiappa-Pudiyangadi near Kozhikode continued to register progress during 1975. A similar project has been started at Vypeen and another project at Anjengo is under implementation.

1.43 The Kerala Fisheries Corporation which had been running at a loss in the past has been streamlined in 1974-75 so as to make it commercially viable. Accordingly, 7 ice plants and 2 boat building yards were retransferred to the Department of Fisheries, while 3 boat yards were closed down. The reorganised Corporation has since entered deep-sea fishing activity with two Mexican trawlers already acquired. The Corporation, in future, would also be concentrating on processing and export activities.

1.44 An important development during the year under review was the preparation of an ambitious project report for the Integrated Fisheries Development Projects at Vizhinjam, Neendakara and Beypore with assistance from the World Bank. This project when approved and implemented would give a major fillip to the fisheries development activities in the State. The total estimated cost of the project is Rs. 36 crores. It envisages construction of fishing harbours, development of offshore facilities and organisation for processing and marketing of fish and fish products. The annual additional fish catch is expected at 1 lakh tonnes and the additional foreign exchange earnings may amount to about Rs. 11 crores.

#### *Forests:*

1.45 Apart from its industrial significance, forestry in the State also derives its importance from the point of view of its socio-economic impact on the weaker sections of our rural community especially the tribals. This is because the needs of the rural poor are forest based, viz., timber for housing, land for cultivation and shelter, firewood, fodder etc.

1.46 It is the declared policy of the Government to conserve and protect the forest resources in the State. The Kerala Forest Development Corporation was formed in January, 1975 with this primary objective in view. The Corporation has prepared a Project report for a massive programme for raising plantations like Eucalyptus, Wattle, Tropical Pines in an area extending over 62 thousand hectares. Development of these plantations is intended to support the wood-based industries in the State.

1.47 A Forest Research Institute has been set up in the State as an autonomous body. The Institute was formally registered in

July, 1975. It would function as a multi-disciplinary and inter-disciplinary research organisation for meeting the requirements of forestry and forest-based industries. It would also be engaged in studies and research in conservation, development and management of forests and optimum utilisation of forest produce.

#### *Industrial Development:*

1.48 The years 1973 and 1974 witnessed a phenomenal increase in the number of working factories in the State. In 1975, the situation improved further thanks to the declaration of emergency and the consequent improvement in industrial and economic discipline. Since the public sector occupies an important place in the industrial profile of Kerala, it has to play a dominant role in the development of industries in the State. The Kerala State Industrial Enterprises continued to make efforts to resuscitate the subsidiary companies through diversification and expansion programmes. Its units such as Travancore Plywood Industries, Kerala Electrical and Allied Engineering Company and the Kerala State Drugs and Pharmaceuticals have started making profits in 1974-75. The Kerala State Industrial Development Corporation continued to play the role of a premier agency in the promotion of large and medium scale industries in the State. The Corporation has till now assisted 29 companies to establish new projects and 12 companies to affect expansion/diversification/rehabilitation. It also extended financial help to the State Farming Corporation, KITCO, KSEDC, and Kerala State Industrial Enterprises. The Corporation could enhance its profits significantly during 1974-75.

1.49 Among the old group of concerns, mention may be made of the Travancore Cochin Chemicals, which has completed its fourth stage expansion. The Transformers and Electricals which is on its third stage of expansion programme and which could, for the first time, declare a modest dividend in 1974-75. The United Electrical Industries which has diversified into production of plastic film capacitors and the Traco Cable Company which has implemented a telephone cable project and which is preparing for a second cable manufacturing unit at Thiruvalla.

1.50 As far as the new projects in the Public Sector are concerned, the Kerala State Electronics Development Corporation (KSEDC), Steel Industries Kerala Limited and the Kerala Minerals and Metals Limited could make substantial progress. The KSEDC made significant strides in the implementation of its different schemes through the companies incorporated by it. A number of items have been developed and perfected by its Research and Development Division. Though the Corporation has an installed capacity to manufacture 5000 television sets per annum, due to acute shortage of picture tubes, it could produce only 1000 television sets during

1974-75. The Corporation has received licence for manufacture of 5000 electronic calculators with 60 per cent export commitment. It has also perfected the manufacture of voltage stabilisers of various capacities. The Corporation has promoted many subsidiary companies to implement its various projects. Among them mention may be made of Keltron Components Complex Ltd., for the manufacture of electrolic and monolythic capacitors, Keltron Crystals Ltd., for the manufacture of quarty crystals, Keltron Magnetics Ltd., for the assembly of certain magnetic components and Keltron Resistors Ltd., for the production of Carbon film resistors.

1.51 In the Central Sector, the Indian Telephone Industries has commissioned their project at Palghat of the Electronic Switching Factory. The Cochin Ship Building Yard has already reached the production stage. The Newsprint Project of the Hindustan Paper Corporation has been making good progress.

1.52 In view of the importance of small scale industries to the economy of the State, a massive programme of setting up 10,000 new small scale units and reviving 2500 sick units has been drawn up. The programme would involve an aggregate investment of Rs. 100 crores of which as much as 80 per cent is expected to come from the commercial banks and other financial institutions. The first batch of 11 mini estates (110 small scale units) under this programme has already been established. A second batch of 22 mini estates is nearing completion. The Governmental institution for building up the infrastructure has been strengthened by the formation of a new Corporation, the Kerala State Industries Development and Employment Promotion Corporation.

1.53 Among the traditional industries, restructuring of the coir industry has started as a phased programme. The entire scheme would require an outlay of nearly Rs. 42 crores. The scheme is now pending before the Central Government. The recent notification of Minimum Wages in coir industry has helped the coir workers to better their lot.

1.54 A comprehensive scheme for the development of handloom industry has been drawn up by a Committee in July 1975 in the wake of the announcement of the Twenty Point Economic Programme. The Centre has recently agreed to allot two projects, one for the production of handloom cloth intended for internal market and the other for the production of export varieties. The Central Government has set up a Handloom Weavers' Centre at Cannanore while the State Handloom Weavers' Apex Society has started a Weavers' Service Centre at Trivandrum. Other sectors like handicrafts, Khadi and Village Industries and beedi industry are being reorganised on co-operative lines so as to maintain employment and boost up exports wherever possible.



1.55 In the field of mineral development, the limestone deposits at Walayar have been investigated in detail by the Mineral Exploration Corporation, and resources of about twenty million tonnes have been proved to be available within a depth of 60 to 110 metres, capable of being quarried from the surface downwards. Messers Holtecs (cement consultants for the Cement Corporation of India) have been appointed as consultants for studying the feasibility of a Cement Plant of suitable size based on the Walayar deposits.

#### *Power Development:*

1.56 The inauguration of the first unit of the 3 x 130 MW stage I of the Idukki Hydro Electric Project in February, 1976 was an event of major national significance. This has signalled the beginning of commercial operation of the Idukki Project. This was made possible by the rapid pace of construction of the project during 1975 which resulted in the quick completion of all the three dams and allied works. The total installed capacity has now gone up from 621.5 MW to 751.5 MW.

1.57 During 1974-75, 14 more villages were electrified and 49358 consumers were benefited. Also 3427 street lights were installed during 1974-75. Since special emphasis had to be given in the last few years for completing the Idukki Project, sufficient funds could not be found for improving transmission and distribution facilities. This area would now get adequate emphasis in the future programme of power development in the State.

#### *Transport and Communications:*

1.58 In the field of transport, the major development that took place was the completion of the broad-gauge railway line between Quilon and Ernakulam. Work on the broad-gauge line between Quilon and Trivandrum has been making satisfactory progress. The Traffic-cum-Engineering Survey for the rail link between Trichur and Kuttipuram via Guruvayoor has been completed. The Traffic Survey for the Cochin Alleppey rail line is nearing completion.

1.59 The Shipping Corporation of Kerala which was incorporated in May, 1974, as a Public Limited Company, has purchased its first ship 'Kairali' with a capacity of 20,000 tonnes of cargo.

1.60 As at the end of December 1975, the number of post offices in Kerala stood at 4024. On an average, a post office in Kerala serves an area of 9.9 sq. kms. against the all India average of 24 sq. kms. The postal traffic in the year 1974-75 went up by 6 per cent as compared to the previous year. The telephone density of the

Kerala Tele-Communication Circle is 1.8 per sq. km., and 3.3 per 1000 persons. These ratios compare favourably with the national average.

### *Social Services:*

1.61 The social services sector continued its onward march of progress in the different fields of activity. Considerable expansion took place in educational facilities. The number of high schools increased from 1488 to 1521 and upper primary schools from 2568 to 2606 between 1974-75 and 1975-76. There were 6975 lower primary Schools during 1975-76. Out of the total number of 11102 schools, 6746 (61 per cent) are being run by private agencies. The total number of students in schools during 1974-75 was 53.59 lakhs.

1.62 In 1975-76, the number of arts and science colleges in the State stood at 130. Six new colleges were started during the year. The number of students in all the colleges including university departments was 154783 during 1974-75. In the 18 Polytechnics in the State, the total enrolment in 1974-75 was 5898 as against 4177 in the previous year. In the six Engineering Colleges in the State, total enrolment during 1974-75 was 3537 as against 3043 in 1973-74. The four Medical Colleges imparted instruction to 3303 students during 1974-75.

1.63 Medical and public health facilities recorded steady progress as a result of planned efforts. Despite a rapid increase in population, the number of beds available per lakh of population has registered an increase over the past few years. With the establishment of rural dispensaries under the "Special Employment Programme", all the panchayats in the State have now been provided with a Government institution for medical service - allopathic, ayurvedic or homoeo. Family planning programme recorded fair progress during the year. The number of vasectomy operations performed doubled during the year as compared to the previous year.

1.64 In the matter of supply of medicines to Government medical institutions at cheap rates, the Kerala Drugs and Pharmaceuticals Limited, which is a public sector venture, has been playing an important role. The Company is now manufacturing about 56 essential items of drugs for supply to Government hospitals and dispensaries.

1.65 A notable achievement in the field of medical facilities has been the progress recorded in the building up of the Shri Chitra Thirunal Medical Centre as an autonomous institute. The institute is modelled on the All India Institute of Medical Sciences

for treatment in the specialities of Neurology and Cardiology and for advanced research in the specialities. The Institute was formally inaugurated last month.

1.66 Water supply schemes both in the urban and rural areas made good headway during 1974-75. Four urban water supply schemes were completed during the year and eighteen schemes were under implementation. The number of towns having protected water supply increased to 19 at the end of 1974-75 from 15 during the previous year. Under Rural Water Supply, 59 schemes were completed and there were 266 schemes under various stages of implementation during the year.

1.67 Under the "one Lakh Housing Scheme", 42000 houses have been completed so far. Construction of 10000 houses is in progress. Considering the huge magnitude of the programme the achievement so far has indeed been commendable. During 1974-75, 12 housing schemes were under implementation by the State Housing Board of which two schemes have been completed.

1.68 The activities of the Kerala State Rural Development Board registered good progress during the year. Out of the 204 rural water supply schemes taken up by the Board in 1971, 135 schemes have so far been completed. The Board has also started remunerative development schemes comprising construction of modern market stalls, shopping centres, lodging houses, community halls etc., in the panchayat areas.

1.69 Programmes aimed at betterment of the lot of the backward classes received special impetus during the year. A separate department under the Director of Tribal Welfare was formed for the promotion of the welfare of Scheduled Tribes. The State Planning Board has prepared a detailed project report for the integrated development of the Attapadi Tribal Area. The development of the Western Ghat region in the State, which has been initiated as a Centrally Sponsored scheme, is expected to result in considerable economic benefits to the tribal population of the region. The State Government has prepared six projects covering the development sectors of agriculture, dairying and afforestation. Two dairy development schemes—one in Idukki and another in Attapady Tribal Area—have already been sanctioned and a financial allocation of Rs 38 lakhs for these projects was made during 1974-75. A project for the organisation of co-operative farms in the Attapady Tribal Area has also been approved.

#### *Export Trade:*

1.70 The overall exports from Kerala showed good pick-up during the year 1974-75. Excepting in the case of marine products,

the other traditional export items did well during the year. In regard to marine products, the quantum of exports declined from 31.6 thousand tonnes in 1973-74 to 25.3 thousand tonnes in 1974-75. In terms of value, the decline was from Rs 57.8 crores to Rs 39.58 crores.

1.71 In regard to spices, Kerala's exports during 1974-75 touched a new high. The value of exports of pepper, cardamom, ginger and tumeric amounted to Rs 42.1 crores as against the previous year's level of Rs 33.1 crores. About 70 per cent of the country's earnings from the export of spices during 1974-75 was contributed by Kerala. Another major item was cashew whose exports from Kerala amounted to Rs 92.2 crores during the year. Coir and coir products valued at Rs 17.5 crores were exported during 1974-75. Kerala's share of the exports of coffee and tea also showed improvement during the year. Of the country's total exports of tea valued at Rs 220 crores, tea valued at Rs 42 crores were exported through the Cochin Port. These major items of our exports alone amounted to as much as Rs 216 crores. While complete data regarding the exports from Kerala are not readily available, on the basis of the improvement in the trends of major export items as compared with those in the previous year, a rough estimate of the total value of exports from Kerala during 1974-75 may be placed around Rs 330 crores.

#### *Employment and Manpower:*

1.72 During the year 1975, the number of work seekers on the live register of employment exchanges increased to 6.91 lakhs from 5.88 lakhs in the previous year. While all those registered with employment exchanges are not unemployed, it has been found on the basis of a sample survey, that about 65 per cent of them were actually unemployed. Thus, about 4.5 lakhs may be taken as the number of unemployed on the live register. An analysis of the categorised data of registrations would seem to indicate that very few graduates and post-graduates were able to secure jobs through the employment exchanges since very few new opportunities arose for educated persons. The unemployment situation among technically and professionally qualified persons has not improved during the year. While in the case of medical and engineering graduates the absorption rate has been more or less equal to the new out-turn, in the case of I. T. I. Certificate holders, the situation has been unsatisfactory. At the end of December, 1975, there were over 20,000 I. T. I. Certificate holders on the live register.

1.73 In the organised sector (public and private) there has only been a marginal increase in employment. As at the end of June 1975, the number of employed persons increased only to 8.09 lakhs

from a figure of 7.90 lakhs six months before. Between the public and private sectors, while employment in the former registered an increase of 45.5 per cent during 1966-1975, that in the latter showed a marginal decline of 1.2 per cent in the corresponding period. These figures would indicate a virtually stagnant employment situation in the private sector in Kerala.

*The Twenty Point Economic Programme:*

1.74 The gist of the Twenty Point Economic Programme has already been mentioned earlier. The progress of implementation of some of the major activities envisaged under the programme such as speedy implementation of land reforms, Housing Schemes, Power Programmes and effective regulation of prices of essential commodities has also been dealt with in earlier paragraphs. In regard to the other important items in the programme, the progress of implementation by the State Government is briefly dealt with below.

1.75 In the matter of economy in Government expenditure, strict orders have been issued to enforce greater financial discipline. These include ban on sanction of new schemes and posts in the non-plan sector, restrictions in filling of vacancies wherever possible, restrictions in purchase of stores and equipment etc. In the interest of efficiency in administration, the State Government has taken a decision to retire compulsorily employees above the age of 48 years who do not evince sufficient interest and initiative in the discharge of their responsibilities and against whom charges of corruption have been levelled. Government have constituted Implementation Committees at the State and district levels to assess from time to time the progress of implementation of the Twenty Point Programme.

1.76 With the launching of the Programme, the scheme of distribution of Government poramboke land to the landless and indigent persons received added emphasis and substantial progress has been achieved in the last six months. During the latter half of 1975, on an average per month, 747 hectares of land were assigned as against a monthly average of 450 hectares in the first half of the year.

1.77 With a view to prohibiting alienation of tribal lands, the State Government enacted a new legislation banning transfer of lands held by the Scheduled Tribes to non tribals and for restoring the alienated lands to tribal people themselves. The Kerala Scheduled Tribes (Restriction on Transfer of Lands and Restoration of Alienated Lands) Act, 1975 has received the President's

assent and steps are under way for framing rules of implementation. The State Government has also chalked out a special programme for providing 2000 houses to Scheduled Caste families. A similar programme for providing 1000 houses to families belonging to Scheduled Tribes has also been launched. The system of bonded labour has now been abolished through the enactment of Bonded Labour System (Abolition) Act, 1975. The Government has also recognised the need to evolve measures to reduce the large scale unemployment and poverty among the Scheduled Tribes. Measures initiated in this direction have been (i) introduction of a liberal rural credit policy (ii) strict enforcement of Minimum Wages Act and Kerala Agricultural Workers Act, 1974 (iii) resettlement of the tribes concerned in new colonies, (iv) preferential allocation of surplus land to tribal people and (v) drawing away part of the labour force from agricultural to the secondary and tertiary sectors.

1.78 To tackle the problem of rural indebtedness and attendant evils, the Kerala Debtors (Temporary Relief) Act 1975 has been enacted to give temporary relief to indebted artisans, landless labourers and kudikidappukars. The Act provides for a moratorium for a period of one year on the defined categories of debt incurred by the above category of persons. It came into force in October 1975. Steps are also being taken to reorganise the existing service co-operatives into Farmers' Societies enlarging their scope of operation. The State Planning Board conducted a study of the problem of rural indebtedness in the State and it has since been published.

1.79 The Minimum Wages of Agricultural Workers were revised in Kerala with effect from September 1975. According to the revised rates, an ordinary adult worker will receive Rs 8 per day which is the highest obtaining in any State. The Kerala Agricultural Workers Act of 1974 is one of the most progressive pieces of legislation undertaken by any State Government so far.

1.80 Under the programme of extending irrigation facilities, Kerala had targetted for an additional area of 30330 hectares for 1975-76. Upto the end of January, 1976, 14256 hectares have been additionally brought under irrigation. The Central Government's additional financial assistance of Rs 2.10 crores would be utilised for augmenting irrigation facilities to the extent of 10,000 hectares each under the Periyar and Pamba irrigation schemes, and another 2000 hectares under the Kuttiyadi scheme.

1.81 To develop the handloom industry in the State in a big way, a Committee constituted by the State Government in July 1975 has formulated a time-bound comprehensive development programme which has since been forwarded to the Government of India. To

ensure successful implementation of the scheme steps are being taken to strengthen the administrative infrastructure.

1.82 The State Government has taken stringent steps to prevent tax evasion in the State. The administrative machinery has been sufficiently geared up for the purpose. A high level Committee has been constituted consisting of the Members of the Board of Revenue, Inspector-General of Police, Director of Vigilance Investigation and Deputy Inspector-General of Police (Vigilance) for achieving high level co-ordination in connection with a concerted drive against economic offenders. Strict instructions have been issued to the Departmental Officers to be more vigilant in their Supervision over the proper utilisation of imported and scarce raw materials obtained by the small scale industrial units.

#### *State Plan Outlays:*

1.83 During the year 1974-75, the outlay on the State Plan amounted to Rs. 82 crores. The likely expenditure during 1975-76 has been placed around Rs. 100 crores. The approved outlay for the coming year is Rs. 111.5 crores. On the basis of these figures, in the first three years of the Fifth Plan, the aggregate outlay would amount to Rs. 294 crores as against the tentative outlay of Rs. 563 crores fixed for the five-year period. The estimated expenditures during the first three years would constitute about 52 per cent of the proposed five year outlay. Thus, to achieve the plan target, the expenditures for the last two years of the Plan would have to be considerably stepped up.

1.84 In the field of resource mobilisation, the State Government's effort during 1974-75 has been commendable. As much as Rs. 10.58 crores of additional taxes were raised in that year which, over a full year, yielded Rs. 18.69 crores of additional revenue. Over the Plan period, this would fetch extra resources to the tune of Rs. 100 crores which is the five-year target fixed for the State. During 1975-76 also, the State Government went in for additional taxation to the extent of Rs. 3.32 crores. Over the Plan period, this would result in an additional revenue of Rs. 16 crores. Thus, the measures undertaken during the first two years alone would far exceed the five year plan target.

1.85 However, even with this order of resource mobilisation it has not been possible for the State Government to bridge the budgetary gap mainly because of the substantial escalations in non-development expenditures arising mainly out of the enhancement of the dearness allowance of State employees. In order, therefore, to reduce the budgetary gap and also to sustain a reasonable tempo of plan outlays it would be inescapable on the part of the State Government to go in for a substantial order of additional resource mobilisation in the coming year.

## CHAPTER II

### POPULATION AND INCOME

#### Population:

It probably must have taken several decades for Kerala to reach the first 100 lakh population at the beginning of the decade 1931-40. Barely 35 years later, around 1968, the second 100 lakh was added. As per the 1971 Census, the States population stood at 213.47 lakhs.

2.2 The studies on the growth of population have shown that the highest rate of increase has been attained during the first half of the decade 1961-70. Since 1966 there has been a perceptible downward trend in the growth rate of population and it is now falling steadily, though slowly. The average annual rate of increase during the decade 1961-70 was 2.6 per cent and in 1973 it had declined to 2.1 per cent. The estimated population for 1975 is 232.2 lakhs.

#### Birth and death rates:

2.3 The 'crude birth rate' or the number of births occurring in a year per 1000 of the average population of that year indicates the rate at which the population is being augmented by births. The 'crude death rate' or number of deaths in a year per 1000 of the average population of that year shows the rate at which the population is losing numbers by death. The birth and death rates compiled from the Sample Registration study for Kerala and for all-India are presented in Table 2.1.

TABLE 2.1

**Birth and Death Rates**

<i>Year</i>	<i>Kerala</i>		<i>India</i>	
	<i>Births per 1000 population</i>	<i>Deaths per 1000 population</i>	<i>Births per 1000 population</i>	<i>Deaths per 1000 population</i>
(1)	(2)	(3)	(4)	(5)
1968 (Rural)	34.3	10.4	39.0	16.8
1970 (Rural & Urban combined)	32.1	9.2	36.8	15.7
1971            "	31.6	9.1	36.9	14.9
1972            "	31.7	9.1	36.6	16.9
1973 (Rural)	29.9	8.7	34.6	15.5



2.4 The Sample Registration study is conducted separately in rural and urban areas of the State every year. The results of the urban study for 1973 have not yet been finalised. During the five years from 1968 to 1973 there has been a decline of 4.4 points in the birth rate as against only 1.7 points in the death rate in Kerala. At the same time the death rate has reached as low as 8.7 deaths per 1000 population. Probably the death rate is on the point of getting stabilised at this level. For All-India, though, there is a substantial reduction in birth rate over the five years, the death rate continues to be very high. The Indian Population is entering the point of demographic evolution which is termed as 'the late expanding'. This stage is characterised by rapid fall in death rates as well as birth rates. The Kerala Population has passed this stage and is poised for entering the next stage of demographic evolution which is known as 'low stationery' when the death rates will remain more or less stable and birth rates will decline rapidly. This may lead to a substantial reductions in the growth rate of population in the coming years in this State.

2.5 From Appendix 2.3 it can be seen that the vital rates in the urban areas are invariably lower than that in the rural areas of the State. In 1972 the birth and death rates in the rural areas were 32.1 and 9.4 per 1000 population respectively as against 29.5 and 7.8 per 1000 population in the urban areas. One of the factors mainly responsible for the smaller rates in the urban areas is the low female-male ratio obtaining in the urban areas. According to the 1971 census the sex ratio in the urban areas of the State was 997 females per 1000 males and the sex ratio in the rural areas was 1020 females per 1000 males. However the difference between urban and rural vital rates in Kerala is significantly less compared to the All India average as the rural-urban distinction in Kerala is visibly low compared to other parts of the country.

### *Fertility:*

2.6 Though crude birth rates reflect the fertility conditions of a population, in order to measure the level of fertility more effectively the age-specific fertility rates and total fertility rate are usually used. The age-specific fertility rate is obtained by taking the ratio of total births to total female population at the reproductive ages. The age specific fertility rates relating to 1971 and 1973 are presented in Table 2.2 for the population of Kerala.

TABLE 2.2

## Age-specific Fertility Rates for Kerala

Age group (Years)	1971	1973
15-19	48.4	48.3
20-24	210.8	204.2
25-29	223.3	218.7
30-34	173.2	152.0
35-39	116.7	98.8
40-44	42.8	38.2
45-49	6.9	6.0

2.7 In all the age groups there has been a reduction in the fertility rates in 1973. The rate rises to a maximum at ages 25-29 years and tapers off quickly with smallest rates at age 45-49 years. The trend is the same in both the years 1971 and 1973.

2.8 The total fertility rate is computed by taking the ratio of total births to total female population in the age group 15-49 years. The total fertility rates computed for 1971 and for 1973 are 4.1 and 3.8 respectively. This means that the estimated average number of children a woman will have during her entire reproductive years has come down from 4.1 in 1971 to 3.8 in 1973.

2.9 A special fertility study carried out by the Registrar General of India has brought out certain unique features in the fertility characteristics of Kerala population. If the births that occur in an year are classified according to the order of birth to the mother it is seen that 43 percent of the birth in Kerala occur to mothers having at least three children. Such births account for 48 percent of the total births for All-India. The distribution of births according to birth order is presented below for Kerala and All-India.

TABLE 2.

## Percentage Distribution of Live Births by Birth Order

Order of birth	Kerala		India	
	1969	1971-72	1969	1971-72
1st Order	22.30	21.76	20.50	19.48
2 "	18.80	18.35	18.10	17.25
3 "	15.30	17.05	16.40	15.53
4 "	13.30	13.41	14.50	13.86
5 "	10.50	9.49	11.60	11.31
6 and above	19.80	19.94	18.90	22.57
All	100.00	100.00	100.00	100.00

2.10 There has been a significant increase in the third order births in Kerala in 1971-72 compared to 1969, and at the same time some reductions have been noticed in the first second and fifth order births. For All-India the increase is noticed only in the sixth and higher order births. It may be pointed out that the full impact of the Family Planning Programmes will show itself only when the percentage of higher order births starts dwindling considerably.

*Mortality:*

2.11 There has been substantial gains in the longevity or expectation of life at birth for the population of Kerala in recent years. In the beginning of this century the expectation of life at birth was only 26 years. In 1973 an average person in Kerala had a longer life span of 61.6 years. One of the factors responsible for rapid increases in the expectation of life at birth is the efforts made to control infant mortality rates. In the earlier decades of the century the number of infants which die before reaching the first year of life varied from 240 to 250 per 1000 live births. But in recent years there has been a steep fall in the infant mortality rates and in 1973 it has reached as low a level as 52 infant deaths per 1000 live births in this State.

*Working Population:*

2.12 The total workforce in 1971 was composed of 62.2 lakhs workers of whom 47.7 lakhs were males and 14.5 lakhs were females. Thus women account for less than one fourth of the workforce. The number of persons who do not form part of the workforce (and who are therefore its dependents in one way or another) as compared with the size of the workforce itself is a useful economic and social indicator. In 1971 there were more than 2,400 dependents for every 1,000 workers in this State. Out of this about 1,500 dependents were females. For India as a whole there were slightly more than 2,000 dependents for every 1,000 workers out of which 1,300 were females. Thus the dependency ratio is high in Kerala compared to all-India. Some of the reasons for the heavy dependency ratio in this State are acute unemployment situation, relatively more percentage of people pursuing higher studies etc.

2.13 The distribution of male and female workers according to industry for 1961 and 1971 is given in Table 2.4.

TABLE 2.4

## Distribution of Workers according to Industry

No. in lakhs.

Industry	1961 Census			1971 Census		
	Males	Females	Total	Males	Females	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Cultivators	9.04	2.74	11.78	10.40	0.67	11.07
2. Agricultural Labourers	5.17	4.61	9.78	11.96	7.12	19.08
3. Livestock, Forestry, Fishing, Hunting and plantation, orchards & allied activities	3.98	0.89	4.87	3.56	0.79	4.35
4. Mining and Quarrying						
5. Manufacturing						
(a) Household Industry	1.89	3.00	4.89	1.48	1.18	2.66
(b) Other than household Industry	3.93	1.36	5.29	5.33	1.79	7.12
6. Construction	0.68	0.03	0.71	1.03	0.04	1.07
7. Trade & commerce	2.98	0.24	3.22	5.36	0.29	5.65
8. Transport storage and communication	1.46	0.07	1.53	2.27	0.15	2.42
9. Other services	10.34	3.89	14.23	5.97	2.47	8.44
<b>Total</b>	<b>39.47</b>	<b>16.83</b>	<b>56.30</b>	<b>47.64</b>	<b>14.52</b>	<b>62.16</b>

It may be seen that when the population has increased by 26 per cent during the decade 1961 to 1971 the workforce has increased by 10 per cent only. Compared to 1961, there has been a decrease in 1971 in the number of female workers in some of the categories like cultivators, household industries and other services. There were a total of 16.8 lakh female workers in 1961 and it has come down to 14.5 lakhs in 1971. In Appendix 2.4 the distribution of workers in rural and urban areas of the State is furnished. It is seen that the sex composition of the workforce varies in the rural and urban areas. In the urban areas 19 per cent of the workers are reported as females while nearly one fourth of the workers in the rural areas are female workers. Forty-seven per cent of the female workers in the urban areas are engaged in 'other services' as against only 13 per cent in the rural areas under this category. Fifty-four per cent of the women workers in the rural areas are agricultural labourers.

**Urbanisation:**

2.14 Out of the 213.47 lakh persons reported in 1971 census, 178.81 lakh persons were living in the rural areas and the remaining 34.66 lakh persons in the urban areas of the State. The urban population accordingly amounted to barely 16 per cent of the total population. At the all-India level the corresponding percentage was slightly less than 20. Table 2.5 gives the rate of change in urbanisation in Kerala and all India.

TABLE 2.5

**Rate of change in Urban Population**

	Percentage of urban Population		Percentage change per decade	Urban rural ratio		Percentage per decade
	1961	1971		1961	1971	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kerala	15.1	16.2	7.3	0.178	0.194	9.0
India	18.0	19.9	10.6	0.219	0.249	13.7

2.15 Though the change in the percentage of urban population indicates the rate of change in urbanisation the urban-rural ratio is considered as a better index to use when comparing rate of change for regions at different levels of urbanisation. Here both the indicators lead to the same conclusion that urbanisation is taking place at a more rapid rate all over India than in Kerala. The density of urban population in the State has increased from 2284 persons per sq. km. in 1961 to 2585 persons per sq. km. in 1971.

2.16 There are three Municipal Corporations out of 88 towns in the State. The population of the three cities of Trivandrum, Cochin and Calicut together accounts for 34 per cent of the total urban population. Table 2.6 gives the area and population of the three cities in the State.

TABLE 2.6

**Area and Population of Cities (1971)**

Name	Area in Sq. Km.	Total population (lakhs)	Population per Sq. Km.
(1)	(2)	(3)	(4)
1. Trivandrum Corporation	74.93	4.10	5467
2. Cochin Corporation	94.88	4.99	4628
3. Calicut Corporation	82.67	3.34	4040

*Housing:*

2.17 The rapid increases in the population during the decade 1961-70 will naturally have a direct impact on the housing conditions in the State. According to 1971 census there were 45.6 lakh census houses in 1970 out of which 33.3 lakhs were residential buildings. Table 2.7 gives the number of houses in 1960 and 1970.

TABLE 2.7  
Changes in the pattern of Census Houses—(1960-70)

(In lakhs)

	1960			1970		
	<i>Rural</i>	<i>Urban</i>	<i>Total</i>	<i>Rural</i>	<i>Urban</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. No. of census houses	28.73	5.07	33.80	38.20	7.41	45.61
2. Residential buildings	23.73	3.67	27.40	28.44	4.88	33.33
3. No. of residential houses per 1000 population	166	145	163	160	143	157

During the ten years from 1960 to 1970 the number of residential buildings had increased by 21.6 per cent whereas the population had increased by 26.0 per cent. Consequently the number of residential houses per 1,000 population has come down from 163 in 1960 to 157 in 1970. In urban areas there were only 143 houses per 1,000 population in 1970.

2.18 In the 1971 census the buildings have been classified into four categories according to the type of materials that go into the construction. In type I houses the materials used for wall and roof are grass, cadjan leaves, mud and unburnt bricks. In type II houses stone, burnt bricks and concrete are used as material for walls and grass, cadjan leaves etc., are used as roofing material. If materials used for wall are the same as in type I and tiles or concrete is used as roofing materials it is classified as type III. In type IV houses stone, burnt bricks etc., are used as wall materials and tiles, concrete, cement sheets etc., are used as roof materials. Table 2.8 gives the distribution of houses according to type.

TABLE 2.8

## Percentage distribution of Houses according to Type (1971)

Type	Rural	Urban	Total
(1)	(2)	(3)	(4)
Type I	53.58	35.10	50.86
Type II	11.64	8.26	11.14
Type III	9.55	7.14	9.19
Type IV	25.11	49.40	28.68

Considering the materials used for wall and roof it is seen that 62 per cent of the houses in the State are "Kutcha" houses (type I and type II). In urban areas 43 per cent of the houses come under type I and type II houses. The census study has also revealed that out of 34 lakh households in the State 21 per cent reside in one room houses, 31 per cent in two room tenements, another 22 per cent in three room houses and the rest in more than three room tenements. The distribution of the houses according to different types in respect of the three cities in the State are given in Table 2.9.

TABLE 2.9

## Percentage Distribution of Houses According to Type in the Corporation area

Type	Trivandrum Corporation	Cochin Corporation	Calicut Corporation
(1)	(2)	(3)	(4)
Type I	49.29	23.00	21.60
Type II	5.18	6.34	11.74
Type III	8.12	1.86	3.25
Type IV	37.38	68.70	63.17

2.19 Table 2.9 shows that nearly 55 per cent of the houses in Trivandrum city come under the category of "Kutcha" houses.

### State Income

2.20 A brief analysis of the net domestic product (NDP) at factor cost by industry of origin of Kerala vis-a-vis India as per revised estimates is presented in this section.

**Net Domestic Product in 1973-74:**

2.21 The net domestic product of Kerala at current prices for the year 1973-74, as per quick estimates, was placed at Rs. 1,764 crores, which registered an increase of 24 per cent over that of the previous year (Rs. 1,422 crores). The primary sector recorded the highest increase of 36 per cent from Rs. 746 crores in 1972-73 to Rs. 1,014 crores in 1973-74. The next highest increase of 21.8 per cent was in the Sector 'finance and real estate' followed by 15.6 per cent in the Sector 'community and personal services'. The least increase of 1.6 per cent is noticed in the secondary sector comprising manufacturing, construction, electricity, gas and water supply. The per capita income rose from Rs. 647 in 1972-73 to Rs. 785 in 1973-74 registering an increase of 21.3 per cent.

2.22 At constant prices the net domestic product of Kerala increased by only 1.8 per cent from Rs. 664 crores in 1972-73 to Rs. 676 crores in 1973-74. As against an increase of 36 per cent in the net domestic product in the primary sector at current prices the increase at constant prices was only 0.3 per cent. This shows that most part of the increase at current prices was due to the inflationary prices. The secondary sector witnessed an increase of 0.8 per cent in 1973-74 over the previous year, at constant prices. In the tertiary sector, 'community and personal services' recorded an increase of 9.4 per cent, followed by 3.7 per cent in 'finance and real estate' and 1 per cent in 'transport, communication and trade'. There was a fall in real per capita income by Rs. 2 from Rs. 302 in 1972-73 to Rs. 300 in 1973-74.

2.23 The quick estimates of net domestic product of India at current prices for 1973-74 shows a phenomenal increase of (24.4 per cent) from the previous year's figure of Rs. 39,899 crores to Rs. 49,628 crores. In the primary sector the increase during the year was 35.7 per cent and in the secondary sector 10.5 per cent. In the tertiary sector, while 'Transport, Communication and Trade' increased by about 20 per cent, the increase in the remaining sectors was a little over 12 per cent. The per capita income at current prices in 1973-74 reached the level of Rs. 850 recording an increase of 21.8 per cent over a year. This was largely due to the significant price rise, as can be seen from the fact that the per capita income at constant prices increased by only Rs. 3 from Rs. 337 in 1972-73 to Rs. 340 in 1973-74. At 1960-61 prices the net domestic product of India for 1973-74 shows an increase of 3 per cent over the year 1972-73, which had witnessed a decline of 0.8 per cent over the previous year. The recovery was mainly the result of an increase of 7.6 per cent in food grains production coupled with a rise of 8.4 per cent in the output of oil seeds. While the primary sector showed an increase of 5.9 per cent over the previous year, the secondary sector registered a decline of about 0.9 per cent.



In the tertiary sector 'transport, communication and trade' showed only a marginal increase of 0.3 per cent, while 'finance and real estate' registered an increase of 1.3 per cent and 'community and personal services' 4.8 per cent. Tables 2.10 and 2.11 give a comparative picture of the rate of growth in the net domestic product of Kerala and India, sector-wise, at current prices and at 1960-61 prices respectively.

TABLE 2.10

**Net Domestic Product at Factor Cost for the Years 1972-73 and 1973-74 at Current Prices—Kerala and India**

(Rs. Crores)

Sectors	Kerala			India		
	1972-73	1973-74	Percentage increase	1972-73	1973-74	Percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Primary Sector	746	1014	35.9	19302	26186	35.7
2. Secondary Sector	189	192	1.6	8228	9089	10.5
3. Transport, Communication & Trade	252	283	12.3	6247	7470	19.6
4. Finance and Real Estate	55	67	21.8	1677	1881	12.2
5. Community and personal Services	180	208	15.6	4445	5002	12.5
6. Total net domestic product	1422	1764	24.0	39899	49628	24.4
7. Per Capita income (Rs.)	647	785	21.3	698	850	21.8

TABLE 2.11

**Net Domestic Product at Factor Cost for the Years 1972-73 and 1973-74 at 1960-61 Prices—Kerala and India**

(Rs. Crores)

Sectors	Kerala			India		
	1972-73	1973-74	Percentage increase	1972-73	1973-74	Percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Primary Sector	323	324	0.3	8056	8529	5.9
2. Secondary Sector	125	126	0.8	4499	4460	(—)0.9
3. Transport, Communication and Trade	104	105	1.0	3205	3216	0.3
4. Finance and Real Estate	27	28	3.7	845	856	1.3
5. Community and Personal Services	85	93	9.4	2717	2849	4.8
6. Total Net Domestic Product	664	676	1.8	19322	19910	3.0
7. Per capita Income (Rs.)	302	300	—0.7	397	340	0.9

### *Economic Growth During the Fourth Plan:*

**2.24** The net domestic product of India registered an average annual increase of 2.8 per cent during the Fourth Plan period, as against the targeted rate of growth of 5.7 per cent. The growth in the economy was somewhat haphazard and irregular. While there was an increase of 5.7 per cent in the NDP at constant prices during the first year of the Fourth Plan it declined to 4.8 per cent in the second year and to 1.3 per cent in the third year. The fourth year witnessed a decline of 0.8 per cent due to a drastic decline in production in the primary sector, in which the net domestic product decreased by 7 per cent during the year. The recovery in the agricultural front in the fifth year of the Fourth Plan saved the economy from a depression and helped to register an overall increase of three per cent in the NDP. While the primary and secondary sectors showed an average annual increase of around two per cent during the Fourth Plan period, the tertiary sector registered an average annual increase of 4.2 per cent. The all-India per capita income increased by only Rs 8 during the Fourth Plan period from Rs 332 in 1968-69 to Rs 340 in 1973-74. In 1970-71, the second year of the Fourth Plan, the per capita real income was Rs 352, in 1971-72 it declined to Rs 348 and in 1972-73, it came down to Rs 337. At the end of the Fourth Plan it rose only to Rs 340, which is less than the per capita income of Rs 343 in 1969-70, the first year of the Fourth Plan.

**2.25** The average annual rate of growth of NDP in Kerala during the Fourth Plan period was 3.3 per cent, which was slightly higher than that for all India. During the first three years of the Fourth Plan period the rate of growth in Kerala was slightly higher than four per cent. In the fourth year it was only 2.2 per cent and in the last year it declined further to 1.7 per cent due to stagnation in production in the primary and secondary sectors during the year. During the Fourth Plan period the average annual rate of growth in the primary sector in Kerala was 2.3 per cent, that in the secondary sector 4.9 per cent and in the tertiary sector 3.9 per cent. The per capita income at constant prices in Kerala increased by Rs 14 during the Fourth Plan period from Rs 286 in 1968-69 to Rs 300 in 1973-74 though in the previous two years it was Rs 303. The per capita income difference of all India and Kerala which stood at Rs 46 during the year immediately prior to the beginning of the Fourth Plan has been reduced to Rs 40 during the last year of the Fourth Plan.

**2.26** In Tables 2.12 and 2.13 the year-wise and average rates of growth of net domestic product and of the different sectors are given. The rates of growth at current prices are significantly higher than those at constant prices which shows the spectacular price rise under all sectors during the Fourth Plan period.

TABLE 2.12

**Rate of Growth of Net Domestic Product at Factor Cost during Fourth Plan Period—  
India and Kerala (At current prices)**

(Percentages)

Sl. No.	Sector	India					Kerala					Average for five years Compound		
		I year	II year	III year	IV year	V year	I year	II year	III year	IV year	V year			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1	Primary Sector	10.0	7.3	3.0	6.6	35.7	11.9	11.8	12.2	(-)	7.9	20.2	36.1	13.6
2	Secondary Sector	16.5	9.1	7.7	9.4	10.5	10.6	10.5	1.6	9.0	6.1	1.6	5.7	5.7
3	Tertiary Sector	8.3	9.4	8.7	9.9	16.0	10.4	12.4	12.2	9.6	12.9	14.6	12.9	12.9
4	Net Domestic Product	10.7	8.3	5.6	8.2	24.4	11.2	11.8	10.7	(-)	0.0	15.6	24.1	12.2
5	Per Capita Income	8.4	6.0	3.3	5.6	21.8	8.8	9.2	8.1	-2.4	13.1	21.3	9.6	9.6

TABLE—2.13

**Rate of Growth of Net Domestic Product at Factor Cost during the Fourth Plan Period—  
India and Kerala (At 1960-61 prices)**

Sl. No.	Sector	India					Kerala					Average for five years (compound)	
		I year	II year	III year	IV year	V year	Average for 5 years (compound)	I year	II year	III year	IV year		V year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Primary Sector	6.1	7.5	(—)1.7	(—)6.9	5.9	2.0	4.1	5.4	1.3	0.7	0.2	2.3
2	Secondary Sector	5.3	0.5	1.7	4.0	(—)0.9	2.1	7.6	(—)0.5	12.4	4.7	0.7	4.9
3	Tertiary Sector	5.3	4.2	5.4	4.0	2.3	4.2	2.3	5.5	4.3	3.1	4.5	3.9
4	Net Domestic Product	5.7	4.8	1.3	(—)0.8	3.0	2.8	4.2	4.4	4.2	2.2	1.7	3.3
5	Per Capita Income	3.3	2.6	(—)1.1	(—)3.2	0.9	0.5	1.7	2.1	1.7	0.0	—0.7	1.0

## Growth of Domestic Product

### Since the Beginning of the Sixties:

2.27 The index of net domestic product of India at constant prices (1960-61 = 100) is 149 in 1973-74 and that for Kerala 156. The corresponding indices for India and Kerala at current prices are 372 and 408 respectively. The indices for all years from 1960-61 to 1973-74 for India and Kerala, both at current and constant prices are presented in Table 2.14. During the years 1965-66 and 1966-67 the index of all-India net domestic product declined due unprecedented drought. In the case of Kerala though there was no decline, the growth during the years was not significant.

2.28 The average (compound) annual rates of growth in the net domestic product of India and Kerala during the thirteen years from 1960-61 to 1973-74, both at current and constant prices, sector-wise, are given in Table 2.15. Both at current and constant prices the average annual rates of growth in the net domestic product of Kerala are slightly higher than those for all India. While the net domestic product of Kerala at constant prices increased at an annual average rate of 3.5 percent, the all-India annual average during the period was only 3.1 percent. At constant prices the average annual rates of growth in the primary and secondary sectors in Kerala were higher than those for all-India, the tertiary sector, however, witnessed more or less the same rate of growth for Kerala as well as all India. At current prices, while the primary and tertiary sectors of Kerala witnessed higher rates of growth than those for all India, the secondary sector registered a lower rate of growth.

2.29 The average annual rates of growth in the per capita income at constant prices during these years was only around one per cent for Kerala as well as all India.

TABLE 2.14  
Indices of Net Domestic Product—Kerala and India

Year	(1960-61 = 100)			
	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

TABLE—2.14 (Contd)

(1)	(2)	(3)	(4)	(5)
1963-64	120	128	107	112
1964-65	141	151	112	120
1965-66	164	156	113	114
1966-67	177	180	119	116
1967-68	213	213	127	126
1968-69	230	218	133	130
1969-70	257	242	138	137
1970-71	285	262	144	144
1971-72	284	277	150	146
1972-73	329	299	154	145
1973-74	408	372	156	149

TABLE—2.15

**Average Annual Rate of Growth (Compound) in the Net Domestic Product for 13 years from 1960-61 to 1973-74 India and Kerala**

(Percentages)

Sector	At current prices		At 1960-61 prices	
	India	Kerala	India	Kerala
(1)	(2)	(3)	(4)	(5)
Primary Sector	10.7	11.7	1.6	2.4
Secondary Sector	10.3	8.6	4.4	5.1
Tertiary Sector	10.7	12.2	4.7	4.7
Net Domestic Product	10.6	11.4	3.1	5.5
Per Capita Income	8.2	8.9	0.8	1.1

### Sectoral Contributions:

2.30 The primary sector constitutes the major share in the domestic product of Kerala as well as India. In 1960-61, 56 percent of the net domestic product of Kerala and 52.2 percent of the net domestic product of India were accounted for by this sector. At constant prices the share of the primary sector has dwindled, while the shares of the secondary and tertiary sectors have increased. In Kerala, during the thirteen years from 1960-61 to 1973-74, the share of the primary sector has decreased by 8.1 per cent from 56.0 per cent to 47.9 per cent. The increase during the period in the share of the secondary sector was 3.5 per cent and that in the tertiary sector 4.6 per cent. In the case of all-India, while the share

of the primary sector dwindled by 9.4 percent those of the secondary and tertiary sectors increased by 3.3 percent and 6.1 percent respectively. In both cases the increase in the share of the tertiary sector was more than that in the secondary sector.

2.31 At current prices the share of the primary sector in the net domestic product of Kerala and India increased marginally. In Kerala the share of the secondary sector at current prices has decreased by 4.3 percent from 15.2 percent in 1960-61 to 10.9 percent in 1973-74. During the period the share of the tertiary sector increased by 2.8 percent. In the case of all India, at current prices change in the shares of the secondary and tertiary sectors is less than one percent.

TABLE 2.16.

**Percentage Distribution of Net Domestic Product at Current Prices**

<i>Sector</i>	<i>Kerala</i>			<i>India</i>		
	1960-61	1968-69	1973-74	1960-61	1968-69	1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Primary Sector	56.0	54.0	57.5	52.2	51.1	52.8
Secondary Sector	15.2	14.6	10.9	19.1	18.9	18.3
Tertiary Sector	28.8	31.4	31.6	28.7	30.0	28.9

TABLE 2.17

**Percentage Distribution of Net Domestic Product at Constant (1960-61) Prices—Kerala and India**

<i>Sector</i>	<i>Kerala</i>			<i>India</i>		
	1960-61	1968-69	1973-74	1960-61	1968-69	1973-74
Primary Sector	56.0	50.2	47.9	52.2	44.4	42.8
Secondary Sector	15.2	17.3	18.7	19.1	23.2	22.4
Tertiary Sector	28.8	32.5	33.4	28.7	32.4	34.8

### Per Capita Income.

2.32 The all-India per Capita income at current prices in 1973-74 was estimated to be Rs 850 and that for Kerala during the year Rs 785, the difference being Rs 65. The per capita income difference of all-India and Kerala during 1960-61 was only Rs 47, the all-India per capita income during the year being 306 and for Kerala Rs 259. At constant (1960-61) prices the per capita income difference has dwindled from Rs 47 in 1960-61 to Rs 40 in 1973-74, the per capita income of all-India and Kerala during 1973-74 being Rs 340 and Rs 300 respectively. The average annual rates of growth in the per capita income of Kerala and all-India during the thirteen years from 1960-61 to 1973-74 were only around one percent.

2.33 The objectives of the Fourth Five Year Plan of Kerala, *inter alia*, envisaged bridging of the gap between the per capita income of all-India and that of the State within a period of 15 years. At the beginning of the Fourth Five Year Plan the per capita income of Kerala was less than that of all-India by Rs 46. In the final year of the Fourth Plan the difference was reduced to Rs 40.

2.34 In Table 2.20 all states in India are ranked based on their per capita income at current prices for the years 1968-69 to 1972-73. Kerala had the eighth place in 1968-69, sixth in 1969-70, again eighth place in 1970-71 and 1972-73, and only tenth in 1971-72.

TABLE 2.18

#### Indices of Per Capita Income—Kerala and India

Year	(1960-61=100)			
	At current prices		At 1960-61 Prices	
	Kerala	India	Kerala	India
(1)	(2)	(3)	(4)	(5)
1960-61	100	100	100	100
1961-62	106	103	99	101
1962-63	108	107	100	101
1963-64	112	120	100	104
1964-65	129	138	102	110
1965-66	147	139	101	102
1966-67	154	157	104	101
1967-68	181	182	108	107
1968-69	192	182	111	109
1969-70	209	198	113	112
1970-71	227	209	115	115
1971-72	221	216	117	114
1972-73	250	228	117	110
1973-74	303	278	116	111



TABLE 2.19

## Per-capita Income Differences—India and Kerala

(Rs.)

Year	At current prices			At 1960-61 prices		
	India	Kerala	Income differences	India	Kerala	Income differences
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1960-61	306	259	47	306	259	47
1965-66	425	380	45	311	261	50
1968-69	557	496	61	332	286	46
1969-70	604	542	62	343	291	52
1970-71	640	586 ✓	54	352	297	55
1971-72	661	572	89	348	302	46
1972-73	698	647	51	337	302	35
1973-74	850	785	65	340	300	40

2.35 The average annual rate of growth of per capita income of Kerala during the Fourth Plan period was slightly higher than that of all-India.

TABLE 2.20

## Ranking of States based on per capita Income at current prices

State	1968-69 Rs.	Rank	1969-70 Rs.	Rank	1970-71 Rs.	Rank	1971-72 Rs.	Rank	1972-73 Rs.	Rank	1973-74 Rs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Andhra Pradesh	495	9	521	8	569	9	602	7	628	9	808
2. Assam	514	6	491	12	528	12	545	13	571	12	..
3. Bihar	402	18	403	15	426	16	440	17	..	..	..
4. Gujarat	606	4	696	4	806	3	833	3	733	5	..
5. Jammu & Kashmir	513	7	..	..	..	..	..	..	..	..	..
6. Haryana	634	3	809	2	836	2	906	2	982	2	..
7. Himachal Pradesh	576	5	586	5	638	5	678	6	727	6	..
8. Karnataka	490	12	503	10	540	11	551	12	570	13	704
9. Kerala	496	8	542	6	586	8	572	10	647	8	785
10. Madhya Pradesh	425	17	469	13	490	15	528	14	572	11	696
11. Maharashtra	700	2	752	3	787	4	831	4	867	3	1075
12. Manipur	485	13	423	14	397	17	441	16	509	15	609
13. Orissa	464	15	491	12	496	14	511	15	..	..	..
14. Punjab	881	1	945	1	995	1	1054	1	1105	1	..
15. Rajasthan	426	16	500	11	632	6	563	11	590	10	769
16. Tamil Nadu	494	10	540	7	622	7	688	5	746	4	..
17. Uttar Pradesh	476	14	521	8	520	13	591	8	652	7	..
18. West Bengal	491	11	519	9	546	10	587	9	568	14	..
India	557		604		640		661		698		850

## CHAPTER III

### AGRICULTURE

#### CROP PRODUCTION

The crop production sector on the whole registered a significant recovery during the agricultural year 1974-75. The index number of production touched an all-time high of 156.3 recording an increase of 2.2 percent over the previous year. This recovery has been largely due to an increase in production of rice and plantation crops such as rubber, cardamom, arecanut, tea and coffee. Rice production increased by 6 percent from 12.57 lakh tonnes to 13.34 lakh tonnes. Details of crop production trends may be seen from Tables 3.1 and 3.7.

3.2 The relatively impressive performance of the crop production sector despite the none too-favourable weather condition is an indication of the resilience of the sector particularly that of food grains. The relatively low incidence of pests and diseases, and the preparedness of the extension agency to take adequate preventive and curative measures through a pest and disease surveillance system have been largely responsible for the recovery of rice production.

3.3 Improvement in production has come about through increases in both area and productivity. The index number of area moved up from 127.9 to 129.3 and that of productivity from 119.5 to 120.9. The largest increase in productivity has been in respect of rice, whose index number of productivity moved up from 106.2 to 111.8 although it was still below the level of 116.4 attained in 1972-73.

#### *Farm Commodity Prices:*

3.4 The advantages of a relatively impressive performance in the production front have been partly offset by a general declining tendency seen in the prices of farm commodities particularly of coconut and rubber. After the depression experienced during 1971-72 the price of coconut began to pick up and reached a peak of nearly Rs 1019 per thousand nuts in January 1974 (See Table 3.2). Since then, the price of coconut started declining and it reached the low level of Rs 544 in July 1975 though partly the price fall could be

TABLE—3.1

## Index Numbers of Area, Production and Productivity of crops in Kerala \*

Base Year: Average of 1959-60 to 1961-62

Crops	Area				Production				Productivity			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	1968-69	1973-74	1974-75	Weight	1968-69	1973-74	1974-75	1968-69	1973-74	1974-75	1973-74	1974-75
All crops (A+B)	119.8	127.9	129.3	100.00	135.3	152.9	156.3	112.9	119.5	120.9	119.5	120.9
A. Foodcrops (1+2)	113.5	118.7	120.3	59.14	140.3	161.1	165.6	123.6	135.7	137.7	135.7	137.7
1. Food grains (i+ii)	108.5	112.4	113.2	28.81	120.3	120.5	127.8	110.9	107.2	112.9	107.2	112.9
(i) Cereals	109.1	113.9	114.6	28.52	120.5	121.0	128.4	110.4	106.2	111.8	106.2	111.8
(ii) Pulses	97.2	85.2	84.9	0.29	96.3	72.5	72.8	99.1	85.1	85.7	85.1	85.7
2. Non food grains	120.5	127.6	130.2	30.33	159.4	199.7	201.5	133.7	156.5	154.8	156.5	154.8
B. Non food crops	131.9	145.9	146.3	40.86	128.1	141.1	142.8	97.1	97.2	97.6	97.2	97.6
(i) Oil seeds	134.6	146.5	147.2	31.74	117.7	113.2	113.8	87.4	77.3	77.3	77.3	77.3
(ii) Plantation crops	132.4	152.4	154.2	8.09	173.4	255.6	261.8	131.0	167.7	169.8	167.7	169.8
(iii) Commercial crops	87.8	91.1	91.6	1.03	93.0	100.2	99.9	105.9	110.0	109.1	110.0	109.1

\*Provisional

Cereals: Rice, Jowar, Ragi.

Non-food grains: Banana, tapioca, sweet potato, sugarcane, pepper, chillies, ginger, turmeric, cardamom, arecanut, cashewnut

Oil seeds: Groundnut, sesamum &amp; coconut.

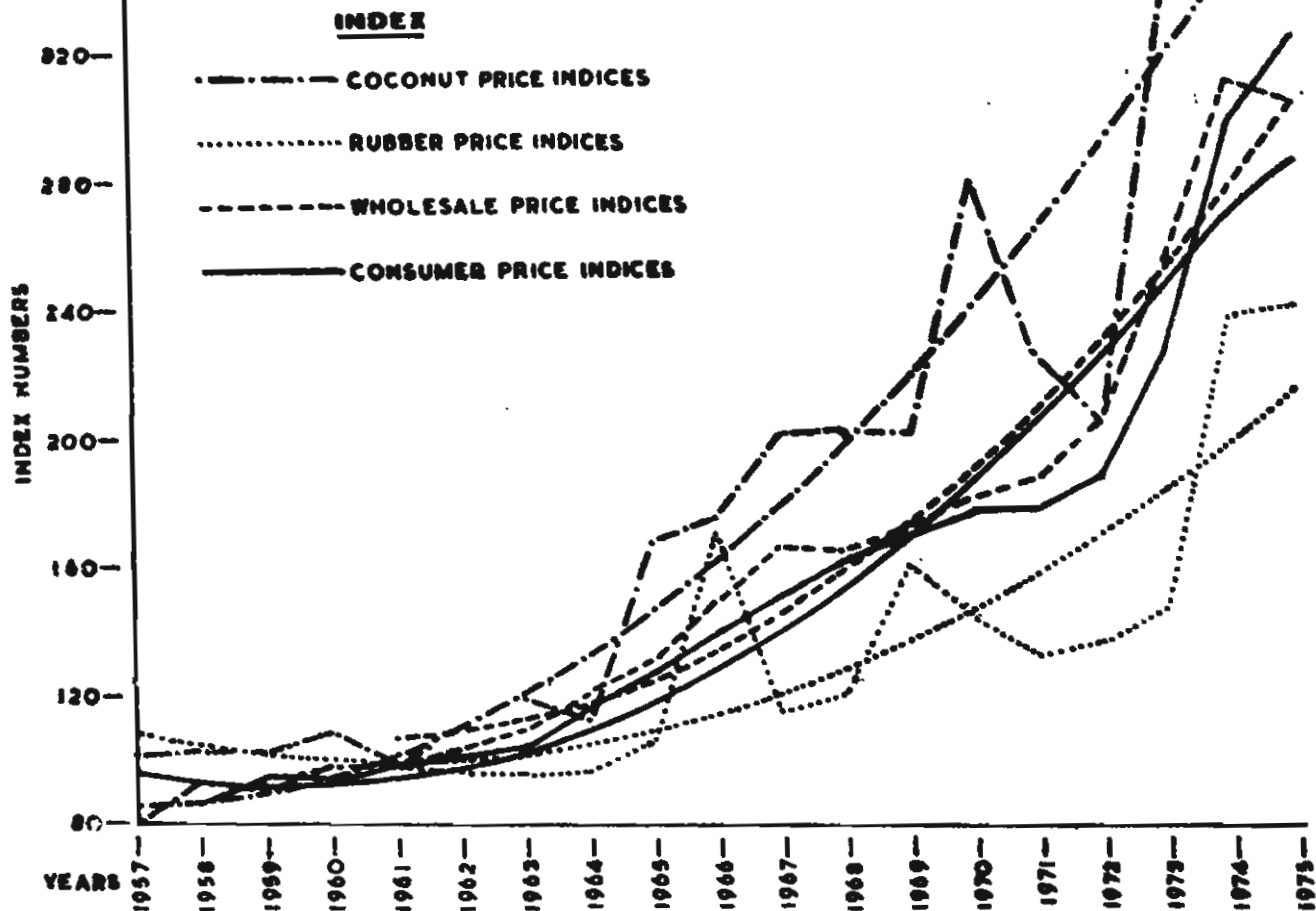
Plantation crops: Tea, Coffee &amp; Rubber.

Commercial crops: Lemon grass, cotton &amp; tobacco.

**INDEX NUMBERS OF FARM PRICES OF COCONUT AND RUBBER, CONSUMER PRICES (KERALA) AND WHOLESALE PRICES (INDIA)**

Base 1961=100

GRAPH 3.1



attributed to seasonal factors. The seasonal variation in the prices of coconut is as much as 20%, the highest being in January and the lowest in July (See Table 3.2). Coconut prices have registered a slow recovery and by December 1975 it had reached a level of Rs. 720 per thousand nuts.

3.5 Coconut, accounting for a quarter of the net area sown and nearly a third of the value of agricultural production, is primarily grown in small scale. It is in this crop that the small farmers find a marketable surplus and a source for meeting their cash needs. Hence the price level of coconut has a significant impact on the farm economy of the State. While the farm prices of coconut during the last two decades or so have been rising faster than the wholesale prices and consumer prices (See Table 3.2 and the graph there has been a declining trend visible since the beginning of 1975. During the same period, the wholesale prices and consumer prices have been moving up overtaking the coconut prices and thus causing erosion in the economic status of the coconut farmers. The movement has been steady as could be seen from the secular trend projected (See Table 3.3). Anticipation of a bumper harvest of oilseeds, partial removal of restraints on import of vegetable oils and animal fats in order to increase the availability of vegetable oil to help bring down the price level of consumer goods, and the substitution of coconut oil with other inferior quality but low priced oils in the industrial sector, have all contributed to the declining price trends in coconut during 1975. Since July 1975 there has been some pick-up in prices, which may be described only of a seasonable character. The fall in prices of coconut, and in turn of coconut oil, has improved the demand for coconut oil by industrial users and this is expected to prevent further fall in coconut prices. The highly fluctuating nature of coconut prices has received considerable attention from the Government and its agencies and departments. Government has initiated a significant step in stabilising the price of coconut with the establishment of Kerala State Coconut Development Corporation.

TABLE-3.2

Average Farm Prices of Coconut in Kerala

(Unit '000 nuts)  
(Amount Rs.)

Month	January	February	March	April	May	June	July	August	September	October	November	December	Yearly average Price	
Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1955	147.42	136.96	138.78	130.92	127.97	132.68	136.74	130.43	134.04	133.39	133.22	140.14	135.22	
1956	139.00	138.62	141.32	143.22	141.64	137.07	133.78	136.97	138.13	142.06	153.02	167.94	142.73	
1957	172.19	173.64	164.39	161.88	157.73	151.62	148.55	154.60	161.44	167.13	177.05	190.53	165.06	
1958	192.03	189.99	189.26	196.22	190.23	184.87	185.72	183.71	191.53	195.05	199.86	200.10	191.55	
1959	200.09	201.16	196.76	195.34	190.73	184.00	177.23	172.08	179.82	188.58	188.69	191.53	188.83	
1960	197.21	205.38	203.79	203.39	204.95	200.23	200.87	205.92	205.92	212.95	219.07	228.42	207.31	
1961	227.07	228.08	220.07	215.04	209.38	203.40	194.14	187.95	189.44	208.60	206.97	202.62	207.73	
1962	216.90	226.63	230.73	234.76	233.65	230.25	228.40	226.50	229.30	239.25	254.40	247.20	233.16	
1963	268.40	270.80	254.20	254.66	255.08	245.90	231.70	233.30	239.10	238.80	244.80	249.10	243.82	
1964	254.90	252.30	244.50	236.90	232.90	224.60	220.10	214.10	215.10	221.90	230.00	252.20	233.30	
1965	267.20	275.00	295.10	336.90	346.10	338.30	355.20	366.30	373.70	383.00	437.30	441.10	351.27	
1966	427.50	414.40	392.10	409.50	381.60	313.30	312.34	337.93	345.07	349.40	361.93	369.10	367.85	
1967	371.29	398.09	399.16	397.14	396.23	387.22	405.73	404.13	429.63	466.10	506.37	509.56	422.55	
1968	514.85	478.59	448.88	451.25	430.15	399.15	371.98	385.81	403.45	407.20	401.12	393.06	423.79	
1969	395.44	390.00	396.80	386.34	377.97	424.86	403.01	493.01	426.58	444.52	498.04	521.19	420.72	
1970	532.71	529.44	513.29	525.75	592.54	593.87	582.70	615.10	629.40	657.80	657.40	618.70	587.39	
1971	596.90	548.50	524.80	528.10	495.60	447.00	441.30	451.00	444.40	418.30	387.40	405.90	474.10	
1972	421.20	426.50	430.10	421.80	397.10	403.00	432.60	425.50	421.30	432.10	459.80	489.60	430.05	
1973	513.20	572.80	586.30	646.00	674.10	680.90	711.50	680.70	710.70	850.40	909.80	950.60	707.00	
1974	1018.90	997.20	938.70	977.20	985.60	954.80	889.60	860.50	861.30	842.20	912.20	949.60	932.32	
1975	962.40	896.30	833.00	811.00	736.90	654.60	544.00	657.70	595.10	632.00	718.00	719.80	722.57	
(275)	72.210	71.200	71.700	71.000	71.500	71.800	71.900	72.000	72.100	72.200	72.300	72.400	72.500	
Average	415.70	378.59	368.67	376.82	369.44	355.79	347.90	354.47	358.30	372.89	393.16	401.81	371.11	

TABLE—3.3

## Index Numbers and Estimates of Price Trend

Year	Index number — base year 1961=100					Estimates of price trend			Wholesale price index
	Coconut	Rubber	Consumer price index of Kerala	Wholesale price index for all commodities (All India)	Coconut	Rubber	Consumer price index		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1957	79.46	101.83	84.31	..	86.15	109.83	96.25	..	
1958	92.21	103.44	87.03	..	87.76	105.46	93.25	..	
1959	90.90	103.41	94.56	..	91.13	102.31	91.93	..	
1960	99.80	109.42	95.61	..	96.26	100.38	92.29	..	
1961	100.00	100.00	100.00	100.00	103.15	99.67	94.33	107.52	
1962	112.24	96.19	101.25	103.80	111.80	100.18	98.05	109.20	
1963	119.78	95.78	104.81	110.20	122.21	101.91	103.45	112.82	
1964	112.31	97.25	117.15	122.30	134.38	104.86	110.53	118.38	
1965	169.10	107.93	128.45	131.60	148.31	109.03	119.29	125.88	
1966	177.08	170.71	140.79	149.90	164.00	114.42	129.73	135.32	
1967	203.41	115.74	152.51	167.30	181.45	121.03	141.85	146.70	
1968	204.01	121.00	163.80	165.40	200.66	128.86	155.65	160.02	
1969	202.53	162.66	170.92	171.60	221.63	137.91	171.13	175.28	
1970	282.77	144.31	178.03	181.10	244.36	148.18	188.29	192.48	
1971	228.23	133.47	179.28	188.40	268.85	159.67	207.13	211.67	
1972	207.02	138.16	190.16	207.10	295.10	172.38	227.65	232.70	
1973	340.35	148.64	229.29	254.30	323.13	186.31	249.85	255.72	
1974	448.81	240.28	301.67	313.70	352.88	201.46	273.73	280.60	
1975	347.84	243.79	329.71	307.60	384.41	217.83	299.29	307.58	

Trend equation  $Y = a + bt + ct^2$  where  $t$  is the time in years.1 Coconut  $Y = 86.30 - 1.03t + 0.88t^2$  ( $R^2 = 0.88$ )2 Rubber  $Y = 115.42 - 6.20t + 0.61t^2$  ( $R^2 = 0.73$ )3 Consumer price  $Y = 100 - 93.52t + 0.84t^2$  ( $R^2 = 0.94$ )4 Wholesale price  $Y = 107.78 - 1.23t + 0.97t^2$  ( $R^2 = 0.95$ )



**3.6** Another commodity whose price situation has been causing considerable anxiety and concern during the past one year was rubber. The sudden price spurt which was observed in the month of February 1974 continued till August 1974 touching the highest level of Rs. 996 per quintal which was double the rate that obtained a year ago (See Table 3.4). But in October 1974 rubber price dwindled to Rs 776 and the decline continued. Then again in January 1975 the price situation improved significantly touching Rs. 889 per quintal. After ruling high for a couple of months, the price began to fall and has been staying around Rs. 700. Though the average price obtained in 1975 was marginally higher than in 1974, the indications are that the low levels of prices may not show much improvement. Similarly, though rubber prices have been moving upwards over the years, whole-sale prices and consumer prices have been moving faster putting the rubber growers in disadvantage. (See Graph) Recent price changes have shown that the rubber prices are heading off while the upward swing of other prices still continues, thereby further worsening the economy of the rubber growers.

**3.7** Instability in the prices of farm products has far reaching consequences. Not only is it necessary that the price of a particular farm commodity should have reasonable stability by permitting it to fluctuate within narrow limits but it should also be in balance with that of other farm commodities. A precipitous fall in the prices of farm products takes away at a stroke the gains of cultivation accruing to the farmers. Farmers are thus dissuaded from making long-term investments such as land improvements, augmentation of irrigation facilities, and replanting and rejuvenation of old and unproductive plantings. Abnormal price increases would also have adverse impact on the demand pattern of the crop. A balanced system of farm prices is also necessary to maintain some evenness in the income distribution between the farmers in various regions whose resource endowments are not uniform. If abnormally high price conditions prevailed in a particular commodity, the

TABLE-3.4

## Wholesale Price of Rubber

Centre—Kottayam.

Unit—Quintal

Amount: Rs. Ps.

Year	Month	January	February	March	April	May	June	July	August	September	October	November	December	Average annual Price
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1957		335.10	335.10	336.42	327.01	321.87	327.76	325.18	317.57	323.90	329.50	327.60	327.12	327.84
1958		327.93	332.34	337.30	337.30	333.34	330.69	332.89	332.89	332.89	332.89	322.89	333.89	333.02
1959		331.24	330.14	330.69	330.69	330.69	330.69	330.69	330.69	330.98	330.03	329.32	335.10	330.91
1960		355.71	361.84	352.74	358.46	371.72	374.47	346.67	338.41	340.06	341.49	351.39	322.33	351.27
1961		327.36	328.79	331.48	329.76	328.90	327.80	323.66	320.90	321.20	312.12	310.75	304.04	321.92
1962		315.15	315.80	314.60	306.63	311.58	312.16	310.75	305.95	308.25	309.75	304.40	301.00	309.67
1963		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	309.50	309.30	309.00	309.00	307.80	305.50	308.35
1964		309.20	311.13	313.50	313.75	312.50	313.50	313.80	315.00	313.50	313.20	313.25	314.50	313.07
1965		313.70	313.75	315.88	315.90	318.25	325.00	361.70	372.19	373.75	351.00	384.69	423.75	347.45
1966		564.07	550.32	454.54	587.00	583.75	637.50	625.00	642.50	563.00	485.00	425.00	477.00	549.56
1967		428.75	400.00	392.00	390.63	367.50	383.00	374.38	367.50	348.00	337.50	345.00	337.00	372.61
1968		353.75	378.75	385.50	375.63	386.50	396.29	410.63	423.00	420.65	438.13	515.00	558.75	389.55
1969		572.50	556.25	595.50	595.63	525.50	516.25	513.75	502.00	477.50	472.00	476.25	480.50	523.64
1970		475.00	463.75	467.50	471.88	465.00	454.06	436.00	465.63	455.63	470.00	480.00	471.50	464.66
1971		475.50	467.50	463.13	458.00	443.75	436.25	434.00	411.88	386.88	402.50	398.75	378.00	429.68
1972		418.91	423.13	446.35	473.60	485.94	468.63	459.06	433.41	422.88	433.91	435.16	436.48	444.79
1973		467.63	464.53	468.18	464.66	470.81	474.00	479.37	492.13	490.50	485.79	491.10	492.30	478.42
1974		503.70	618.10	642.50	685.00	834.00	877.19	980.94	996.25	948.13	776.25	713.50	706.56	773.51
1975		889.00	857.61	818.23	828.44	785.50	804.38	793.75	762.88	757.35	697.13	713.44	710.00	784.81
		625.25	625.25	625.25	625.25	625.25	625.25	625.25	625.25	625.25	625.25	625.25	625.25	625.25
Average		431.34	433.82	431.45	441.67	443.17	449.42	445.35	444.21	432.84	417.22	418.17	421.86	434.21

Source: Bureau of Economics and Statistics, Trivandrum.

farmers who have more favourable resource endowment for that crop by virtue of the agro-climatic location would gain more than the farmers in poorly resource endowed areas. Continuance of such price system would help only to accentuate the disparities in income between regions. The situation would call for the evolution of a price policy for farm commodities keeping a balance of relative prices between farm commodities, to help optimum resource use and development of the farm sector.

### *Rain fall:*

3.8 The annual precipitation received during the calendar year 1974 which essentially influenced the crop production prospects of the agricultural year 1974-75 has been 2769 mm which was less than the annual normal rainfall of 2985 mm by a little over seven per cent. (See Table 3.5). More than the total quantum of rainfall, it is the distribution and the occurrence of rainfall during the critical periods of crop growth that affect production. Rainfall during the months of April and May has been slightly above normal and hence it must have favoured crop production in general particularly rice production. Despite the good beginning with plentiful pre-monsoon showers the onset of South West monsoon began at a low pitch with only about half the normal during July. Such excess over normal rainfall continued through the months of August to October with no recess in September. But subsequently it tapered off suddenly. The North East Monsoon was weak as the precipitation was less than half the normal during October and a third of the normal during November. The excessive precipitation during South West Monsoon has helped to keep down the pest incidence on rice. However the excess precipitation during the Second half of South West Monsoon period hampered inter cultural operations of virippu rice crop particularly top dressing of fertiliser. It also made the harvest operations difficult. The result was a substantial reduction in the yield of virippu crop. The North East Monsoon has put most of the crops to moisture stress. More than the rice crop it has affected adversely the dryland crops as the summer season began early from November itself. But the weak North East Monsoon has also helped to keep the pest population low by providing a less congenial environment. The early setting in and continuance of the dry spell through March enhanced the need for water and had put undue strains on the summer irrigation system. Thus, on the whole the rainfall distribution has been less favourable to crop production during the year under reference.

TABLE—3.5

## Average Monthly Rainfall in Kerala

Month	(Rainfall in milli-meters)				
	Normal	1972	1973	1974	1975
(1)	(2)	(3)	(4)	(5)	(6)
January	17	3	..	1	6
February	18	9	..	7	24
March	43	3	12	18	66
April	111	84	118	155	130
May	245	447	168	243	170
June	677	390	619	263	823
July	683	697	514	965	N.A.
August	417	287	467	526	N.A.
September	236	194	63	392	N.A.
October	302	269	277	136	N.A.
November	187	144	92	62	N.A.
December	49	121	57	1	N.A.
Total	2985	2748	2387	2744	..

Source: Bureau of Economics & Statistics.  
N. A. Not Available.

3.9 More or less the same pattern of rainfall was seen in all the districts, except that the pre-monsoon showers were much weaker in the Idukki district, and North East Monsoon was abnormally poor in the Ernakulam district (See Appendix 3.1).

3.10 The heavy pre-monsoon showers during March-April months of 1975 have posed some problems for sowing the Virippu crop by dry broadcast which is the main practice for most of the rice lands in the State. But subsequent good rains have augured well for the Virippu Crop.

#### Land Use:

3.11 The stock of land put to crop production registered a marginal increase of 6 thousand hectares over the past year. The stock of forest land depleted by about half a per cent. The largest sector which has been making new demands on the scarce land resources, continued to be the non-agricultural uses. This type of land use absorbed 9 thousand hectares. A significant increase of over 3 per cent in area sown more than once was registered. A redeeming feature of the changing land use has been the increasing intensity of land had been added to the net area sown, the increase in area sown

more than once has been 4 times with 23 thousand hectares during the period. For the first time 'the gross cropped area' surpassed the three million hectare mark. The land put to productive uses add upto 92.7 per cent of the geographical area. Apart from the net area sown this included area under forests, non-agricultural uses, permanent pastures and other grazing land. The balance sheet of 'land use' is presented in Table 3.6.

### Area Under Crops:

3.12 The 'gross cropped-area' registered an increase of nearly one per cent over the past year with the addition of 29,000 hectares. The largest increase of 11.5 thousand hectares has been registered under tapioca. (See Table 3.7). Increase in the area under rice has been second only to tapioca with nearly seven thousand hectares representing an increase of a little over three quarter per cent over the previous year. Other notable increases in area have been under coconut, arecanut, rubber and cashewnut. Except for a negligible decline in the area under tea, the hectarage of all crops registered increases during the year under reference.

TABLE 3.6  
Land Use Pattern in Kerala

Sl.No.	Classification of Land	1973-74	1974-75	Changes over the previous year	
				Actuals	Percent
				(5)	(6)
(1)	(2)	(3)	(4)	(5)	(6)
1	Total Geographical area	3859	3859	..	..
2	Forest	1053	1047	-6	-0.57
3	Land put to non-agricultural uses	286	295	+9	+3.2
4	Barren and uncultivable land	65	65	..	..
5	Permanent pastures and other grazing land	28	28	..	..
6	Land under miscellaneous tree crops not included in net area sown	100	98	-2	-2.0
7	Cultivable waste	74	72	-2	-2.7
8	Fallow land other than current fallow	22	21	-1	-4.5
9	Current fallow	28	25	-3	-10.7
10	Net area sown	2202	2208	+6	+0.26
11	Area sown more than once	797	820	+23	+3.0
12	Total cropped area	2999	3028	+29	+0.96

Source: Bureau of Economics & Statistics.

TABLE 3.7

## Area Under Principal Crops

(Area in thousand hectares)

Sl. No.	Crops	1973-74	1974-75	Changes over the year	
				Actual	Percentage
1	Rice	874.7	881.5	+6.8	+0.78
2	Sugarcane	9.5	9.5	..	..
3	Banana and other plantains	46.7	47.1	+0.3	+0.64
4	Arecanut	90.7	93.0	+2.3	+2.54
5	Cashewnut	103.2	104.9	+1.7	+1.65
6	Tapioca	306.4	317.9	+11.5	+3.75
7	Coconut	744.3	748.2	+3.9	+0.52
8	Tea	37.7	37.6	-0.1	-0.27
9	Coffee	35.8	36.6	+0.8	+2.23
10	Rubber	199.6	202.3	+2.7	+1.35
11	Ginger	12.0	12.2	+0.2	+1.67
12	Cardamom	47.5	46.6	+0.9	+1.89

Source: Bureau of Economics &amp; Statistics.

*Production:*

3.13 In general, production of most of the crops registered increases during the agricultural year 1974-75. The largest increase has been in the production of cardamom. Details are set out in Table 3.8. Production of cardamom increased by a third over the previous year, by 548 tonnes. Production of rice has also registered a significant increase of six per cent with the addition of 77000 tonnes. Among the plantation crops, production of rubber, arecanut, tea, cashewnut and coffee recorded increases. The increase in production of coconut has been meagre, being less than half a per cent.

*Productivity:*

3.14 The most notable increase in productivity has been registered in the yield per hectare of cardamom with an increase of over 37 per cent. (See Table 3.9). The increase of yield per hectare of rice, though only five per cent over the previous year, had a far greater impact on the agricultural production in the State. Among other crops, rubber and tea also registered increases in productivity. The decline in yield per hectare of land under tapioca has been very significant and was over four per cent. Other crops whose productivity declined included ginger (nearly 4 per cent)

and pepper (over one per cent). There has been practically no increase in the yield per hectare of land under coconut. In general the relatively better performance of crop production during 1974-75 as compared with the previous year has been equally accounted for by expansion in area and increase in productivity. Though such expansion of area may be said to have put under strain the relatively scarce land resource, the positive aspect has been that the land was being used more intensively. The intensity of land use moved up further from 136.2 to 137.1 per cent.

### *Rice Production:*

3.15 Production of rice registered a significant increase of six per cent over the previous year with the addition of 77000 tonnes. Production has increased largely due to increases in yield per hectare which rose from 1437 to 1518 Kg. (See Table 3.10). However, it was still behind the highest yield per hectare of 1575 Kg. attained during 1972-73. The increase in production has been largely from Mundakan Crop (5 per cent) and to a lesser extent from summer crop (3 per cent). No difference in the seasonal pattern of area under rice over the previous year was observed, but the seasonal pattern of production has altered significantly. Rice production

TABLE 3.8

### **Production of Major Crops**

<i>Crops</i>	<i>Unit</i>	<i>Production</i>		<i>Changes over the previous year</i>	
		1973-74	1974-75	<i>Actual</i>	<i>Percentage</i>
1. Rice	'000 tonnes	1257	1334	+77	+6.1
2. Coconut	Million Nuts	3703	3719	+16	+0.4
3. Tapioca	'000 tonnes	5660	5625	-35	-0.6
4. Arecanut	Million Nuts	13459	13777	+318	+2.4
5. Pepper	'000 tonnes	28	27	-1	-0.4
6. Tea	do.	48	49	+1	+2.1
7. Banana and other plantains	do.	354	357	+3	+0.8
8. Cashewnut	do.	116	118	+2	+1.7
9. Rubber	do.	118	122	+4	+3.4
10. Coffee	'000 tonnes	155	158	+3	+1.9
11. Ginger	'00 tonnes	267	260	-7	-2.6
12. Cardamom	Tonnes	1502	2050	+548	+36.5

Source: Bureau of Economics & Statistics.

TABLE 3.9  
Average Yield/Hectare of Principal Crops in Kerala

Crops	Unit	Average Yield		Changes over the previous year	
		1973-74	1974-75	Actuals	Percent
1. Rice	Kg/Hect.	1437	1513	+76	+5.3
2. Coconut	Nuts/Hect.	4975	4971	-4	-0.08
3. Tapioca	Kg/Hect.	18468	17696	-772	-4.2
4. Arecanut	Nuts/Hect.	148389	148072	-317	-0.24
5. Pepper	Kg/Hect.	233	230	-3	-1.3
6. Tea	do.	1283	1301	+18	+1.4
7. Banana and other plantains	do.	7569	7564	-5	-0.06
8. Cashewnut	do.	1122	1122	..	..
9. Rubber	do.	591	601	+10	+1.7
10. Coffee	do.	432	431	-1	-0.25
11. Ginger	do.	2215	2134	-81	-3.7
12. Cardamom	do.	32	44	+12	+37.5

Source: Bureau of Economics & Statistics.

TABLE 3.10  
Area, Production and Yield of Rice

Season	Area ('000 hectares)		Production ('000 tonnes)		Yield in Kg./hectare		Change in per cent
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Virippu (Autumn)	392.8 (44.91)	394.9 (44.80)	605.6 (48.18)	535.5 (40.15)	1542	1356	-12.06
Mundakan (Winter)	381.0 (43.56)	384.8 (43.66)	507.8 (40.39)	602.2 (45.15)	1333	1565	+17.40
Punja (Summer)	100.9 (11.53)	101.7 (11.54)	143.7 (11.43)	196.2 (14.71)	1424	1929	+35.46
Total	874.7 (100.00)	881.4 (100.00)	1257.1 (100.00)	1333.9 (100.00)	1437	1513	+5.29

Figures in parenthesis indicate percentages.

Source: Primary data from the Bureau of Economics & Statistics, Government of Kerala



during Virippu season registered a decline of over eight per cent; during Mundakan season it increased by nearly five per cent, while in summer season the increase was about 3 per cent. The yield per hectare during Virippu season declined by over 12 per cent, while it increased during Mundakan season by over 17 per cent. In summer, there took place a significant increase of 35 per cent. Despite the relatively larger rainfall during the Virippu season, the prolongation of the pre-monsoon drought and the excessive precipitation during July-August have adversely affected production. The latter condition prevented farmers from resorting to measures of augmenting productivity, particularly fertiliser application. The poor drainage conditions consequent to the high rainfall was also a contributing factor to declining productivity. Timely action taken by the Department consequent to the launching of the survey and surveillance programme has helped not inconsiderably in keeping the pest and disease menace under check. The success achieved in pest and disease management and the prevalence of better water management conditions consequent to the relatively poor rainfall during the North East Monsoon could be the possible reasons for the better performance of the Mundakan crop, notwithstanding the relatively stagnant fertiliser consumption. Over the years, production and yield per hectare of the Virippu crop have been increasing slowly but steadily. But this phenomenon was not noticeable during the year under review; on the contrary, there has been an opposite trend. Given the rainfall conditions obtaining in the State, this crop is most susceptible to the vagaries of monsoon. The adverse effect is not on account of the shortage of precipitation, but due to excess rainfall and consequent poor water control conditions. It points to the need for developing better water management, particularly drainage improvements leading to the control of water regions. This aspect has not yet received the attention it deserves. The relatively-improved performance of Mundakan and Summer Crops is a pointer, that inspite of the poor rainfall conditions (North West Monsoon yield was very low) and stagnant fertiliser consumption levels, the production could be increased with better pest and disease management and improved water control conditions.

### *High Yielding Variety:*

3.16 The area under high yielding varieties declined by nearly a third over the past year from over 28 to 19 per cent of the total area under rice. (See Table—3.11). Proportionately, the largest reduction in area has been registered during the summer season (nearly 40 per cent), followed by Virippu season (over 38 per cent). The decline during Mundakan season has been only

about ten per cent. The plausible reason for the decline in area under high yielding varieties could be the abnormal hike in the price of fertilisers and the fallacious notion that these varieties perform well only under high fertility conditions. Despite the plant protection cover, both preventive and curative, farmers has not yet got over the sense of despair arising out of the sad experiences of pest incidence during past years. This would partly explain the reduction in area during the Mundakan and Summer seasons, particularly during the latter.

3.17 The contribution to increase in rice production from use of high yielding varieties showed a decline during the year. This could be attributed more to a decline in area than reduction in

TABLE 3.11

**High Yielding Varieties of Rice**

Details	Quantity		Change		Proportion of H. Y. Vs. to the total rice (Percent)	
	1973-74	1974-75	Quantity	Percent	1973-74	1974-75
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Area (in hectares)</b>						
Virippu (Autumn)	125292	77537	-47755	-38.12	31.90	19.62
Mundakan (Winter)	57076	50988	-6088	-10.67	14.96	13.25
Punja (Summer)	65904	39128	-26776	-10.63	65.31	38.45
<b>Total</b>	<b>248272</b>	<b>167653</b>	<b>-80619</b>	<b>-32.97</b>	<b>28.39</b>	<b>19.03</b>
<b>Production (rice in tonnes)</b>						
Virippu (Autumn)	228749	130572	-98177	-42.92	37.76	24.39
Mundakan (Winter)	75795	83840	+8045	+10.61	14.95	18.92
Punja (Summer)	99376	80390	+18986	-19.11	68.48	40.98
<b>Total</b>	<b>403920</b>	<b>294802</b>	<b>..</b>	<b>-27.01</b>	<b>32.13</b>	<b>22.10</b>
<b>Average Yield/ Hectare (Kgs.)</b>						
Virippu (Autumn)	1826	1542	-284	-15.55	118.42	113.72
Mundakan (Winter)	1328	1644	+316	+23.80	99.62	105.05
Punja (Summer)	1508	2054	+546	+36.20	105.90	106.48
<b>Total</b>	<b>1627</b>	<b>1758</b>	<b>+131</b>	<b>+8.10</b>	<b>113.22</b>	<b>116.19</b>

Source: Primary data from the Bureau of Economics & Statistics, Government of Kerala.

yield per hectare. While area covered by high yielding varieties declined from 32 to 22 per cent, yield per hectare increased from 113 to 116 per cent over the traditional varieties.

3.18 The relatively slow increase in the spread of high yielding varieties during the Virippu season could possibly be due to the poor drainage conditions prevailing in the paddy lands consequent to the heavy rainfall. During the Mundakan season, area under H. Y. P. remained almost stagnant. As regards productivity, though the yield per hectare of high yielding varieties has been higher than that of the traditional varieties, it was found fluctuating from year to year between 119.6 and 153.6 per cent. Even during Virippu season, such fluctuations were found, though they were of a lesser magnitude than that for Mundakan and Puncha seasons.

3.19 The high yielding varieties have been in the State since 1968-69. The fluctuations in their performance over the years indicate that we have not yet got over the infantile maladies associated with the development effort of this kind. Striking results in yields have been registered at the research stations and in national demonstration plots with use of many of the high yielding varieties currently in vogue. However, it has not been possible for use to spread the immense potential over a wider area and reap the benefits of higher productivity, presumably because necessary conditions for the wider and successful adoption of these varieties could not be created. It is time that we make an earnest attempt to identify the constraints that inhibit the full exploitation of the production potentials created through these varieties.

3.20 There are certain obvious factors which need to be taken into account. The agro-climatic variations under which rice is grown in the State are quite substantial due to the number of seasons and the variegated topo-sequence. Generally, these varieties are highly sensitive to even variations in the micro environmental conditions. Further, the rice production sector in the State involves over 7.5 lakh farmers whose decisions are very sensitive to rising input costs and declining prices of their output. It is also time for us to look at the management capability of the rice farmers given the land tenure relationship and their ability to manipulate the economic forces. A technology appropriate to the level of management has to be evolved. Perhaps instead of a high management, high cost technology we may have to go in for a medium management, low-cost-technology for rice production.

*Development Programmes:*

3.21 The recovery from the set back experienced in the previous year consequent on the adverse natural factors, leading to the relative buoyancy in agricultural production, may largely be attributed to the increased tempo of development effort. Primarily, the effort has been to consolidate the gains from programmes already launched rather than from new programmes except the schemes for Pest Survey and Surveillance, and Pulses development.

3.22 Fertiliser consumption declined substantially by about 15 per cent. (See Table 3.13). Reduction in consumption has taken place largely in the case of phosphatic and potassic fertilisers; consumption of nitrogenous fertilisers increased marginally. Although after the initial difficulties, the supply position improved, prices continued to remain high. By the middle of 1975, the Government of India took steps to reduce the prices of nitrogenous fertilisers owing to the ease in price conditions in the international market and also due to the appreciation of the need for continued use of fertilisers by the farmers. But it was too late for the rice farmers to profit from the price reduction and apply fertilisers to the Virippu crops as the season had past half way. Later by December 1975, the prices of phosphatic and potassic fertilisers were reduced significantly and that of nitrogenous fertilisers marginally to induce

TABLE No. 3.13

**Selected Indicators of Agricultural Development**

<i>Programme</i>	<i>Unit</i>	1973-74	1974-75
1. <i>Fertilizer consumption</i>	Tonnes	78846	67362
Nitrogen	"	31691	32143
Phosphorus	"	22609	17187
Potash	"	24546	18032
2. <i>Plant Protection</i>			
Seeds treated	Lakh tonnes	1.54	2.9
Liquid fungicides (in terms of technical grade)	Tonnes	13.00	15.00
Liquid insecticides ( " )	"	76.00	123.00
Solid fungicides ( " )	"	85.50	292.00
Solid insecticides ( " )	"	356.50	347.00
Area treated	Lakh hect.	11.45	11.17
Aerial spraying	"	10700.00	Nil.
Rodent Control operation	"	1.45	0.65
3. <i>High Yielding Seeds</i>			
HYV and other improved seeds distributed from Seed Farms or Govt. Agencies	Tonnes	2498	2300
Coverage of HYV including natural spread	Lakh hecets.	2.48	1.67

(1)	(2)	(3)	(4)
4. <i>Quality planting materials distributed</i>			
Coconut seedlings	Lakh Nos.	4.58	5.00
Areacanut seedlings	"	0.79	Nil
Rooted pepper	"	8.87	4.71
Cashew layers/seedlings	Nos.	68180	20698
Cashew seedlings	Lakh No.	7.10	17.93
5. <i>Farmers Training Programme</i>			
Farmers trained	Nos.	16529	23610
Training camps organised	"	1393	1564
6. <i>IPD Programme</i>			
Units organised	Nos.	189	189
Area covered	Hect.	45800	45800
7. <i>Coconut Package Programme</i>			
Units organised	Nos.	63	63
Area covered	Hect.	31500	31500
Demonstrations organised	Nos.	630	630
Fertilizer distributed	Tonnes	} N 57 } P 56 } K 117	1097 1108 2212
Medium term loans distributed (thro' co-operatives)	Rs. '000	6.38	14.73
Filter points established	Nos.	..	5
Filter points connected with pumps	"	..	5
Dug wells	"	..	133
Area benefited	Hect.	11	955
8. <i>Pilot Project for replanting Coconut</i>			
Area covered	Ha.	..	859.50
Seedlings distributed	Nos.	..	24197
9. <i>Survey &amp; Surveillance Programme</i>			
Units established	Nos.	Nil.	100
Area protected	Lakh ha.	..	8.75
10. <i>Short term loans</i>			
Amount distributed	Rs. Lakhs	..	462.06
11. <i>Cashew Plantation Scheme</i>			
Area covered	Ha.	5130	13734
Amount disbursed as subsidy	Rs. '000	396	994
Total investment	"	537	2259

Source: Department of Agriculture.

the farmers to consume more of these fertilisers. On this occasion also the farmers of Kerala could not take advantage of this reduction in fertiliser price for it came too late in the Mundakan Season. The relative high prices of fertilisers had a severe set back in the consumption of fertilisers particularly of phosphatic and potassic fertilisers. Adverse weather conditions, particularly the

untimely excess rainfall during the Virippu season, also exercised restraint on the farmers using fertilisers. With the prevailing high prices of fertilisers, the rice farmers could still be persuaded to enhance the consumption of fertilisers, but for the declining tendency of prices for most of the farm commodities. It is very likely that the consumption level of fertilisers might get stagnated if not reduced if the prices of farm commodities, particularly of rice, continue to register falling trends.

3.23 The level of plant protection coverage was more or less retained over the past years by protecting an area of 11 lakh hectares. With the launching of the pest survey and surveillance programme, the effort in the area has been strengthened. Though there has been a substantial reduction in the coverage of high yielding varieties, the distribution of seeds of high yielding varieties through seed farms and government agencies showed only marginal decline. The distribution of cashew seedlings more than doubled, reaching nearly 18 lakh seedlings. There was also improvement in the distribution of coconut seedlings, with 5 lakhs seedlings distributed during the reference period. Farmers' training programmes registered good progress by holding 1564 camps and training over 23600 farmers, which was nearly forty per cent more than the past year. The fertiliser and other inputs distribution programme received a boost through issue of short term loans for Rs 462 lakhs.

3.24 Though no new Intensive Paddy Development or Coconut Package Units were organised, the activities of the existing units showed considerable improvement. Notable achievements have been registered in the programmes for coconut development. Fertiliser consumption in these areas increased nearly twenty times reaching 1097 tonnes of nitrogen, 1108 tonnes of phosphorus, and 2212 tonnes of potash. The distribution of medium-term credit through co-operatives registered an increase of forty per cent. Irrigation facilities were improved in about 950 hectares through digging of 133 wells and distributing over 25 pumpsets. Apart from the package programme, another important project under implementation has been the pilot project for the rejuvenation of coconut trees in Muthukulam Block. Over 24 thousand hybrid seedlings were distributed for replanting. Nearly 860 hectares have been covered under the replanting scheme. Another major attempt in the area of Coconut Development has been the launching of a scheme for the production of 5.5 lakh hybrid seedlings annually.

3.25 A major effort has been under way for increasing the area under cashew to augment the supply of raw nuts substantially from internal sources as a support to the cashewnut processing

industry. A scheme was launched to expand the cultivation of cashew in private holdings. The farmers were helped with free supply of inputs like planting materials and fertilisers, and a cash subsidy to a limited extent. Enthusiastic support from the farmers has been received for this programme. Since the launching of the scheme, about 13700 hectares have been planted of which over 8600 hectares were planted during last year.

#### *Pest and Disease Surveillance Programme:*

3.26 The transformation of crop production from traditional varieties to high yielding varieties, concomitantly lead to the creation of congenial environment for the multiplication and proliferation of insect parasites and disease pathogens. Once substantial investments on purchased inputs like fertilisers have already been made, farmers are tempted to use effective plant protection measures irrespective of cost, in their anxiety to save the crops. The tendency generally observed is the indiscriminate use of large quantities of pesticides, often more than what is required to keep the pest incidence in check. Such indiscriminate application of highly toxic chemicals causes health hazards through the pollution of environment, not only to the human beings, but also to the fauna on land and water. Apart from escalating the cost of production, such uses also destroy many beneficial organisms. If the incidence of pests and diseases could be anticipated fairly well in advance, the farmers need take only less costly and simple preventive measures, to control the incidence and thus keep the problem from assuming explosive dimensions. A major effort in building up a system of anticipating the incidence of pests and diseases was launched by establishing over 100 pest and disease surveillance units throughout the state. Each unit is to cover an area of fifteen hundred hectares under paddy and has the support of a trained agricultural demonstrator who is supervised and controlled by a Junior Agricultural Officer. Each unit will have four observation plots and from them the data on the pest population and incidence of disease pathogens, are collected. The data so collected are analysed and interpreted by the Subject Matter specialists attached to the district headquarters and broadcast over the radio through the Farm Information Bureau. Farmers are informed on the intensity of the incidence of pests and diseases in the affected areas and rendered necessary advice on the control measures against threat of red hopper attack in the upper Kuttanad in March 1974 and in kole lands in April 1975. Proposals are under way to increase the number of units and to intensify the survey so as to provide a better and more efficient coverage.

### *Ground Water Survey and Development:*

3.27 Apart from continuing the regular programme of detailed hydro-geological survey, the Ground Water Survey Unit has initiated the exploitation of ground water through tube wells. Already two tubewells have been completed and three more are in fairly advanced stages of completion. The Unit undertakes construction of tubewells at the request of farmers on the basis of payment of actual costs incurred. Under the same programme, farmers are given advice on the siting of location for open draw wells and on the installation of filter points. Accordingly, sites were chosen for 700 open wells and 20 filter points. Quick appraisal of the ground water potential of the districts of Trivandrum, Trichur and Malappuram has been carried out at the request of the Kerala Co-operative Central Land Mortgage Bank. The ground water assessment for some pockets in Calicut and Trichur districts have also been undertaken by the Unit as support for the Rural Electrification Programme.

### *Soil and Water Management Projects:*

3.28 Development of water resources is not an end in itself. It only signifies a process by which water is utilised as a significant input for increasing agricultural production. The new technology built around the high yielding varieties has put new demands on the water distribution system as these varieties are highly sensitive to the water regimes obtained at various stages of plant growth. The exploitation and full expression of the production potentials of high yielding varieties of rice are contingent upon the timely application and withdrawal of water leading to the maintenance of particular water regimes appropriate to the different stages of plant growth. In the context of Kerala, with its high rainfall incidence and relatively better spread, withdrawal of water is equally important as its addition. In other words, drainage has equal importance as that of irrigation. The economy of the irrigation system also depends upon the efficiency of the distribution system. The efficiency could be improved by the most economic use of water with respect to time and quantity. The problems related to the efficient use of water are being studied under the two soil and water management projects under various stages of implementation in the State.

3.29 The first project on soil and water management was commenced in the Neyyar Irrigation Project area during 1972. The project was sponsored by the Ministry of Agriculture, Government of India. The Second project was launched by the Kerala Agricultural University in the Chalakudy Irrigation Projects under



the All-India Co-ordinated Project for Research on New Cropping Patterns and Water Use in Selected Command Areas, sponsored by the ICAR. The project was commenced in August 1973 at the Agronomic Research Station, Chalakudy.

The broad objectives of these programmes are:

- (1) to identify the soil and water management problems in the respective project areas.
- (2) to test, evaluate and demonstrate (i) the most profitable cropping patterns; (ii) techniques for increasing the number of crop days with special reference to the maximum profitable utilisation of land, water and other input resources, (iii) the profitability of lining field channels with special reference to saving of land, labour and water for new techniques of irrigation in the dry lands; and (iv) new models of irrigation and drainage channels and structures.
- (3) to assess the water requirements of rice, in the ayacut, and
- (4) to impart training in soil and water management for the extension personnel and farmers.

#### *Farm Information Bureau:*

3.30 Farm Information Bureau, the agency rendering communication support to the various departments and agencies engaged in agricultural development of the State, has been successful in introducing several new innovations in the area of farm information communication system. Outstanding among them has been the involving of news papers for disseminating farm information. The columns devoted to this feature covered periodically important developments in the field of farm technology, experiences of the farmers discussions on vital problems concerning the farming community, and linking new farming practices with seasonal farm operations. The Bureau rendered information support to the daily newspapers for undertaking this feature. At least one language newspaper which is among the newspapers having the largest circulation in the State has commenced this feature in its columns once in a week. This innovation of involving directly a newspaper in the information communication system for the farming community has been a unique experience in the country and has opened up new vistas in this area.

3.31 Last year the Bureau, in collaboration with the All-India Radio, had started a broadcasting programme, 'the Farm News'. Farm News when started was a short news feature lasting for five

minutes during morning covering the southern districts in the State. In September 1975 this programme was extended and an additional new bulletin lasting for five minutes was introduced. This feature is being utilised by the farmers as an invaluable source of information on the incidence of pests and diseases of plants and animals, availability of inputs, extension education efforts etc. News and messages received from the field are collected, edited by the Bureau and transferred to the All India Radio for broadcast from all its stations in the State.

3.32 The highest literacy levels in the country offer tremendous possibilities which have not yet been fully exploited for the development of new channels of information communication to the farm community. Already the State has a wide net work of over 4000 libraries reaching even the remotest parts of the State. Over 95 per cent of them are located in the rural areas. The Farm Information Bureau has initiated a programme of organising "Farm Book Corners" in collaboration with Kerala Grandhasala Sangham, a voluntary organisation which has been doing pioneering work in the organisation of libraries and reading rooms in rural areas, and the State Institute of Language. According to the scheme, books on agriculture produced by the State Institute of Language would be made available to 50 selected libraries at a subsidised price. Those libraries which have taken up "Farm Book Corner" programme would initiate extension education programmes by holding 3 to 4 seminars in a year on agriculture and allied subjects focussing attention on the local problems. In such seminars, farmers and specialists would participate. These libraries would be fed with a regular flow of farm literature by the Bureau. The resources needed are expected to be raised by the local farming community.

#### *Kerala Agricultural University:*

3.33 Institution and implementation of a series of measures involving organisational and structural changes leading to the integration of teaching, research and extension education has been a major development effort attempted during the period under review. These measures include the integration of the services of different streams of personnel, changes in the course content by incorporating work experience, and involving teaching personnel in the research programmes of the research stations.

#### *Research:*

3.34 Investigations on several research problems which had been already under way have been pursued with vigour. The search for disease and pest resistant varieties of rice has been continued and

screening of several varieties for multiple resistance has been done in collaboration with the All India Co-ordinated Rice improvement Project, the Central Rice Research Institute, Cuttack and the International Rice Research Institute, Manila, Philippines. Improved package of practices including recommendations for optimum fertilizer use and management practices for different agro-climatic regions, have been formulated on the basis of the research results. Research on weed control of direct-seeded flooded rice have revealed that weedicides such as Machete, Ronstar and Propanil are highly effective. Fertilizer experiments on paddy have shown that in general 90:45:45 kg. of NPK (nitrogen, phosphorus and potash) per hectare for medium duration varieties and 70:35:35 kg. NPK per hectare for short duration varieties over a basal application of 5 tonnes of organic manures, are optimum doses. Studies on the biological control of *Salvinia* (African payal) with the exotic insect *Paulinia*, have been undertaken in collaboration with the Commonwealth Institute of Biological Control, Bangalore. Studies on exotic and indigenous cultivars of coconut have been continued, and it has been found that exotic cultivations such as Laccadive Ordinary, Andaman Ordinary, New Guinea, Cochin China and Phillipines are superior to the local West Coast Tall in respect of nut yield, copra and oil content. Studies have also shown that selection from progenies of Tall Dwarf gave high yielding planting material. A good germ plasm collection of pepper varieties has been built up and hybridisation is in progress with a view to evolve superior high yielding varieties. The artificial pollination technique in pepper has also been standardised. A large collection of banana and pineapple varieties has been built up as part of the research programme on horticultural crops. Studies have revealed that exotic varieties of banana such as 'Bodies Altra Fort' from Jamaica and different types of semi-tall mutants of Dwarf Cavendish such as 'Monsmaire' are promising. Manurial and cultural practices for 'Nendran' banana have been standardised. For raising healthy ratoon crops of 'Nendran' banana, which is highly susceptible to the weevil borer pest, application of 50 gm. BHC (10%) per plant in the basins at the time of first planting and also to the ratoon crop after harvest has been found to be an effective method for controlling the pest. In cashew, a number of high yielding hybrids with the crossing of indigenous and exotic types as parents have been evolved. Blossom biological studies and propogational trials are being continued. For Mandarin Orange, rough lemon has been found to be the best root stock. Studies on ginger have shown that varieties such as 'Rio-de-geneiro', 'Maran', 'China' and 'Manantoddy' are high yielders. A fertilizer dosage of 60:60:120 kg. NPK per hectare has been standardized for ginger. Fertilizer trials on turmeric have shown that a dosage of 100:100:120 kg. NPK per hectare gives significantly higher yields. Investigations:

on lemongrass and other essential oil plants have been continued. The new variety of lemongrass OD-19 has secured wide acceptance among the farmers. Trials on *Eucalyptus citriodora* have shown that yield of leaves and oil content could be enhanced with increase in the height of pruning. Breeding work for evolving superior varieties of cardamom and investigations on the control of 'Azhukal' and 'Katte' diseases have been continued. The University has participated in fourteen All India Coordinated Research Projects covering rice improvement, fruits improvement, floriculture, fodder crops and animal sciences.

#### *Education:*

3.35 During the academic year 1974-75 83 students in the College of Agriculture, 44 in the College of Veterinary and Animal Sciences and 20 in the College of Horticulture were admitted for the graduate courses. (See Table 3.14). For the Master's Degree programme, ten candidates in the various disciplines of Agriculture and thirteen in Animal Sciences, were admitted. So also for the Doctoral Programme, eighteen students in agricultural disciplines and two in veterinary and animal sciences were given admission. Significant changes have been brought about in the course content with the inclusion of work experience and 'earn while you learn' programmes at the graduate level, and introduction of course-credit system for the Doctoral degrees.

#### *Extension Education:*

3.36 In the area of extension education the University initiated a number of new programmes. Apart from continuing its assigned functions and responsibilities such as publication of periodicals, both popular and technical, information communication and advisory and consultative services, a programme for inservice training of the personnel of the departments of Agriculture and Dairy Development was commenced. Training programmes were also organised for agro-business representatives and input dealers. Special training courses organised included a short course on cattle and poultry rearing for groups of deputees from Laksha Dweep, on pests and disease surveillance for the personnel of the Agriculture Department, and on horticultural practices for school teachers. In an effort to broadbase the dissemination of technology, the University organised 'on campus evening training classes' for farmers at six centres, and initiated a correspondence course in crop production. Another significant effort in farmer education has been the demonstration project highlighting the concept of 'maximum production with minimum inputs' in collaboration with the Department of Agriculture and Mangalore Fertilisers and Chemicals. In order

TABLE 3.14

**Teaching Programme of the Kerala Agricultural University**

<i>Prlogramme</i>	<i>Unit</i>	1973-74	1974-75
<i>Graduate Programme:</i>			
Admission to B.Sc. (Ag.)	Nos.	83	83
Admission to B.S.c. (Hort)	"	19	20
Admission to B.V.Sc. &A.H.	"	42	44
Successful completion of B.S.c (Ag.)	"	7	51
Successful completion of B.Sc. (Hort)	"	Nil.	Nil.
Successful completion of B.V.Sc.	"	21	37 *
<i>Post Graduate Programme.</i>			
Admission to M.Sc. (Agri)	"	24	10
Admission to M.V. Sc.	"	18	13
Admission to Ph. D. (Ag. Faculty)	"	10	18
Admission to Ph.D. (Vet. Facult)	"	2	2
Successful Completion of M.Sc. (Agri.)	"		
Successful completion of M.V.Sc.	"	Nil.	Nil.
Successful completion of Ph.D.	"	Nil.	Nil.

*Source:* Registrar, Kerala Agricultural University, Trichur and Dean, Faculty of Veterinary and Animal Sciences, Kerala Agricultural University.

to help update the extension personnel on the technological developments taking place, a new publication 'Agri-News' has also been commenced.

*Operational Research Project:*

3.37 The existence of a time lag between the accumulation of knowledge of science and technology with the research stations on the one hand and its transfer to the farmers on the other has been recognised. The nation wide programme of National Demonstrations organised during the Fourth Five Year Plan with the active involvement of the scientists and technologists in the process, had helped to gain considerable experience on the problems of technology transfer. It has also been realised of late that the relatively controlled conditions obtaining in the laboratories and experimental stations are not found in the same measure in the farmers field where the physical resource endowments differ. Therefore in the process of transferring technology to the field, leakages and dilutions take place, and consequently the divergence in the results obtained in the research stations and in the farmers fields. Thus, there is need for adapting the research results to the field conditions obtaining in the farms. In appreciation of this phenomenon,

the Indian Council of Agriculture Research has initiated a number of Operational Research Projects in which scientists in the research stations would be actively involved in transferring the technology by undertaking adaptive research and demonstrations. This programme would afford an opportunity to the scientists to tailor their findings to the field conditions. In addition, it would also help to gain valuable experience on the research support needed to solve the current problems.

3.38 Under the aegis of the Indian Council on Agricultural Research the Kerala Agricultural University in collaboration with the Department of Agriculture has commenced an operational research project in Kuttanad with the Mancombu Rice Research Station as its headquarters. The focus in the Kuttanad Project would be on the integrated pest and disease control. Kuttanad, the biggest rice bowl in Kerala, has been in the forefront of adopting the new technology of rice cultivation. In the recent past, this area has been suffering from the heavy incidence of pests and diseases of rice. The indiscriminate use of highly toxic chemicals and the resulting problems of pollution and the imbalances that it might cause on the ecosystem has also been causing grave concern. Initial steps have been taken for the implementation of the project. Four Villages in the area have been selected for these projects.

*Kerala State Coconut Development Corporation:*

3.39 In pursuance of the efforts to impart stability to the sharply fluctuating price conditions of coconut and coconut projects the Government initiated steps to form the Kerala State Coconut Development Corporation. The main objectives of the corporation are:—

- (1) to develop coconut industry by providing technical facilities; and
- (2) to provide financial and ancillary facilities through term loans, share participation or furnishing of guarantees, for the development and modernisation of—
  - (a) production, processing and marketing of coconut and its derivatives, ancillary industries for the profitable utilisation of the products and bye-products of the coconut industry;
  - (b) ancillary industries for the manufacture and distribution of materials required by the coconut industry; and
  - (c) other industries beneficial to the coconut industry either directly or indirectly.

3.40 To begin with, the Corporation aims at providing financial assistance to coconut growers for increasing productivity. On the processing and marketing side, the corporation will assist to establish efficient and sophisticated units. The starting of one or more coconut complexes owned by the Corporation is also under contemplation. The original Project Report is now being recast with the view to give adequate emphasis on the processing and marketing aspects. A scheme for the supply management of coconut oil which would regulate the supplies in the market around the year and help stabilisation of its price, is also under consideration of the Corporation.

*Kerala Agro-Industries Corporation:*

3.41 Apart from continuing the programmes on hand already, and the assigned functions such as the procurement and distribution of tractors, power tillers and spare parts for these machines, running of workshops and service stations, custom hiring service and training technicians, dealing in inputs, the Corporation has undertaken two projects, one for the formulation of insecticides and the other for the manufacture of mechanical compost. There has been improvement in several activities of the Corporation. Direct sale of agricultural machinery has increased by over 50 per cent. (See Table 3.15). Similar has been the improvement in the sale of spare parts and inputs such as seeds and agro-chemicals. The receipts from hiring have nearly doubled. Similarly there was also improvement in the receipts from workshop and service stations. During this period the Corporation distributed 78 tractors, 108 power tillers and 33 pumpsets. However, in regard to the hire purchase and sale of Kubotta components, there was a substantial decline. The profit before provision of reserve and taxes declined over the previous year by about 15 per cent.

3.42 The feasibility study for establishing a pesticides formulation unit at Arimpur, Trichur has been under way. Arrangements have also been made for preparing a feasibility report for the project for a mechanical compost plant at Cochin. The project has been entrusted to Messrs Gujarat State Agro-Industries Corporation Ltd., on turn-key basis. The agro service centres with trained entrepreneurs were set up in six places. Training has been given to 17 candidates, and it is expected that a few more centres would be established. Implementation of the Kubotta Power Tiller Project by the Agro-Machinery Corporation, a subsidiary Company, has been progressing well. The manufacturing programme is expected to be commissioned in 1976-77. The Meat products of India Ltd., another subsidiary of the corporation, would shortly be taking over the Bacon Factory. Negotiations are under way for the processing of buffalo meat for export.

TABLE 3.15

**Activities of the Kerala Agro Industries Corporation**

<i>Item</i>	1973-74	1974-75
	<i>Rs.</i>	<i>Rs. Ps.</i>
1. Direct sale of Agricultural Machinery and Implements	89,48,782	96,13,209.08.
2. Hire purchase sales	18,71,464	1,52,814.86
3. Sale of spare parts	9,83,818	13,18,557.64
4. Sale of Kubotta components	24,84,908	Nil.
5. Sale of Fertilizers	92,536	Nil.
6. Sale of paddy seeds	Nil.	1,38,586.51
7. Sale of other items	54,596	83,528.37
8. Sale of Agro Chemicals	Nil.	1,16,458.53
9. Receipts from hiring	1,35,198	6,79,548.66
10. Receipts from work shops/Service Stations	1,35,198	1,68,356.58
11. Repayment of loans issued		..
12. Profit before provision for reserve and Taxes	9,65,634	7,98,391.80

*Source:* Kerala Agro Industries Corporation.

***Kerala State Warehousing Corporation:***

3.43 Kerala State Warehousing Corporation has improved its performance in several spheres of its activities. The corporation has already exceeded its target of creating 75 thousand tonnes of additional storage capacity by building a capacity of 135 thousand tonnes. Its demand on the State exchequer has been lower as it received only Rs. 10 lakhs as share capital from the Government against Rs. 16 lakhs allocated. The Corporation has been able to net a profit of over Rs. 10 lakhs during 1974-75. (See Table 3.16). This has been made possible by canvassing more deposits and increasing the storage charges. During this period, there has been an increase of nearly 50 per cent in the bank advances made. The commodity pattern of deposits received continued to be more or less the same, with only marginal changes (See Table 3.17). There has been an increase of nearly five per cent in food grains and a decline of the same order in sugar. The analysis of the commodity-wise deposit showed that the services and warehousing facilities of the Corporation were largely being utilised by the trade



while its services were not sufficiently popular with the farmers, For instance, foodgrains, fertilisers, sugar and CARE articles together accounted for nearly 90 per cent of the commodities received for storage by the Corporation. On the other hand, commodities which could have been deposited with the Corporation for securing better prices by the farmers such as pepper, copra, arecanut, cashew, coffee, rubber and cardamom, together constituted less than one and a half per cent of the commodities received by the Corporation for deposit. Warehousing as a means against the hazards of marketing and price fluctuation is yet to become popular with our farming community.

TABLE 3.16

## Warehousing Activities of Kerala State Warehousing Corporation

<i>Year</i>	<i>Number of Deposits</i>	<i>Deposits received in M.T.</i>	<i>Bank advances Rs.</i>	<i>Storage charges collected Rs.</i>	<i>Profit &amp; Loss Rs.</i>
1959-60	..	..	..	..	5,638
1960-61	361	725	4,44,000	2,669	(←)7,41,487
1961-62	827	5,939	24,00,000	28,780	(—)4,41,500
1962-63	1,811	14,545	48,24,600	76,448	(—)67,245
1963-64	2,447	13,490	73,83,782	92,361	(—)88,768
1964-65	3,357	25,052	78,53,797	1,00,554	(—)91,448
1965-66	3,932	40,456	82,34,629	172,782	(—)66,645
1966-67	5,042	54,256	86,07,409	2,39,477	(—)79,222
1967-68	5,512	66,282	70,56,121	3,97,376	(—)1,02,308
1968-69	5,366	68,726	76,85,132	4,22,018	(—)1,39,809
1969-70	5,400	60,929	93,56,235	5,13,765	(—)37,903
1970-71	5,471	89,011	60,44,089	5,48,392	(+)82,908
1971-72	7,803	1,64,859	1,08,01,601	843,392	(+)1,07,155
1972-73	8,922	1,69,586	1,44,28,000	10,27,780	(+)2,06,661
1973-74	10,918	2,27,037	1,68,55,088	12,52,021	(+)2,44,419
1974-75	11,396	2,75,951	2,40,00,000	22,00,748	(+)10,00,218

*Source:* Kerala State Warehousing Corporation.

TABLE 3.17

**Commodity-wise Deposits Received by the Kerala State  
Warehousing Corporation**

Sl. No.	Commodity	1973-74		1974-75	
		Commodity in tonnes	Percentage	Commodity in tonnes	Percentage
1.	Foodgrains	58,681	25.85	85,632	30.81
2.	Other foodgrains	4,632	2.04	6,841	2.46
3.	Grams and Pulses	1,084	0.48	1,374	0.49
4.	Pepper	876	0.39	874	0.32
5.	Copra	448	0.20	1,145	0.41
6.	Groundnut	393	0.18	407	0.14
7.	Oilcakes	47	0.12	160	0.06
8.	Areca nut	553	0.24	646	0.23
9.	Cashew	177	0.08	158	0.06
10.	Fertilisers	84,951	37.41	1,03,693	37.31
11.	Care Articles	18,343	8.07	24,374	8.76
12.	Cement	7,303	3.22	3,092	1.12
13.	Sugar	34,259	15.09	29,449	10.59
14.	Coffee	578	0.25	591	0.21
15.	Rubber	1,801	0.79	227	0.08
16.	Cardamom	25	0.01	16	0.01
17.	Miscellaneous	12,886	5.67	19,272	6.94
Total		2,27,037	100.00	2,77,951	100.00

Source: Kerala State Warehousing Corporation.

*State Farming Corporation of Kerala:*

3.44 The State Farming Corporation of Kerala was formed primarily to supplement the raw material requirements of the under-utilised sugar mills in the State by cultivating sugarcane on forest lands. Some of the sugar mills have very substantial unutilised capacities. At the time of the establishment of these mills, sugar cane cultivation was very much in vogue in the feeding zones of the factories. Due to the general shortage of rice in the State, the price differential between paddy and sugarcane has been widening. Paddy priced out sugarcane from cultivation in these areas as both compete for the same type of land resource. Under the prevailing

price relationship between paddy and sugarcane unless various institutional measures are taken to encourage sugarcane cultivation the prospect of producing sufficient cane by the farmers to feed the mills is not very bright. The decline of the abnormal rise in the price of paddy if continued and stabilised at some reasonable level, farmers might be persuaded or even compelled to switch over from paddy to sugarcane cultivation in these areas.

3.45 In increasing the production capacities of the sugar mills, the State Farming Corporation has been playing a very vital role. Even if sufficient sugarcane were made available from farmers' sources, the Corporation's role would still be crucial as it alone can make production adjustments and supply schedules with respect to seasons and time. In its effort of supporting the needs of the sugar mills, the Corporation has been sustaining losses over the years and within two years of its operation, it had accumulated loss of over Rs. 38 lakhs. The Corporation has taken up a number of measures to minimise the loss which included the introduction of irrigation in its farms, adoption of modern techniques of farming and diversification of production. Areas within the farm which are not suitable for sugarcane, were planted with appropriate crops such as banana, tapioca, pineapple, coconut, cocoa, cashew, hill paddy etc. The Sugarcane mills in the State continued to work much below their installed capacities. In fact, all of them crushed less sugarcane during 1975 than in the previous year. (See Table 3.18).

TABLE 3.18

**Installed capacity and Utilisation of Sugar Mills in Kerala**

<i>Name of the Mill</i>	<i>Installed capacity (metric tonnes)</i>		<i>Cane crushed</i>		
	<i>per day</i>	<i>Annual (200 days)</i>	1972-73	1973-74	1974-75
1. Mannam Sugar Mills, Pandalam	1,000	2,00,000	60,085	65,530	61,901
2. Pamba River Factory	850	1,70,000	63,883	63,661	48,273
3. Co-operative Sugars Ltd., Chittur	1,000	2,00,000	1,21,016	1,92,481	1,43,273
<b>Total</b>	<b>2,850</b>	<b>5,70,000</b>	<b>2,44,984</b>	<b>3,21,672</b>	<b>2,52,847</b>

### *Central Sector Projects:*

3.46 The Government of India provided support through its agencies for the development of a few crops which are valuable to the economy of the State. They included coconut and spices. The Directorate of Coconut Development, Ministry of Agriculture and Irrigation, Government of India, extended financial support to three projects for coconut development. They were the Coconut package programme, production and distribution of hybrid seedlings and rejuvenation of diseased coconut gardens. Under the package programme for coconut development, so far 63 units covering an area of 31,500 hectares have been established against the Fifth Five Year Plan target of 93,500 hectares. At present 67 thousand farmers are participating in this programme. Over six hundred demonstrations have been laid out; 61 pumpsets have been installed and medium term credit of Rs. 73.39 lakhs and Rs. 8.35 lakhs respectively for fertilisers and pumpsets have been distributed. Production of hybrid seedlings by crossing West Coast Tall and Dwarf varieties was another important programme financed by the Directorate. Under the scheme, 27,000 seedlings were produced and distributed and over 80,300 hybrid nuts resulting from crosses already done have been harvested. In the highly diseased areas, a programme for the rejuvenation of coconut gardens by replanting the diseased ones and under-planting with hybrid seedlings, has been taken up in the Muthukulam Community Development Block as a pilot project. So far over 860 hectares have been covered.

3.47 The Directorate of Arecanut and Spices Development supported a few programmes for the development of spices, particularly pepper and ginger. Establishment and maintenance of progeny orchards of the high yielding variety, Panniyoor-1, the production and distribution of rooted cuttings of pepper and high yielding ginger, were the important programmes supported by the Directorate. During the first two years of the Fifth Five Year Plan, 22 hectares of progeny orchards of pepper and 2½ hectares of nursery for ginger have been established. In addition, 254 plots for demonstrating the superiority of the high yielding variety of pepper, Panniyoor-I, have been laid out. Control of pests and diseases of pepper was demonstrated in an area of 400 hectares.

3.48 The State Farms Corporation of India has established a State farm at Aralam in Cannanore District on the forest land made available. Since its establishment, the farm has taken possession of over 3,000 hectares out of which nearly 400 hectares are either not fit for cultivation or have been to put various uses such as roads, buildings etc. Nearly 1,300 hectares have been brought under different plantation crops such as coconut, cashew, rubber,

lemon grass and other tree crops. Apart from the plantation and perennial crops, annual and seasonal crops like tapioca mostly as inter crop in coconut plantings, banana, sweet potato and paddy were also planted. In addition to its demonstration function, the farm is also being developed as a centre for the production of high quality planting materials. A nursery for high quality planting materials of rubber and coconut seedlings have already been established. In order to make available large quantities of D x T hybrid seed nuts, an elite seed garden covering 200 hectares has been planned. Dwarf Orange and West Coast Tall varieties of coconuts have already been planted in 30 hectares, and the project is expected to be completed in three years. Multiplication of planting materials of high yielding strain of tapioca was also a project proposed for implementation.

### *Small Farmer Development.*

3.49 With the inauguration of Small Farmers Development Agencies in the Districts of Trivandrum and Trichur, the State is now covered with this programme in four districts. The new projects are being formulated on the basis of experience gained in implementing small farmer development projects in the districts of Quilon and Cannanore which were launched towards the latter half of the Fourth Five Year Plan. The period of life of the older projects has been extended for a period of three more years. These agencies are to help the development of three group of people who are primarily dependant on land for their livelihood. They are the small farmer, the marginal farmer and the agricultural labour. Some major policy changes in the implementation of these projects have been brought about during this year. Changes have been brought about in the definition of these various groups for their identification. Accordingly, a small farmer is defined as a cultivator who owned land between one and two hectares, a marginal farmer as one who owned land up to one hectare and an agricultural labour as one who owned no land but a homestead and worked as hired labour and derived more than fifty per cent of the income as wages from agricultural operations. However, these identified persons who have a steady off farm income of Rs. 200 or more per month for the family will not be covered by any programme of the Agency. Another major policy change has been the integration of the small farmer and marginal farmer projects and thereby extending the operational area of the latter to the coterminus with the former. Each project is to be confined to one revenue district and will attempt to cover 50,000 beneficiaries during a five year period of operation adopting a compact area approach within the district. The proportion of small and marginal farmer beneficiaries will be roughly in proportion of their total numerical strength in the

project area. Both groups are to have similar development programmes but the scale of assistance would vary. Generally the small farmer received a subsidy of 25 per cent while the marginal farmers would be eligible for a subsidy up to 33 per cent. An apparent change in the programme content seems to have been the greater emphasis on the exploitation of the limited land resources of the small farmer than on subsidiary occupations and on priorities to tackle the felt needs and the creation of durable assets.

#### *Small Farmer Development Agencies of Quilon and Cannanore:*

3.50 Over 20,000 farmers have been identified during the period bringing the total to nearly 125,000 (See Table 3.19). Enrolment in the co-operatives has increased by 4,500 bringing the membership level to over 64,000. Co-operatives have extended about Rs 136 lakhs, Rs 32 lakhs and Rs 13 lakhs under short, medium and long term credit respectively. Similarly, the commercial banks have extended about Rs 5 lakhs under short-term loan and Rs 4 lakhs under long-term loan. The Kerala State Agro-Industries Corporation made available over Rs 14 lakhs for hire purchase of equipments. During the period, 43 minor irrigation works and community soil conservation works benefiting 900 hectares were completed. In order to foster supplementary occupations, 610 milch cattle and 983 goats were distributed.

3.51 Marginal farmer development projects also made good progress. Over 29,000 participants were newly identified bringing the total to 107,000 farmers (See Table 3.20). Over 13,000 marginal farmers were newly enrolled in the co-operatives. Co-operatives extended about Rs 47 lakhs, Rs 21 lakhs and Rs 5 lakhs under short, medium and long term credits respectively. Commercial banks provided term loans of over Rs. 2 lakhs. Agro-Industries Corporation provided hire purchase facilities to the extent of nearly Rs 10 lakhs.

#### *Small Farmers Development Agencies of Trivandrum & Trichur:*

3.52 The Small Farmer Development Agency, Trivandrum was registered in March, 1975 and formally inaugurated in August, 1975. During a period of five years, the project is expected to invest Rs 150 lakhs for various programmes which should help strengthen the economic base of 7,000 small and 43,000 marginal farmers identified in the District. Apart from the investments proposed to be made directly by the Agency, institutional finance to the extent of 3 to 4 times would also be mobilised. The project report has been prepared and sent to Government of India for approval

TABLE 3.19

**Selected indicators of the progress of the SFDA Programme—  
Quilon and Cannanore**

<i>Indicators</i>	<i>Unit</i>	<i>Achievement during 1974-75</i>	<i>Cumulative till the end of March 1975</i>
(1)	(2)	(3)	(4)
<i>General</i>			
1. Participants identified	Nos.	19882	125954
2. Enrolment in the Co-operatives	"	4537	64204
3. Wells and Tanks dug	"	347	583
4. Filter point tube wells installed	"	7	113
5. Pumps distributed	"	429	2487
6. Community tube wells installed/irrigation works	"	..	5
7. Minor Irrigation works executed	"	43	101
8. Community soil conservation works executed	Hect.	900	1087
9. Land Development works executed	Nos.	96	214
10. Seedlings and Planting materials supplied	"	..	..
11. Bore ploughs distributed	"	3237	9186
12. Plant protection equipments distributed	"	455	1911
13. Milch cattle supplied	"	610	2699
14. Poultry birds supplied	"	20	633
15. Ducklings supplied	"	10	26
16. Goats supplied	"	983	983
17. Custom service of tractors	Hect.	8	204
18. Rural custom Service Units	Nos.	1	5
19. Demonstration plots laid	"	..	1199
20. Fodder plots laid	"	..	1000
21. Homestead gardens established	"	300	300
22. Farmers trained	"	450	800
23. Expansion of district poultry farm	"	1	1
24. Piglings supplied	No. of farmers	..	41
25. Participants assisted under Rural Artisans Scheme	Nos.	147	204
26. Do. Rural works programme	"	..	..

(1)	(2)	(3)	(4)
<b>Strengthening of Co-operatives*</b>			
27. Godowns subsidy to co-operatives	Rs. lakhs	..	..
28. Managerial assistance to co-operatives	"	6.45	1.85
29. Share capital loans to co-operatives	"	1.92	5.48
30. Interest rebate to co-operatives	"	3.95	4.30
31. Capital subsidy to co-operatives	"	..	..
32. Risks fund contribution	"	..	..
33. Interest free loans for purchase of shares	"	..	..
<b>34. Credit (Commercial Year)</b>			
<b>(a) Co-operatives:—</b>			
Short term	Rs. lakhs	135.60	469.89
Medium term	"	92.28	195.25
Long term	"	12.92	25.28
<b>(b) Commercial Banks:—</b>			
Short term	"	5.97	13.24
Term loans	"	4.01	20.50
<b>(c) Agro-industries Corporation</b>			
	"	14.48	30.22

\*For Sl. Nos. 27 to 33 information relates to SFDA Cannanore only.

Source: Small Farmers Development Agencies, Quilon & Cannanore

TABLE 3.20

**Selected indicators of the progress of MFAI programmes—  
Quilon and Cannanore**

Indicators	Unit	Achievement during 1974-75	Cumulative till the end of March 1975
(1)	(2)	(3)	(4)
<b>General</b>			
1. Participants identified	Nos.	29315	108747
2. Enrolled in the co-operatives	"	13097	19501
3. Wells dug	"	344	472
4. Filter point tube-wells installed	"	..	..
5. Pumpsets distributed	"	210	210



(1)	(2)	(3)	(4)
6. Community tube wells installed	Nos.		
7. Petty Minor Irrigation	"		
8. Community soil conservation works executed	Hect.	100	107
9. Land Development works executed	Nos.		
10. Seedlings and planting materials supplied	"	24440	96768
11. Bose plough distributed	"	1219	3519
12. Plant protection equipments distributed	"	174	229
13. Milch cattle supplied	"	573	638
14. Poultry birds supplied	"	76	76
15. Ducklings supplied	"	6	6
16. Goats supplied	"	7921	7921
17. Custom service of tractors	Hect.	70	70
18. Demonstration plots laid	Nos.	78	430
19. Fodder plots laid	"		
20. Homestead gardens established	"		
21. Rural custom service units established	"		
22. Farmers trained	"		
23. Expansion of district poultry farm	"	1	1
24. Piglings supplied	No. of farmers		
25. Boats and nets supplied	No. of fishermen	3	3
26. Participants assisted under Rural Artisans Scheme	Nos.	61	61
27. Do. under Rural Works Programme	"	2212	12784
<i>Strengthening of co-operatives*</i>			
28. Godown subsidy to co-operatives	Nos.		
29. Managerial assistance to Co-operatives	"	1	1
30. Share capital loan to co-operatives	"		
31. Capital subsidy to co-operatives	"		
32. Interest rebate to co-operatives	"		
33. Risk fund contribution to co-operatives	"	1	1
<b>34. Credit (Commercial Year)</b>			
<b>(a) Co-operatives:</b>			
Short terms	Rs. lakhs	47.40	69.22
Medium term	"	21.33	30.31
Long term	"	4.83	5.19
<b>(b) Commercial Banks:</b>			
Short term	"	0.39	2.88
Term loans	"	2.43	5.08
<b>(c) Agro-Industries Corporation</b>			
	"	9.87	9.87

\*For Sl. Nos. 28 to 33 information relates to M.F.A.I. Quilon only

Source: Small Farmers Development Agencies, Quilon & Cannanore

3.53 Small Farmer Development Agency, Trichur was registered in April 1975 and inaugurated in August, 1975. This agency is also expected to invest over Rs. 150 lakhs directly and 3 to 4 times the same through institutional financing agencies for the development of 7,000 small farmers and 43,000 marginal farmers and agricultural labourers in the district.

#### *Western Ghat Development:*

3.54 The importance of an integrated approach for the accelerated development of important geographically contiguous regions which cut across several States in the country has been recognised by the National Development Council. One such region identified for special development during the Fifth Five Year Plan has been the Western Ghat sprawling over Kerala, Tamil Nadu, Karnataka, Goa and Maharashtra. The task of evolving a suitable plan for the integrated development of this region was entrusted to a high level committee consisting of the Chief Ministers of the constituent States. Union Minister for Industries, Member (Agriculture) Planning Commission and Chairman, Atomic Energy Commission. The schemes for the integrated development of this region have been conceived as additive to the plan. The programme has been mainly directed towards the economic well-being of the population in hilly areas and exploitation of resources of the region. The content of the plan drawn up by the committee emphasised the development of plantations, horticulture, afforestation, minor irrigation animal husbandry and tourism.

3.55 The Government of Kerala had prepared six projects covering the development sectors of dairying, agriculture, afforestation and fisheries at a total investment of nearly Rs. 18 crores. Two dairy development schemes one in Idukki district and the other in Attappady tribal area have been sanctioned and an amount of Rs. 38 lakhs has been allocated for these projects by the Planning Commission during 1974-75. Under dairy development projects, already an investment of over Rs. 16 lakhs has been made in the Idukki district on feed subsidy, insemination rebate assistance to dairy co-operatives, establishing chilling plants, procuring transport vehicles and the development of communication. About Rs. 2.89 lakhs have been invested on similar activities under the dairy development scheme for Attappady. A project for the organisation of co-operative farms in the Attappady tribal area has also been approved. Nearly Rs. 5 lakhs have been spent on this project.

#### *Food Situation:*

3.56 The year 1975, particularly its latter half, has been a period of relative ease in the availability of food. The over all availability

of food grains has been maintained at the previous year's level though the import of rice on State account declined by about 30 per cent. This could be achieved through better management of the reduced rice supplies, improvements in the internal production of rice and large wheat imports on State account. The per capita

TABLE 3.21

**Availability of Food in the State—1971-75**

(1 tonne of rice=2.22 tonnes of raw-tapioca)

<i>Particulars</i>	<i>Unit</i>	1971	1972	1973	1974	1975
1. Population of the State as on 1st April	(Lakhs)	213.47	218.38	223.40	227.50	232.20
2. Production of rice in the State	(Lakh tonnes)	12.98	13.52	13.36	12.57	13.84
3. Import of rice on State account	(Lakh tonnes)	7.47	7.74	7.20	7.44	5.12
4. Import of wheat on State account	(Lakh tonnes)	0.55	0.83	1.98	2.42	5.15
5. Production of raw tapioca	(Lakh tonnes)	46.17	54.29	56.92	56.60	56.25
*6. Per capita availability of rice from internal production	(Grams)	150	155	158	136	188
7. Per capita availability of imported rice on State account	(Gms.)	96	98	88	90	64
8. Per capita availability of rice from internal production and imports on State account	(Gms)	246	250	246	226	202
9. Per capita availability of wheat from imports on State account	(Gms)	7	10	24	29	61
†10. Per capita availability of rice equivalent of tapioca.	(Gms.)	201	231	237	232	223
11. Per capita availability of food-grains including rice and wheat from internal production and imports on State account	(Gms.)	253	260	270	255	268
12. Per capita availability of food grains including rice and wheat from internal production and imports through State account and rice equivalent of tapioca, available for consumption	(Gms.)	454	491	507	487	486

\*Ten per cent of the Production is set apart for a seed, feed and other wastage and the rest alone is accounted for as available for consumption.

†Twenty five per cent of the production is set apart for industrial uses such as Sago and Starch manufacturing and animal and poultry feed, and the rest alone is accounted for as available for consumption.

availability of foodgrains from internal production together with import of rice and wheat on State account, improved over 1974 by 9 grams per day. (See Table 3.21). The poor harvest of rice in the country and less-than-easy availability in the international market, have necessitated a reduction in the quantum of rice made available through the public distribution system by 29 per cent from 90 to 64 grams per capita per day. However, improvements in internal production enabled to reduce the shortfall in the availability of rice per capita per day and it has been only less than 12 per cent over the previous year. The deficiency in rice supply has been more than made up by doubling the per capita availability of wheat from 29 to 61 grams per capita per day. Tapioca consumption in the State is quite substantial. There was only a marginal decline of 9 grams (rice equivalent) in the availability of tapioca during the year. When tapioca was also added to the food basket, the State has been able to maintain the availability of food at the previous year's level of about 486 grams per capita per day. While the import of rice on State account was reduced by a third over 1974 level from 744 to 512 thousand tonnes, the import of wheat doubled from 242 to 515 thousand tonnes during 1975. (See Table 3.22).

3.57 The public distribution system with a net work of nearly 11,400 retail outlets had been handling every month on an average

TABLE 3.22

## Imports of Foodgrains on State Account

(in '000 tonnes)

Month	Rice		Wheat*	
	1974	1975	1974†	1975†
January	64.9	40.4	7.8	44.6
February	68.6	37.1	8.0	41.0
March	69.0	34.3	8.0	42.0
April	79.5	34.2	8.0	42.4
May	78.1	38.3	7.9	44.8
June	69.0	37.3	7.9	39.9
July	82.0	59.9	5.9	50.9
August	86.3	53.9	8.1	49.5
September	44.9	38.3	35.9	47.6
October	34.6	42.6	42.1	40.0
November	29.3	45.6	54.9	39.4
December	38.2	49.6	47.6	42.1
Total	744.4	511.5	242.1	515.2

\*Quantity of wheat given includes quantity issued to mills etc., for making wheat products.

†Quantity received from the FCI during the year.

Source: Directorate of Civil Supplies, Government of Kerala.

86,300 tonnes of food grains against 82,400 tonnes of food grains in 1974. (See Table 3.23). Though in respect of rice there has been a decline of over 21,000 tonnes in the monthly average, the quantum of wheat distributed showed an increase of 25,000 tonnes. As part of the effort to tone up the public distribution system, a complete verification of the ration cards in circulation was conducted in May 1974 and fresh ration cards were distributed during the year. During the process about 37,300 bogus ration cards were surrendered resulting in a saving of over 20.25 lakh ration units. By the end of 1975, there were 37.84 lakh ration cards including 4.14 lakhs temporary cards. Together they comprised 490.64 lakh ration units.

TABLE 3.23

**Distribution of Rice and Wheat Through the Public Distribution System**

Month	Rice distributed (in tonnes)		Wheat distributed (in tonnes)	
	1974	1975	1974	1975
January	75775	41539	2576	46445
February	69292	37278	3469	38207
March	76128	41093	4261	45710
April	75846	40154	3665	41854
May	75470	41836	4225	42991
June	73300	40672	4177	42033
July	81800	54914	4059	45443
August	85925	55696	4700	41175
September	48400	37548	32055	42058
October	46563	41065	35610	42940
November	29203	40348	50420	39791
December	44868	58918	53302	36181
<b>Total</b>	<b>785570</b>	<b>531061</b>	<b>202519</b>	<b>504828</b>
<b>Monthly average</b>	<b>65464</b>	<b>44255</b>	<b>16877</b>	<b>42069</b>

Source: Directorate of Civil Supplies, Government of Kerala.

3.58 During the year 1975 the quantum of grains distributed through the public distribution system was on the increase. Throughout the year, it was possible for the system to provide a minimum of 80 grams of rice till November 1975, and up to hundred grams since then. During September-November it was even possible to supply an extra 1 kg. of rice per card per week. The supply of wheat was more liberal. While a minimum of 80 gms. per adult per day could be maintained throughout the year, for most of the period, the supply could be enhanced upto 240 gms. per day. As the year was ending 100 grams of rice and upto 240 gms. of wheat per adult per day and 1 kg. of rice per card per week could be supplied through the public distribution system. Apart from foodgrains, some other essential commodities

were also supplied through the public distribution system. The quantity of coarse cloth allotted increased from about 28,200 to 37,400 bales, sugar from 91.6 to 97.6 thousand tonnes and kerosene from 92,100 to 107,300 tonnes (see Table 3.24).

#### Procurement:

3.59 There has been a decline in the quantity of paddy procured during 1974-75 over the previous year (See Table 3.25). Proportion of paddy procured to what is produced within the State, declined from 4.25 to 2.93 per cent. In August 1975 a fresh notification was issued revising the levy rates and reclassifying the paddy growing areas into different categories.

#### Kerala State Civil Supplies Corporation:

3.60 In order to acquire a commanding position in the distribution of essential commodities and to make available more essential commodities at fair prices, the Kerala State Civil Supplies Corporation was formed as a private limited company in August 1974. The Corporation has commenced the distribution of rice, pulses, wheat products, coconut-oil, soaps, note books and petroleum products through its own retail outlets or agents. A wide net work of outlets is being organised.

TABLE 3.24

#### Public Distribution System of Potential Commodities in Kerala

Particulars	Unit	Years	
		1974	1975
1. No. of ration card and permits (as on 1st April):			
(a) Ration cards for families	No.	36,10,291	36,16,108
(b) Ration permits for institutions	No.	8,057	7,634
2. No. of F.C.I. Sub Depots	No.	22	22
3. No. of wholesale shops:			
(a) Co-operatives	No.	35	41
(b) Others	No.	213	215
(c) Total wholesale shops	No.	248	256
4. No. of retail shops:			
(a) Co-operatives	No.	8,137	9,037
(b) Others	No.	8,122	8,354
(c) Total	No.	11,259	11,391
5. Quantity of coarse cloths (allotted)	('000 sq. metres)	28,229*	37,396*
6. What products distributed	M. Tonnes	35,143	29,933
7. Sugar†	"	91,550	97,636
8. Kerosene	"	92,088	1,07,336

\*18819.50 Std. bales. 1std bale—1500 sq. metres.

\*24930.75 Std. bales.

†Revised figure obtained from the Kerala Civil Supplies Corporation

Source: Directorate of Civil Supplies, Government of Kerala.

TABLE 3.25

## Procurement of Paddy

Month	Quantity in tonnes	
	1973-74	1974-75
July	166.9	75.7
August	322.4	123.9
September	2820.6	1009.8
October	26301.8	12841.0
November	13602.3	12419.7
December	5540.0	3635.7
January	4648.2	2066.9
February	8541.2	4381.5
March	14667.4	13787.9
April	2512.6	6612.1
May	1469.1	2066.0
June	798.7	577.7
<b>Total</b>	<b>81391.2</b>	<b>59597.9</b>
Proportion of rice procured to total internal production in percent	4.25	2.93

Source:—Directorate of Civil Supplies, Government of Kerala.

### Soil Conservation:

3.61 High rainfall together with undulating topographical conditions has rendered a substantial part of the land surface in the State highly vulnerable to the hazards of soil erosion. It is estimated that nearly 10 lakh hectares of arable land is subjected to the hazards of soil erosion whose causal factor is water. Highly vulnerable areas are identified and soil and water conservation measures are instituted under the provisions of the Kerala Land Development Act, 17 of 1964. Since 1955-56 and till 1973-74, 216 Soil Conservation Schemes involving a total investment of Rs. 259.63 lakhs were executed. Another 38 schemes were under various stages of implementation. It is proposed to protect five thousand hectares of arable land involving an investment of Rs. 107.5 lakhs during the Fifth Five Year Plan. During 1974-75, over 787 hectares of land have been protected an investment of Rs. 24.5 lakhs. (See Table 3.26).

3.62 Apart from the projects initiated under Kerala Land Development Act, soil conservation projects sponsored by the Small Farmer Development Agencies are also being implemented in the Districts of Cannanore and Quilon. During 1974-75 over 49 such projects were in existence under various stages of implementation benefiting an area of over 1200 hectares at a cost of Rs. 13.73 lakhs.

TABLE 3.26

**Progress of Soil Conservation and Soil Survey Schemes in Kerala State during 1974-75**

Schemes	Achievements	
	Physical (in hecst.)	Financial (Rs. in lakhs)
<b>I. Soil Conservation Schemes</b>		
<b>(a) State Plan Schemes</b>		
(1) Soil and water conservation in arable lands	593.44	13.436
(2) Reclamation of waterlogged areas	50.00	0.420
(3) Soil conservation in river valley catchment of Idukki	50.00	1.890
(4) Do. in lands belonging to Harijan/Tribal landless allottees etc.	94.00	6.060
(5) Soil conservation in irrigated lands	..	0.550
(6) Do. Research and Training	..	2.160
<b>Total</b>	<b>787.44</b>	<b>24.516</b>
<b>(b) Centrally Sponsored Schemes</b>		
(1) Soil conservation in the catchment of Kundah River Valley Project	438.00	7.920
<b>Total Soil Conservation (State &amp; Central)</b>	<b>1225.44</b>	<b>32.436</b>
<b>II. Soil Survey Schemes</b>		
(1) Soil Survey in Command areas and Problem Areas	81000.0	1.900
<b>Grand Total (I &amp; II)</b>	<b>82225.44</b>	<b>34.336</b>

Source: Department of Agriculture (Soil Conservation), Government of Kerala.

**Soil Survey:**

3.63 Soil Survey is an important pre-requisite in order to evolve appropriate soil and land management practices and to design cropping patterns based on them. Apart from the rapid Reconnaissance Soil Survey (RSS) and Detailed Soil Survey (DSS), Pre-irrigation Survey is also being undertaken in the command areas of the irrigation projects. Till the end of Fourth Five Year Plan an additional 4.95 lakh hectares under DSS have been covered. During 1974-75 over 28,000 hectares, 46,300 hectares and 16,300 hectares have been covered respectively under RSS, DSS and pre-irrigation



surveys. Soil Survey is also envisaged in Government lands and forest lands in order to prepare land use plans for the lands which have become available for distribution.

#### ***Kerala State Land Use Board:***

3.64 Land is one of the scarcest resources available in the State. The importance of designing and implementing appropriate policies and programmes for the scientific management of the land so as to ensure optimum utilisation of these resources has been fully appreciated and recognised. At the time of the discussions on the formulation of the Fifth Five Year Plan, the urgency for creating an organisation to keep a continuous watch on the problems and use and conservation of land resources, and to strengthen and streamline the existing arrangements for the assessment and management of the State's Land resources, was recognised. Against this background the Kerala State Land Use Board was constituted in April 1975 with the Chief Minister as the Chairman.

The main functions assigned to the Land Use Board are:

- (i) to Collect and collate data on land resources and land use;
- (ii) to undertake surveys on current land resource uses;
- (iii) to initiate studies on appropriate land use and related aspects;
- (iv) to recommend appropriate policy framework to help the Government to arrive at correct decisions on land-use and
- (v) to monitor and co-ordinate the implementation of the decisions of the Government related to land-use without displacing the existing agencies.

3.65 The Board started functioning in August 1975. A long term plan for the management of land and soil resources of the State involving an investment of Rs. 19 crores over a period of 25 years has been prepared. Studies on the land use practices of the command areas of Malampuzha and Neyyar Irrigation Projects have also been completed. These studies have revealed considerable scope for increasing land use efficiency in both the command areas by adopting suitable cropping patterns and by economising the use of irrigation water. Studies on the utilisation of cultivable waste lands in Kasaragod taluk and on the appropriate utilisation of forest lands in Idukki District have also been initiated.

#### ***Kerala Land Development Corporation:***

3.66 Kuttanad Development Project has been the first project entrusted to the Kerala Land Development Corporation for implementation. The Kerala Land Development Corporation Limited

(Special Powers) Act of 1974 has empowered the Corporation to take up land development schemes in individual padasekharams in Kuttanad. Most of the legal difficulties in implementing the project have been overcome with the conferment of powers deriving from this Act. During 1974-75 despite the innumerable difficulties that the Corporation had to face, it has been possible to organise work in over 59 padasekharams covering an area of over 4700 hectares, involving 6,080 cultivators. The works were in various stages of implementation and Rs. 63.54 lakhs have already been spent. So far, works have been completed in 7 padasekharams benefiting an area of 190 hectares, involving 304 cultivators. The cost of completed works amounted to Rs. 4.7 lakhs and the length of bunds put up exceeded 11 kms. For the working season 1975-76, an ambitious programme involving an investment of Rs. 150 lakhs has been drawn up. The Corporation has plans to extend its activities to other areas in the State. The Trichur Kole Lands Development Project intended to benefit an area of 11000 hectares of kole lands involving an outlay of about Rs. 14 crores is already under the active consideration of the Government and the Corporation. Investigation of some of the schemes in other areas in the State which are considered economically viable is also in progress.

### *Agricultural Credit*

#### *Short Term Credit:*

3.67 During the last co-operative year (July 1974—June 1975) the co-operative credit system in the State maintained the tempo of activities at the level of previous year particularly in the area of short term financing of agriculture. The credit societies registered significant progress in certain areas (See Table 3.27). The average membership of the societies increased from 1150 to 1221 and the average share capital of the societies moved up from Rs. 77,000 to

TABLE 3.27

#### **Selected Indicators on the Performance of Agricultural Credit Societies**

(Amount in Rs. lakhs).

Sl. No.	Details	As on		
		30-6-1973	30-6-1974	30-6-1975
(1)	(2)	(3)	(4)	(5)
1.	No. of Societies	18.11	1753	1731
2.	No. of members (lakhs)	18.61	20.19	21.14
3.	Paid up share capital (Rs. in lakhs)	1281.76	1350.00	1418.27

(1)	(2)	(3)	(4)	(5)
4.	Statutory reserves	141.07	150.00	
5.	Other reserves	243.00	250.00	491.82
6.	Deposits	1270.00	1443.00	2092.02
7.	Other borrowings	3693.00	3797.00	4109.75
8.	Working Capital	6629.00	6990.00	8779.80
9.	Loans advanced during the year	4085.00	4484.00	4960.17
	(a) Short term	3547.00	3972.00	4292.30
	(b) Medium term	538.00	512.00	667.87
10.	Loans outstanding at the end of the year	4617.00	5282.00	5499.26
11.	Loans overdue	1638.00	1708.00	2533.53
12.	No. of societies that worked at profit	985	906	922
13.	Net profit for the year (Rs. lakhs)	96.00	108.00	157.87
14.	No. of societies that worked at loss	811	792	777
15.	Loss sustained (Rs. lakhs)	107.00	108.00	143.22
16.	No. of societies without profit/loss	15	55	32

Source : Registrar of Cooperative Societies, Government of Kerala.

TABLE 3.28

**Selected Indicators of the Credit Operations of the  
Agricultural Societies**

Sl. No.	Details	As on		
		30-6-1973	30-6-1974	30-6-1975
(1)	(2)	(3)	(4)	(5)
1.	Average membership per society	1027	1150	1221
2.	Average share capital per society (Rs.)	70,790	77,000	81,934
3.	Average deposit per society (Rs.)	70,127	82,300	1,20,856
4.	Average deposit per member (Rs.)	68	71	99
5.	Average working capital per society (Rs.)	3,71,844	3,98,700	5,07,210
6.	Average loans per member (Rs.)	220	222	235
7.	Percentage of borrowing member to total member	49	50	55*
8.	Average loan advanced per advancing society (Rs.)	2,71,594	2,72,000	2,78,000*
9.	Average loan advanced per borrowing member (Rs.)	451	450	458*
10.	Percentage of overdue to outstanding	35	33	46

Provisional.

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

nearly Rs 82,000. There has been a significant improvement in the deposit mobilisation effort. The average deposit per society increased by nearly 50 per cent from Rs 82,300 to Rs 1,20,900. (See Table 3.28). Similarly the working capital of the societies registered an increase of over 25 per cent from nearly Rs 4 lakhs to over Rs 5 lakhs. The borrowing activities also expanded considerably from nearly Rs 38 crores to over Rs 41 crores. The societies worked on profit, increased from 906 to 922 registering nearly 50 per cent increase in the net profit aggregatively from Rs 108 lakhs to Rs 158 lakhs. Though the number of societies worked at a loss declined from 792 to 777 the aggregate loss from Rs 108 lakhs to Rs 143 lakhs. Though there has been improvement in the loans advanced as the loans outstanding moved up from Rs 52.82 crores to Rs 54.99 crores there has been a disturbing increase in the loans overdue from Rs 17.08 crores to Rs 25.34 crores.

3.68 The agricultural credit operations of the co-operatives have registered more than modest progress. Membership increased by about 5 per cent from 20.19 to 21.14 lakhs. Though credit advanced did not show the same rate of expansion as in the previous years, still during 1974-75 this activity has registered some progress. Short term loans disbursed increased from Rs 39.72 crores to Rs 42.92 crores. The average of credit advanced per member increased still further from Rs 222 to Rs 235. So also the average loan advanced per borrowing member increased from Rs 450 to Rs 458. There was improvement in the proportion of borrowing members from 50 to 55 per cent. However there has been significant erosion in the financial strength of the societies as the overdue to outstanding shot up from 33 to 46 per cent.

#### *Long-term Credit:*

3.69 Long term finance required for agricultural development is channeled through the Kerala Co-operative Central Land Mortgage Bank (KCCLMB) and its affiliates, the Primary Land Mortgage Banks. During 1974-75 there were 31 Primary Land Mortgage Banks affiliated to the Central Bank of which eight were newly organised. Total long-term credit advanced during 1974-75 amounted to Rs 346.34 lakhs. Loans outstanding as on June 30, 1975 of the Central Bank stood at Rs 17.7 crores. Long term credit has been advanced under two programmes viz., ordinary loaning programme and special agricultural development programme. Under the former, long term financing is provided to the members through the primary land mortgage banks. The resource required for financing is mobilised primarily from the debentures sold by the Central Bank and the share capital raised by the primary banks. While under the latter, agricultural development programmes with specifically identified purposes are taken up in

compact areas and refinanced by the Agricultural Refinancing and Development Corporation (ARDC).

**Ordinary Loaning Programme:**

3.70 Long-term credit under the ordinary loaning programme advanced during 1974-75 amounted to Rs. 273 lakhs covering a variety of purposes. The largest single item of development financed was levelling and bunding which accounted for over a third of the investments. (See Table 3.29) Construction of new wells, building cattle sheds and farm houses and raising plantations were the other important items for which finance was made available. The Reserve Bank of India has issued instructions to the effect that 90 per cent of the advances should be for productive purposes and that 70 per cent of the total issued should be for 'identifiable production purposes'. The identifiable productive purposes proposed by the Reserve Bank of India such as new wells, tanks, pumpsets

TABLE 3.29

**Ordinary Loaning Programme of the Kerala Central Co-operative Land Mortgage Bank**

(Amount Rupees in lakhs)

Purpose	1972-73	1973-74	1974-75
1. New wells	49.95	36.83	40.99
2. New tanks	6.23	5.79	7.69
3. Pumpsets	13.71	17.21	9.91
4. Agricultural machinery	1.39	1.08	0.53
5. Repairs to wells	10.86	12.03	14.19
6. Do. tanks	1.85	1.15	0.81
7. Persian wheels	0.41	0.01	..
8. Field channels	1.26	4.70	1.69
9. Cattle shed & farm house	20.45	29.45	30.48
10. Fencing	17.01	17.71	18.66
11. Levelling and bunding	80.51	83.20	88.46
12. Terracing	10.85	8.36	15.90
13. Drainage channels	0.14	0.04	2.44
14. Plantations	47.14	50.18	38.45
15. Others	3.60	4.80	3.26
<b>Total</b>	<b>265.36</b>	<b>272.56</b>	<b>272.99</b>

Source: Kerala Central Co-operative Land Mortgage Bank Ltd., Trivandrum.

and agricultural machinery, have relatively smaller scope than the 'non-identifiable' category of productive purposes like levelling, bunding, reclamation of land etc., in the State. Generally land development works such as these mentioned above are of productive nature. The benefits emanating from these are not tangible over a short term and hence not easily identifiable but are of crucial importance to the development of agriculture in the State given the heavy rainfall and topographic conditions. The introduction of the new criteria for the disbursement of long term finance by the Reserve Bank of India has resulted in some difficulties in extending long term finance on account of the singular conditions obtaining in the State, in contrast with other States in the country. Having considered the special features of the State, the Reserve Bank of India concurred that credit advances made available for 'identifiable productive purposes' should be at least 30 per cent of the total loans issued. As the KCCLMB could not adhere to the new stipulations the ordinary loaning programme of the bank was reduced by about Rs. 40 lakhs during last year. However, steps have already been initiated to correct the imbalance so that there would not be any reduction in the loaning programme of the bank in the current year on this score.

*Special Agricultural Development Programme:*

3.71 With the formation of the Agricultural Refinance and Development Corporation, formerly the Agricultural Refinance Corporation, a new impetus has been given to long term development financing undertaken by the Land Mortgage Banks. The ARDC makes available finance for the development of agriculture in compact areas on a long term basis for projects identified with specified objectives. The KCCLMB has been exploiting this source of finance for the development of agriculture. So far, the KCCLMB has formulated 49 projects involving an investment of Rs. 18.15 crores, out of which 23 schemes with an estimated investment of Rs. 7.10 crores and benefiting nearly 860 hectares have been taken up for implementation. Two schemes have already been completed. During 1974-75 seven new schemes have been initiated. Most of them are meant for the development of coconut. Over Rs. 70 lakhs benefiting 158 hectares have been disbursed during 1974-75. (See Table 3.30).

TABLE—3.30

**Agricultural Development Schemes Financed by Agricultural Refinance and Development Corporation  
and Implemented by Kerala Co-operative Central Land Mortgage Bank Ltd., Trivandrum**

*(Area in Acres)  
(Amount in Rs. Lakhs.)*

Sl. No.	Name of Schemes	Total period of the scheme (years)	Year of commencement	Target		Achievement as on 30-6-1975		1974-75 (Co-operative Year)		Target Achievement	Target Achievement
				Physical	Financial	Physical	Financial	Physical	Financial		
(1)	(2)	(3)	(4)	(5)	(5)	(7)	(8)	(9)	(10)	(11)	(12)
1	Wynad Coffee Scheme	10%	68-69	5000	100.0	4694	73.2	—%	..	20.3	3.5
2	Cardamom scheme Wynad and High Ranges	5%	70-71	1150	13.7	1240	11.4	—%	..	3.1	1.4
3	*Kayal Reclamation Quilon and Alleppey	7%	71-72	350	19.8	353	13.9	—%	..	2.1	2.6
4	Kunnathur Coconut Scheme	8	71-72	500	19.5	502	12.2	195	197	6.9	5.2
5	*Parur Coconut Scheme	3	72-73	100	5.0	73	2.5	43	15	3.2	0.7
6	*Pokkali Paddy Stabilisation	3	72-73	154	5.0	70	1.8	62	19	2.0	0.7
7	Coconut Scheme Kasargod-Hosdurg	7	72-73	2000	84.5	1415	29.2	898	313	22.8	10.6
8	*Mundar Paddy Scheme	3	72-73	500	12.5	463	6.8	720	183	21.0	2.8
9	*Trivandrum Kayal Reclamation Scheme	7	72-73	150	8.4	61	2.2	265	20	12.2	1.1
10	Ezhimala Coconut Scheme	7	72-73	500	18.8	361	8.1	218	79	5.6	2.2
11	Malappuram Coconut Scheme	7	72-73	2000	82.5	1406	26.5	1192	597	26.7	13.4
12	Trichur Kayal Reclamation Scheme	3	72-73	200	11.2	202	7.3	58	59	4.0	2.9
13	Waste Lands Reclamation Scheme, Cannanore	3	72-73	1500	24.7	666	9.9	379	345	6.8	5.3

14	Kunnathukkal Coconut Scheme	7	73-74	500	20.3	148	2.1	265	113	5.8	1.6
15	Palghat Coconut Scheme	9	74-75	2000	83.5	391	6.4	100	391	2.1	6.4
16	Tellicherry Coconut Scheme	7	74-75	1000	40.0	177	3.2	200	177	3.6	3.2
17	Thaliparamba-Payyanur Coconut Scheme	7	74-75	1000	40.0	286	4.6	100	286	1.8	4.6
18	Kodakara Coconut Scheme	7	74-75	200	8.0	63	0.9	50	63	0.9	0.9
19	Parakkadavu Coconut Scheme	7	74-75	400	16.00	49	0.6	50	49	0.9	0.6
20	Badakara Coconut Scheme	7	74-75	500	20.0	27	0.5	100	27	1.8	0.5
21	Kozhikode Coconut Scheme	7	74-75	1500	60.0	13	0.1	250	13	4.5	; 1
Total				21204	693.4	12660	223.4	5145	2946	158.1	70.3

\* Targets have been reduced with the approval of A. R. D. C.

% Phasing physical target expired.

Source: Kerala Co-operative Central land Mortgage Bank Ltd., Trivandrum.



3.72 Analysis of the various projects initiated by the KCCLMB shows that the largest number was aimed at the development of coconut, followed by reclamation of land for rice cultivation and a limited number for plantations and minor irrigation. It would be desirable from the point of maximising the benefits from long term financing if the long term loaning is integrated in the short term financing and technical support. This could perhaps, to a large measure, be achieved if the long term financing programme of the land mortgage banks are dovetailed with crop development programmes and soil conservation programmes of the Department of Agriculture. For instance, the long term financing for coconut development could be located in the coconut package areas by proper identification. Similarly programmes for the augmentation of irrigation facilities particularly distribution of pumpsets and construction of wells could again be located in the coconut package programme areas. Tree crop programmes could be identified for locating in areas where soil conservation works have already been initiated.

3.73 After the initial slow progress, the agricultural development programmes financed by ARDC are making headway. The disbursal of finance under special agricultural development schemes averaged around only Rs. 30 lakhs per year, while during the past 2 years significant progress has been registered as the amount disbursed has more than doubled to Rs. 72 lakhs. Several steps have been initiated to absorb as much development finance as possible from the ARDC. A technical cell consisting of specialists in Agriculture and Soil Conservation has been formed to formulate viable schemes. It has also been decided to appoint Agricultural Officers at the primary banks. A series of decisions have also been made by the Registrar of Co-operative Societies and Central Bank on the simplification of the procedure for sanctioning credit.

#### **IRRIGATION:**

3.74 The net area under irrigation during 1974-75 increased by about 7,900 hectares and gross area by a little over 14,100 hectares. The expansion in irrigated area has been made possible largely by increasing the area under Government canals. (See Table 3.31). Almost the entire expansion in area under irrigation has been utilised for irrigating paddy. The irrigated area under paddy increased from 525 to 540 thousand hectares. (See Table 3.32). Over 61 per cent of the gross area under rice received irrigation from one source or other.

#### **Major Irrigation:**

3.75 There were seven continuing major irrigation projects under various stages of implementations during 1974-75. Out of the seven

TABLE—3.31

## Irrigated area in Kerala—Source-wise

Source	(Area in hectares)							
	1973-74				1974-75*			
	Net area		Gross area		Net area		Gross area.	
	Actual	Per cent	Actual	Per cent	Actual	Per cent	Actual	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Govt. Canals	221406	48.5	369485	57.9	228166	49.1	382010	58.6
2. Private canals	10160	2.2	12260	2.0	10160	2.2	12260	1.9
3. Tanks	75851	16.6	88191	13.8	76308	16.4	88746	13.6
4. Wells	5460	1.2	5460	0.9	5460	1.2	5460	0.8
5. Other sources	143903	31.5	162243	25.4	144557	31.1	163271	25.1
Total:	456780	100.0	637639	100.0	464651	100.0	651747	100.00

Source: Bureau of Economic and Statistics, Government of Kerala.

\* Figures for 1974-75 are provisional.

TABLE—3.32

## Irrigated area in Kerala—Crop-wise.

Name of crop	(Area in hectares)			
	1973-74		1974-75*	
	Gross area		Gross area	
	Actual	Percent	Actual	Percent
(1)	(2)	(3)	(4)	(5)
1. Paddy	524889	82.3	538997	82.7
2. Sugarcane	4290	0.7	4290	0.7
3. Other food crops	55690	8.7	55690	8.5
4. Non food crops	52770	8.3	52770	8.1
Total	637639	100.0	651747	100.0

Source: Bureau of Economics and Statistics, Govt. of Kerala.

\* Figures for 1974-75 are provisional.

TABLE—3.33

## Major Irrigation Projects in Kerala

Name of Project	Command area Hectares		Area benefited (Hectares) cumulative till the end of				Investment (Rs. in lakhs)	
	Net	Gross	1973-74		1974-75		1973-74	1974-75
			Net	Gross	Net	Gross		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>I. Continuing Projects:</b>								
1. Pamba	17806	41683	Nil	Nil	Nil	Nil	655.00	795.22
2. Kallada	52610	105220	Nil	Nil	Nil	Nil	454.06	592.16
3. Periyar Valley	32800	85600	14300	37180	15763	40900	738.44	807.99
4. Chitturpuzha	17287	32550	2000	3800	5900	11000	241.36	302.21
5. Kanjirapuzha	19125	21853	Nil	Nil	Nil	Nil	305.92	378.88
6. Kuttiadi	14569	31161	1600	3500	1600	3500	1109.41	1270.80
7. Pazhassi	16200	32375	Nil	Nil	Nil	Nil	477.38	547.17
Total	160397	350442	17900	44480	23263	55400	3981.57	4694.43
<b>II. New Schemes:</b>								
1. Moovattupuzha	17400	52200	Nil	Nil	Nil	Nil	Nil	0.01
2. Chimoni	13000	26000	Nil	Nil	Nil	Nil	Nil	Nil
3. Attappadi	4323	6185	Nil	Nil	Nil	Nil	3.79	12.69
4. Karappuzha	4650	9300	Nil	Nil	Nil	Nil	13.90	18.54
Total	39373	93685	..	..	..	..	17.69	31.23

Source: Chief Engineer (Projects), Trivandrum.

irrigation projects, partial benefits have started flowing from 3 projects. Nearly Rs 39.82 crores have so far been invested on these seven continuing projects till the end of Fourth Five Year Plan. (See Table 3.33). The ultimate command area of these projects is estimated at 160,400 hectares, out of which so far 17,900 hectares have been brought under irrigation till 1973-74 and 23,300 hectares till 1974-75 through three projects. It has been possible to extend irrigation to about 15,800; 5,900 and 1,600 hectares in the major irrigation projects of Periyar Valley, Chittur Puzha, and Kuttiadi respectively. During 1974-75 irrigation has been extended to nearly 5,000 hectares largely from Chitturpuzha and to some extent from Periyar valley. Four new schemes viz., Muvattupuzha, Chimony, Attappady and Karapuzha have commenced during the first year of the Fifth Five Year Plan. Over Rs 22 lakhs have been spent on these projects during the reference period. Irrigation being one of the important programmes specially taken up for implementation under 20 point programme, all-out effort is being made for its speedy implementation.

#### *Minor Irrigation:*

3.76 During 1973-74 about 6,800 hectares have been brought under irrigation through the various minor irrigation projects benefiting a gross area of about 9,150 hectares and involving an investment of Rs. 136 lakhs. (See Table 3.34). Over 31 km. length of anti-sea erosion works got completed during 1974-75. For these works, Rs 206.44 lakhs have been spent. Flood control measures were also undertaken benefiting an area of 6,700 hectares.

3.77 One of the outstanding achievements under irrigation development has been the completion of a temporary bund across the Vembanad Lake at Thanneermukkom (the work on a permanent spillway commenced during the Second Five Year Plan) to prevent the incursion of saline water and thus afford protection to the later phase of the first crop and the entire period of additional crop in summer of 50,000 hectares of paddy lands in Kuttanad. The enthusiastic participation of the mass of people in surrounding area and the co-ordinated efforts of the workers and engineers, have been a new experience in the development history of the State. The whole venture was organised and supervised by a peoples committee.

TABLE 3.34

**Minor Irrigation Programmes in Kerala 1974-75**

Classification of the Project	Area benefited (Hectares)		Amount invested (Rs. in lakhs)
	Net	Gross	
<i>Minor Irrigation</i>			
1. Minor Irrigations Class I	2677	4010	48.303
2. Minor Irrigation Class II	1614	1614	24.281
3. Lift Irrigation	1976	2964	43.072
4. Yela Programme	563	563	19.661
5. Deeping of Wells and Tanks	..	..	0.026
6. Other expenditure	..	..	0.392
Total	6830	9151	135.735
II. Anti Sea Erosion in K.M.	31.257	..	206.439
III. Flood Control	678	..	40.772
IV. I.W.T. (State)	..	..	11.268
V. I.W.T. (Central)	..	..	22.85
IV. Thanneermukkom	..	..	43.090
Grand Total		..	460.158

Source: Chief Engineer, Irrigation, Government of Kerala.

**Land Reforms:**

3.78 A number of agrarian reforms aimed at improving the socio-economic conditions of the peasantry and agricultural labourers, as well as stepping up agricultural productivity were introduced in the State during the past one decade or so. The Kerala Land Reforms Act, 1963 (as amended in 1969), which came into force from January 1970, envisages abolition of landlordism duly conferring owner-ship rights of tenancy lands to the cultivating tenants, fixation of ceiling on land at 10 standard acres per family and rights to the hutment dwellers to purchase their dwelling houses and the land appurtenant thereto. The KLR (Amendment) Act 1972 provides legal protection to all Kudikidappukars (hutment dwellers) who continued to occupy their hutments till January 1970.

3.79 The KLR Act was followed by a series of other agrarian reforms. The Kannan Devan Hills (Resumption of Land) Act 1971 was enacted in order to empower the State Government to resume the entire Kannan Devan Hills concession area comprising over

53,000 hectares. The Kerala Private Forests (Vesting and Assignment) Act 1971 helped the State Government to take over all private forests in the State without paying any compensation. The Agricultural Workers Act 1974, one of the most dynamic pieces of agrarian legislations enacted in the country, envisages security of employment, fixity of hours of work, minimum wages and provision for provident fund for agricultural workers. The Agricultural Workers Act is to be implemented in a phased manner, initially confining to selected districts which will subsequently be extended to other regions.

3.80 While by virtue of the KLR Act of 1963 (Amendment Act of 1969) all the tenancies in the State have been de jure abolished from January 1970, there has been considerable progress in the de facto, conferring of ownership rights of tenancy holdings to the erstwhile cultivating tenants. Till the end of December 1975, a total number of 20.19 lakh applications had been filed for the purchase of titles of ownership of tenancy holdings compared to 10.79 lakh cases at the end of December 1974. Of these, the cases disposed till the end of December 1975 stood at 10.37 lakhs (51 per cent). The certificates of purchase issued comprised 4.16 lakhs.

3.81 The number of ceiling returns filed by the end of December 1975 reached 37,381 of which 12,977 cases have been disposed of. The surplus land declared above ceiling was around 43,000 hectares. Of this, the land ordered to be surrendered was 15,522 hectares, constituting 36 per cent of the surplus declared. The extent of area taken possession reached 8980 hectares at the end of December 1975 (58 per cent of the land ordered to be surrendered) compared to 5,622 hectares, 70 per cent of the land ordered to be surrendered at the end of September 1974. During the period from September 1974 to December 1975, the land taken over went up by 59 per cent. Of the assumed land, the total extent distributed comprised 3,503 hectares as against 929 hectares by September 1974. A portion of the remaining area is under stay from court while the rest is partly reserved for public purposes and partly managed by the Kerala Plantation Corporation and Agriculture Department. The beneficiaries of the surplus land distributed numbered 11,947 families of whom the Scheduled Castes were 4,708 and Scheduled Tribes 706.

3.82 The total number of applications filed for the purchase of Kudikidappu rights constituted 3.65 lakhs at the end of December 1975, out of which as many as 3.52 lakhs were disposed of. The certificates of purchase issued covered 1.56 lakhs.

3.83 The administrative machinery for the implementation of land reform measures comprised 211 Land Tribunals till the end of  
4/744/MC.

December 1974, 87 part time Land Tribunals (B. D. Os.) and 124 full time Land Tribunals (Special Tahsildars). From the beginning of January 1975, all the B. D. Os. functioning as Land Tribunals have been replaced. With a view to speeding up the pace of implementing the provisions of the KLR Act, in the light of the 20—Point Economic Programme the strength of full time Land Tribunals was raised to 251 from August 1975. The Taluk Land Boards, (57 in number) set up in 1973 had only part time Chairmen till September 1975. In order to improve the working of the Taluk Land Boards, full time Chairmen were appointed in respect of 39 Taluk Land Boards and part time Chairmen for the rest. An Ordinance was also issued in December 1975 conferring wide powers to the Taluk Land Boards so as to help quick and effective implementation of the ceiling provisions of the KLR Act.

3.84 The agrarian reforms under implementation in Kerala include also distribution of Government land to the landless agricultural workers. Till the end of December 1975, the estimate of Government land available for assignment was 172,477 hectares. Of this, the extent of land distributed constituted 133,375 hectares (77 per cent) and the beneficiaries comprised 343,281 families. The Scheduled Castes and Tribes (67,242 families) received 18,016 hectares covering 14 per cent of the Government land so far assigned.

3.85 The impact of the Twenty Point Economic Programme has been visibly felt in the implementation of the land reform legislations in Kerala. Since July 1975, the number of cases disposed per month by the Land Tribunals as well as the Taluk Land Boards registered several fold increase as a result of the efficiency drive stimulated by the 20—Point Economic Programme. The cases disposed by the Land Tribunals regarding the assignment of titles of ownership to the cultivating tenants went up steadily from over 22,000 in July 1975 to about 89,000 in December 1975 and those by the Taluk Land Boards on the ceiling returns from 350 to over 2,000 during the same period. At these new rates it should be possible to dispose of all pending cases relating to assignment of proprietary rights to the cultivating tenants and ceiling returns in a year or so.

3.86 The over all impact of land reforms has been encouraging. The tendency to amass land by the rich peasantry hardly exists now. Apparently, there seems to have been greater flow of private capital to industry, the bulk of which otherwise would have gone for the purchase of plantations or the like in agriculture. Absentee landlordism is almost curbed and land is directly cultivated by the owner class leading to better land development and modernisation of agriculture. Above all, the agricultural labourers, with assured homesteads and favourable working conditions, have emerged independent of their age—old bonded labour-hood.

### **Animal Husbandry:**

3.87 Animal husbandry offers immense scope for development in Kerala as a means of subsidiary occupation to the rural poor and as a source for protective foods such as milk, meat and egg to the people. But a large number of our cattle and poultry, being sub standard, are low yielding. This development constraint is being overcome through a programme for cross breeding and upgrading the stock in a phased manner.

3.88 The milk production in the State according to the Dairy Development Department, was estimated at about 4.40 lakh tonnes in 1974-75, yielding a per capita daily availability of 52 grams of milk. This is about one fourth of the nutritional minimum requirement of 210 grams for an average Indian. The Jersey Cross and Brown Swiss Cross cows have now become popular in the State. The breeding programme in the Kodappanakkunnu farm in 1973-74 showed the lactation period of the Jersey Cross around 390 days yielding 1530 kg. of milk per lactation. For the Brown Swiss Cross, the average lactation period exceeded 350 days.

3.89 With a view to upgrading the cattle stock in the State, massive efforts are being made by the Animal Husbandry Department, Dairy Development Department and the Indo-Swiss Project through intensive programmes for cross breeding cows. The Animal Husbandry Department carried out artificial insemination work through the Intensive Cattle Development Project, Key Village Centres and Veterinary Hospitals. In all 420,071 inseminations were conducted in 1974-75 compared to 480,964 in 1973-74. The calves born as a percentage to the inseminations done was low (only 22 per cent) in 1973-74. A Jersey Breeding-cum-Cross Bred Farm was started at Vithura in Trivandrum District as a part of the Cattle Development Programme. The whole of Idukki District covered by the Indo-Swiss Project has 87 breeding units. In 1973-74 altogether 19,252 artificial inseminations were conducted out of which 12,603 were fresh inseminations and the rest repeat inseminations. The percentage of conception recorded was 41.4. The Project had also extended its insemination activities to Trivandrum, Alleppey and Quilon Districts. In 1973-74, a total of 12,887 inseminations were carried out in these districts (8640 in Trivandrum District, 3089 in Alleppey District and 1158 in Quilon District).

3.90 The Dairy Development Department started its massive cross breeding programme in 1973. Under this programme 952 field insemination units have been set up in 721 selected Panchayats in the State for conducting artificial inseminations to cows using high quality semen. The Dairy Advisory Service (the supporting scheme of the massive cross breeding programme) for imparting knowledge and rendering assistance to farmers in various aspects



of cattle husbandry practices, fodder production, economic milk production and other related matters was started in 1974-75. A total number of 85,565 artificial inseminations were conducted through these insemination centres in 1974-75 as against 24,247 in 1973-74.

3.91 The Indo-Swiss Project set up in 1963 continued its activities in the field of livestock development and dairying with the basic objectives of evolving a new multipurpose breed of medium type animal suitable for milk, meat and draught, developing the fodder resources of the State, and translating into action the technical knowledge on scientific breeding, feeding and management of cattle developed in the project farms through extension work among farmers etc. During 1973-74 the project continued its approved breeding policy of producing 62.5% cross breeds by crossing 60% and 75% cross breeds and at the end of the year its stock position was 206 such animals as against the total herd strength of 407. For consolidating and improving the genetic material pooled in 62.5% animals inter se mating was started and as a first step of the last phase of the cross breeding programme and this has paved way for further advancement to shape and improve the breed to better suitability in the future. The bull station managed by the Indo-Swiss Project was in its full strength and the sperm station laboratory functioned at its maximum capacity during 1973-74. A total quantity of 287,980 doses of frozen semen was produced, of which 166,067 doses were from Brown Swiss and the rest 121,913 from cross breeds against a target of 3 lakh doses of semen. The stock of semen in the Semen Bank exceeded 3 lakh doses and always had a buffer stock of 1½ lakh doses during 1973-74. The despatch of semen to Alleppey, Quilon and Trivandrum Districts was arranged through the Regional Semen Bank, Mavelikara and the supply in Idukki district except Munnar was regulated through Peermade Semen Bank. An experiment to infer the final post-thaw mortality of semen samples and thereby enabling to dilute further, if necessary, had been successfully completed. An increase of 15% semen production is anticipated by adopting this method. The liquid Nitrogen Plant at Mattupetti was operated to its maximum capacity and produced 25,510 litres liquid nitrogen during 1973-74. The Project has also undertaken applied research for developing suitable techniques for ameliorating the natural grassland and introducing fodder species in the farming system of the State. Quality forage from improved grassland is sufficient to meet the nutrient requirements of cows yielding up to 3 kg. of milk per day. In mixed management with grazing supplemented by cut green of better quality from leys, cows yielding up to 5 kg. can economically be maintained on roughage alone. These findings by the Indo-Swiss Project open the pathway for economic milk production in the Western Ghats by utilising natural grasslands and incorporating intensive forage production in the cropping pattern.

3.92 The infrastructure facilities set up for milk processing and marketing comprise 6 dairy plants (Trivandrum, Ernakulam, Kottayam, Palghat, Calicut and Alleppey) and 12 milk chilling centres. The total handling capacity of the dairy plants is 51,000 litres and that of the chilling plants 29,400 litres per day. The milk handled in 1974-75 was 107.69 lakh litres, the utilisation of installed capacity being 58 per cent. The milk handled by the chilling plants constituted 37.28 lakh litres the capacity utilised being 35 per cent.

3.93 The veterinary institutions in Kerala in April 1974, comprised 60 veterinary hospitals, 285 dispensaries, 10 mobile dispensaries and 128 veterinary sub centres and first aid centres. In 1974-75 12 veterinary dispensaries were newly opened and 11 veterinary institutions were upgraded into full fledged veterinary dispensaries. Also two mobile diagnostic laboratories were started for the effective control of infection and contagious diseases for early diagnosis, collection and despatch of materials, from outbreak areas to laboratory and for aiding preventive measures. In 1974-75 10,000 vaccinations were carried out to cross bred animals as a preventive measure against foot and mouth diseases. Nearly 17 lakh cases of diseases relating to animals and 4 lakh cases concerning poultry were treated in the various veterinary institutions in Kerala during 1973-74.

3.94 Over 5 lakh animals comprising mainly sheep and goats were slaughtered during 1974 for meat purposes. Over 2.5 lakh animals slaughtered were in rural areas and the rest in the urban areas.

3.95 The estimates of cattle movement from and into the State during 1974 showed that 5.61 lakh animals (3.63 lakh cattle and 1.98 lakh buffaloes) were brought into the State from neighbouring States while 16,687 animals were taken out of the State. The maximum inflow of animals was recorded in the month of May. The monthly average of inflow of cattle was over 46,000 against an outflow of 1,390.

3.96 The estimate of egg production stood around 880 million in 1974-75. Part of this was sent to regions outside Kerala. In 1974 nearly 4,600 tonnes of eggs were sent from the State. The prices of livestock products such as eggs, milk, meat, butter and ghee moved up high in 1974. The yearly average prices of certain selected livestock products and cattle feed are furnished in Appendix-3.

3.97 At present the cross breeding programmes for upgrading the existing stock of cows is being implemented by three agencies

**viz.** Animal Husbandry Department, Dairy Development Department and the Indo-Swiss Project. The involvement of more than one agency has created lack of co-ordination and duplication of work. With a view to avoiding the above difficulties, an autonomous body (the Kerala Livestock Development and Milk Marketing Board) fully owned by the State Government was started functioning in 1975 with headquarters at Trivandrum. The authorised capital of the Board is Rs. 5 crores. The main objectives are to co-ordinate sponsoring and implementing of cattle breeding programmes in the State under one agency, restructuring and revitalising the dairy co-operatives giving the producer farmer complete control of the co-operatives at the primary and the union levels and to attend to all the commercial functions in the field of milk marketing.

### **Fisheries:**

3.98 The fisheries sector, supporting about two percent of the total population of the State, is a unique source of cheap protein food and valuable foreign exchange. With only about seven percent of the continental shelf of the country, Kerala is the leading maritime state in the Indian Union, presently accounting for over 35 percent of the sea fish production and 58 percent of the marine products export earnings at the national level. The regional income from fisheries in 1973-74 stood at Rs. 45.59 crores (2.6 percent) compared to Rs. 33.02 crores (2.3 percent) in 1972-73. The per capita availability of fish in Kerala for internal consumption is estimated at 15 Kg. per annum which is several times higher than that at the national level.

3.99 The total marine fish production in the State in 1974 stood at 4.20 lakh tonnes constituting 35 percent of the all India fish production compared to 4.49 lakh tonnes (36 percent) in 1973. Along with the inland fish production estimated at 23,650 tonnes, the aggregate fish production from both the sources was a little over 4.4 lakh tonnes compared to 4.7 lakh tonnes in the previous year. The principal species comprised oil sardine (24%), other sardines (7%), mackerel (3%), prawns (15%) and ribbon fish (7%). The shrimp production was estimated at 60.8 thousand tonnes in 1974 compared to 86.0 thousand tonnes in 1973.

3.100 According to official statistics published by the Department of Fisheries, the fishing craft in operation comprised over 2000 mechanised boats, and 25000 canoes and catamarans in 1974. The fishing personnel stood around 110 thousand. The mechanised boats, mainly undertaking shrimp trawling in the coastal waters, accounted for 20 percent of the total sea fish landings.

3.101 The working of the A. R. C. sponsored Fishing Project at Pudiappa—Pudiyangadi near Kozhikode continued to register progress in 1975. With fish production linked with marketing, the income accrued to the fishermen as well as the collection of boat dues under the project has been comparatively better. Based on the model of the Project at Pudiappa, a fishing project at Vypeen has already been started and another project at Anjengo is under implementation. The new approach to controlled fishing cum marketing under a Project Officer assisted by a team of Development Officers and marketing personnel not only makes collection of boat dues easy but also helps to ensure the flow of ultimate benefits of mechanisation programme to the groups of fishermen themselves to whom the boats have been issued to.

3.102 The Kerala Fisheries Corporation which had been running on a loss in the past has been streamlined in 1974-75 so as to make it commercially viable. Accordingly, 7 ice plants and 2 boat building yards were retransferred to the Department of Fisheries, while 3 boat yards were closed down. The reorganised Corporation will, henceforth, concentrate on fishing operations with deep sea fishing trawlers and processing and exporting of fish products. While six numbers of 57 ft. trawlers built in India have been withdrawn from fishing operations in view of their inefficiency reported to be arising out of defective designs, the Corporation has acquired two 72 ft. deep sea fishing trawlers from Mexico at a total cost of Rs 25 lakhs. Orders have also been placed for two more such trawlers. A technocrat has already been appointed in the Corporation as the Chairman-cum-Managing Director so as to spear head the activities of the Corporation along proper business perspectives.

3.103 The export earnings from sea food products have been going up steadily till 1973-74 when the value of foreign exports of marine products at the national level reached Rs. 89.51 crores Kerala's share being Rs. 57.75 crores (65 percent). However, the year 1974-75 witnessed a fall in the seafood export trade. Faced with stiff consumer resistance in the importing countries under pressures of inflationary tendencies and global energy crisis, the sea food export earnings at the national level declined to Rs 68.41 crores in 1974-75, registering a 24 percent fall over the previous year. Kerala's contribution was 25,280 tonnes of fish products valued at Rs 39.58 crores in 1974-75, the share of the all India sea food export trade being 56 percent in respect of quantity and 58 percent in terms of the value. The slump experienced in 1974-75 was, however, only a temporary phenomenon, for in the months followed the sea food export trade shot up to unprecedented heights. During April to October 1975 the exports of fish

products reached 33,398 tonnes valued at Rs 66.74 crores compared to 25,743 tonnes valued at Rs 39.68 crores in the corresponding months in 1974 and 28,471 tonnes worth Rs 48.87 crores during the same period in 1973. The foreign exchange earnings from the export of marine products reached an all time record of Rs 105 crores at the national level in 1975 (January-December) as against Rs 76 crores in 1974 and Rs 80 crores in 1973.

3.104 The State had in 1974-75 1057 fishermen co-operatives comprising 189 credit societies, 849 producer co-operatives, and 19 regional marketing societies. The position in 1973-74 was 1054 societies with 846 producer societies, others remaining the same. The total membership of the producer societies went up from 71,755 in 1973-74 to 71,906 in 1974-75. The total paid up share capital was Rs 58.62 lakhs in 1974-75 as against Rs 46.82 lakhs in 1973-74 registering an increase of 25 percent over the year. The increase mainly occurred in the share capital of the Regional Marketing Co-operatives.

3.105 While the West Coast of India accounts for 70-80 percent of the marine fish landed in the country, the Kerala coast along the West Coast provides one of the richest fishing zones in the World. The sea off Kerala within the 80 m. limit, is already well known for its shrimp fisheries. Further deep in the 180-450 m. range, excellent grounds of deep sea prawns and lobsters have been located, especially off Quilon region. Recently, the Pelagic Fisheries Project at Cochin (an undertaking of the UNDP) estimated the pelagic fishery potential of the south west coast extending from Ratnagiri to Tuticorin at nearly 2.5 million tonnes of fish, which mostly comprised mackerel, sardine, anchoviella, cuttle fish and shallow mix. But for the inshore shrimp resources, most of our pelagic and demersal fishery wealth remain, particularly in the off shore and deep sea water off Kerala, underexploited or even unexploited. With a view to tapping these potential resources, three Integrated Fisheries Development Projects for Kerala covering Vizhinjam, Neendakara and Beypore were prepared for the consideration of the World Bank. The three projects together cost about Rs 36 crores and envisage construction of fishery harbours, development of off-shore and deep sea fishing and provision of shore facilities and organisation for processing and marketing of fish and fish products. The projects when implemented in full is expected to yield additionally nearly one lakh tonnes of fish and Rs 11 crores of foreign exchange earnings per annum. The projects are under the active consideration of the World Bank. In this context, a Reconnaissance Mission of the World Bank visited the State in November 1974 and their Preparation Mission in July 1975.

**Forests:**

3.106 The forests, contributing 1.24 percent of the regional income of the State, have a very great influence on agriculture, industry, employment, climate, environment and rural development. Forestry has a relatively larger socio-economic impact on the weaker sections of our rural community especially on tribals who have a cent percent forest-based economy. This is because some of the needs of the rural poor are forest-based viz., timber for housing, land for cultivation and shelter, firewood, fodder etc. All these requirements have to be met from the forests extending over 9.40 lakh hectares. Eighty percent of the forest land in the State belong to the category of Government forests and the rest twenty per cent being the private forests recently vested with the Government.

3.107 The forest area of the State is divided into two major groups (1) natural forests and (2) man made forests. The natural forests extend over 8.17 lakh hectares while the man-made forests (forest plantations) comprise 1.23 lakh hectares. The man-made forests mainly consist of 62,044 hectares of teak, 31,342 hectares of eucalyptus, 19,219 hectares of softwood, 3,335 hectares of cashew, 1,190 hectares of rubber and 5,918 hectares of other plantations in 1974-75. The area of forest plantations in the State has increased from 1.20 lakh hectares in 1973-74 to 1.23 lakh hectares in 1974-75, the actual increase being 2,877 hectares (2.4%). The systematic and planned efforts to raise plantations in the forest area were started in the State since 1960-61. At the end of 1965, the total area under forest plantation in Kerala (raised by the Department) was 73,560 hectares. After a decade, it had gone upto 1,23,048 hectares registering an increase of 67.3 percent. The species-wise breakup of the forest plantations under the Department at the end of March 1975 is furnished in Appendix 3.

3.108 The total growing stock both in the Government forests and the vested forests with the Government is estimated to be 185 million cubic metres of wood, 4.6 million tonnes of air-dry reeds and 1.8 million tonnes of air-dry bamboos.

3.109 The major forest products are timber and firewood. Production of round timber decreased from 541,466 cubic metres in 1973-74 to 452,225 cubic metres in 1974-75, the percentage decrease over the year being 16. However the production of round poles showed a remarkable increase from 414,346 Nos. in 1973-74 to 812,535 Nos. in 1974-75, the percentage increase over the year being 96. The outturn of firewood declined from 414,600 tonnes in 1973-74 to 238,476 tonnes in 1974-75, resulting in a decrease of 42.5 percent over the year. The production of other forest items

like sawn timber, railway sleepers and charcoal more than doubled during the year.

3.110 The net revenue from forests which stood at Rs. 14.57 crores in 1973-74 increased to Rs. 18.17 crores in 1974-75 registering an increase of 24.7 percent over the year. The sale proceeds of timber, firewood and charcoal etc., increased considerably during the year under report despite a fall in the production of certain items like round logs and firewood.

3.111 The Kerala Forest Development Corporation was formed in January 1975 with the primary objective of intensive development of forest resources of Kerala. The Corporation, with its headquarters at Kottayam proposes to create extensive plantation of pulpwood, match wood etc., which are required for wood based industries. The Project envisages an investment of about Rs. 10 crores of which Rs. 6 crores will be provided by the Government of Kerala and the remaining Rs. 4 crores by financial institutions. The programme aims at raising plantations extending over 62,180 hectares comprising quick growing species like Eucalyptus, softwood and matchwood in Trivandrum, Quilon, Idukki, Kottayam, Ernakulam and Trichur within a period of ten years. Regional Offices of the Corporation have already been set up at Trivandrum and Punalur.

3.112 The Forestry Sub Committee of the State Committee on Science and Technology recommended the establishment of a Forest Research Institute in Kerala in 1973. Accordingly, the Government of Kerala sanctioned the establishment of the Kerala Forest Research Institute at Peechi in January 1975 as an autonomous body. The institute was registered as a Society under the Literary, Scientific and Charitable Societies Registration Act on July 3, 1975. The institute will function as a multi disciplinary and inter-disciplinary research organisation for meeting the requirements of forestry and forest based industries. It will also institute advanced studies and research in conservation, development and management of forests, optimum utilisation of forest produce and management of wild life.

## CHAPTER IV

### PLANTATIONS

The plantation crops of Kerala, comprising chiefly rubber, tea, cardamom and coffee exercise considerable national importance. The State has almost a monopoly in respect of rubber and cardamom and her share of the area under all the plantation crops together at the national level is almost 39 per cent. The total extent of the plantation crops in Kerala is over 332,000 hectares, i.e. about 11 per cent of the aggregate cropped area of the State. Rubber provides one of the crucial raw materials required for industries, while tea, coffee and cardamom are important foreign exchange earners. A substantial portion of the area under tea plantations in the State is foreign owned leading to repatriation of heavy profit margins annually from the State. The performance of the plantation sector in 1974-75 showed a mixed trend. While production in respect of rubber, cardamom and coffee registered improvement that of tea witnessed a fall compared to the previous year.

#### *Rubber:*

4.2 The area under rubber plantations in India has been steadily increasing. From 217,540 hectares in 1973-74 it reached 221,265 hectares at the end of 1974-75 the increase over the year being 1.7 per cent. The extent of high yielding varieties went up from 1.54 lakh hectares in 1973-74 to 1.60 lakh hectares in 1974-75. Though the area under improved varieties moved up by 4 per cent the share at the national level remained unaltered at 71 per cent. Kerala accounted for 91 per cent of the total rubber plantations in India, the rest being shared by Tamil Nadu, Karnataka and Andaman and Nicobar Islands.

4.3 The extent of area under rubber in Kerala increased from 199,064 hectares in 1973-74 to 2,02,318 hectares in 1974-75, registering a growth of 1.4 per cent over the year. (refer to Appendix 4.1). A little over 74 per cent of the area comprised small holdings with an average size of 1.21 hectares. The large estates constituted the rest of the area. While the number of estates (plantations above 20 hectares size) decreased from 560 in 1973-74 to 543 in 1974-75, the small holdings moved up from 121,239 to 124,540 over the year. The State-wise distribution of rubber holdings and estates is shown in Table 4.1.



TABLE 4.1

## State-wise Distribution of Area Under Rubber (1974-75)

State	(area in hectares)				
	Total area	Holdings		Estates	
		No. of Units	Area	No. of Units	Area
(1)	(2)	(3)	(4)	(5)	(6)
Kerala	202,318	124,540	150,132	543	52,186
Tamil Nadu	11,455	3,044	4,771	47	6,684
Karnataka	6,544	221	491	18	6,053
Andaman & Nicobar Islands	878	..	..	4	878
Other Regions	70	10	40	1	30
<b>Total</b>	<b>221,265</b>	<b>127,815</b>	<b>155,434</b>	<b>613</b>	<b>65,831</b>

4.4 Besides the cropped area under rubber, the plantations held 51,747 hectares of uncultivated land, raising the total extent of rubber plantations in Kerala to 254,065 hectares in 1974-75. The tapped area comprised 160,956 hectares, nearly 80 per cent of the planted area.

4.5 Production of natural rubber in India in 1974-75 stood at 130,143 tonnes compared to 125,153 tonnes in the previous year, the increase during the year being 4 per cent. The quantity of synthetic rubber produced was 17,535 tonnes, registering a decrease of 6,007 tonnes (25 percent) over the previous year. The production of natural rubber in Kerala moved up from 118,016 tonnes to 121,558 tonnes, the progress over the year being 3 per cent compared to an increase of 28 per cent between 1972-73 and 1973-74. The State's share of the national crop suffered a slight set back from 94 per cent in 1973-74 to 93 per cent in 1974-75. The comparatively low rate of increase in the production of natural rubber in Kerala in 1974-75 is attributed to the prolonged strike of the plantation labourers during August/September 1975 and the adverse climatic conditions during the year.

4.6 The average yield of rubber per hectare has been increasing steadily. In 1974-75, it reached 608 Kg./hectare compared to 591 kg/hectare in 1973-74 and 473 kg/hectare in 1972-73. (refer to Appendix 4.2).

4.7 The total consumption of rubber in India during 1974-75 was estimated at 175,076 tonnes, the share of natural rubber being 132,604 tonnes (76%), synthetic rubber 24,376 tonnes (14%) and reclaimed rubber 18,096 tonnes (10%). Compared to 1973-74, the level of consumption of all rubber in 1974-75 increased by 4,569 tonnes (2.7%). The consumption of rubber in Kerala was estimated at 12047 tonnes (i.e. 7 per cent of the all India level), natural rubber 9690 tonnes, synthetic rubber 1380 tonnes and reclaimed rubber 977 tonnes. Though Kerala accounts for 91-92 per cent of the natural rubber production in the country, her own consumption of natural rubber forms only about 8 per cent of her production; the rest is sent outside the State to meet the demands of the rubber based industries in the country.

The data on consumption of rubber are shown in Table 4.2.

TABLE 4.2

## Consumption of Rubber—India

(Tonnes)

Year	Country/ Region	Natural rubber	Synthetic rubber	Reclaimed rubber	Total consumption
1972-73	India	104028	32913	14666	151607
1973-74	India	130302	22421	17784	170507
1974-75	India	132604	24376	18096	175076
	Kerala	9690	1380	977	12047

4.8 During April and May 1974, 350 tonnes of natural rubber valued at Rs 2.59 million were exported from India. The programme for exporting natural rubber was first introduced in 1973-74, during which year 2700 tonnes of rubber valued at Rs 15.26 million were exported. The objective of the export policy was mainly to ward off the glut in the market experienced during the years 1970-73. As the internal price of rubber moved up considerably since May 1974, and the domestic market showed signs of improvement, export of rubber was henceforth discontinued. The price statistics of rubber in India are given in Appendix 4.3.

4.9 The Plantation Corporation of Kerala, established in 1962, made considerable progress during the year 1974-75. The Corporation has under its administration 7 rubber plantations (7317 hect.) and one oil palm plantation (950 hect.). It has also taken over management of one estate (431 hect.) vested with the Government under the Land Reforms Act. The area under tapping as on 31-3-1975 reached 5247 hect. as against 4994 hect. in the previous

year, and production in 1974-75 went up to 4210 tonnes. For extraction of Red Palm Oil, a factory equipped with a hand-operated Hydraulic Press having a capacity of three tonnes per day was set up. The company made a net profit of Rs. 57.34 lakhs in 1974-75 as against Rs. 13.35 lakhs in 1973-74.

4.10 The labour force employed in the rubber plantations in Kerala stood around 1.50 lakhs in 1974-75, of whom 1.04 lakhs (69%), were engaged on a permanent basis while the others as temporary workers.

#### Tea:

4.11 Tea is the leading plantation crop in India, which accounts for 4.1 per cent of the total area under the four plantation crops of tea, rubber, coffee and cardamom at the national level. The provisional estimate of area of tea plantations in the country in 1974 was 361,663 hectares as against 360,108 hectares in 1973, the percentage increase over the year being marginal. Kerala accounted for 36,907 hectares in 1974 compared to 37,146 hectares in the previous year. The State's share of the area under the crop over the year decreased from 13 per cent to 12 per cent. Assam had the largest share of the area (52 per cent), followed by West Bengal, Kerala and Tamil Nadu. The four States together constitute 96 per cent of the area under tea in India.

4.12 The number of tea estates in Kerala has been going on increasing steadily in the past. From 2629 tea estates in 1970, the number of tea plantations in the State increased to 4173 in 1974, registering a rise of nearly 59 per cent. The area under tea on the other hand reflected a slight tendency to decline over the years. This is further highlighted in Table 4.3.

TABLE 4.3

#### Number of Estates and Area under Tea (Kerala)

Year	Estates		Area	
	Number	Change over the previous year	Hectares	Change over the previous year
(1)	(2)	(3)	(4)	(5)
1970	2629	..	37554	..
1971	3032	403	37185	(369)
1972	4000	968	37274	89
1973	4061	61	37146	(128)
1974	4173	112	36907	(239)

(Brackets indicate minus)

4.13 The growth in the number of tea estates ~~vis-a-vis~~ a declining trend in the area reveals disintegration of estates ranging between 50 to 400 hectares into small holdings below 50 hectares and presumably transfer of possession including ownership. Though the tendency of splitting up the estates had been going strong prior to 1972, it still persists at a lower rate in the years followed. The loss in area over the years further suggests that despite the splitting down of the estates into smaller units, no serious attempts seem to have been made even in maintaining the area with a programme of replanting the sick and uneconomic gardens.

4.14 The data on the distribution of tea gardens according to size are presented in Appendix 4.4. Nearly 94 per cent of the holdings constituted 5 per cent of the area below 5 hectares in size. Estates having 200 hectares and above comprised less than 2 per cent but covered area to the order of 73 per cent.

4.15 Production of tea in India has been showing an uptrend in the past. From 455,996 tonnes in 1972, it increased to 471,952 tonnes in 1973 and further up to 489,475 in 1974. The increase in production in 1974 over 1973 marked 3.6 per cent as against 3.5 per cent in the previous year. Against the uptrend at the national level, production in Kerala in 1974 slumped to almost the 1971 level, registering 6 per cent fall over the previous year. The decrease in the area together with a fall in the productivity accounted for the drop in production. The area, production and average yield of tea are given in Appendix 4.5.

4.16 While the yield per hectare at the national level has been picking up steadily, the same at the State level had shown a mixed trend. The yield per hectare for the country as a whole stood at 1353 kg. in 1974, compared to 1311 kg. in 1973 and 1271 kg. in 1972. For Kerala the corresponding position has been 1142 kg./hect. in 1974 as against 1209 kg. in 1973 and 1202 kg. in 1972. In terms of productivity per hect. Tamil Nadu stands foremost followed by Karnataka, Assam, West Bengal and Kerala. The yield per hectare in Tamil Nadu stood at 1546 kg. in 1974 compared to 1599 Kg. in 1973. For Assam, the most leading tea producing State in the Indian Union, it was recorded at 1416 kg. in 1974.

4.17 The world production of tea in 1974 (calendar year) was estimated at 1.47 million tonnes, as against 1.46 million tonnes in the previous year. India and Sri Lanka have been two of the leading tea producing countries in the world, the former accounting for 33 per cent of the crop and the latter 14 per cent. While half of the world crop is sent to the world market, the share of India in the world export trade in tea is less than 30 per cent, and that of Sri Lanka

forms 25 per cent. Sri Lanka has been closely competing with India in the export trade in tea even though her own production is below half of that of India. Sri Lanka could do this as her domestic market is rather negligible while India has the unique advantage of an expanding domestic market for tea.

4.18 The workforce employed in the tea plantations in India was estimated at 760,000 in 1970. For Kerala, the estimate for 1973 was nearly 69,000.

#### Cardamom:

4.19 Next to rubber, cardamom is the most widely cultivated plantation crop in Kerala. Extending over 47,000 hectares, cardamom plantations in the State account for 55 per cent of the area under the crop at the national level. Karnataka and Tamil Nadu together subscribe to the rest of the area. The total extent of cardamom plantations in the country has been increasing in the past. From 55,761 hectares in 1960-61 it went up to 82,467 hectares in 1974-75, registering an over all increase of 48 per cent over the years. The increases have mainly come through in 1963-64 and 1969-70.

4.20 The cardamom plantations are mostly small holdings (less than 8 hectare size). They constitute as high as 92 per cent of the plantations at the All India level and covered 45 per cent of the area. For Kerala, the small holdings comprised 91 per cent of the plantations having 47 per cent of area. The distribution of plantations registered with the Cardamom Board in 1974-75 is shown in Table 4.4.

TABLE 4.4  
Percentage Distribution of Registered Cardamom Estates, 1974-75

Size of holding (hectares)	Kerala		India	
	No.	Area (hectares)	No.	Area (hectares)
(1)	(2)	(3)	(4)	(5)
Below 8	91.50	47.52	92.29	44.84
8—20	6.20	17.75	5.26	15.89
20—30	0.98	6.25	1.01	6.25
30—40	0.35	2.81	0.36	3.07
40—80	0.51	7.07	0.62	8.84
80—200	0.41	12.15	0.38	11.48
200 and above	0.05	6.45	0.08	9.63
Total	100.00	100.00	100.00	100.00

(Source: Cardamom Board)

4.21 Despite the fact that the planted area has increased considerably in the past, there has not been any commensurate impact on production; in fact, production only declined over the years. From 4130 tonnes in 1963-64, production declined to 2700 tonnes in 1974-75. However compared to 1973-74 production in 1974-75 went up by 115 tonnes (4%). One major factor for the distressing downward trend in production has been the wide spread attack of pests and diseases on the cardamom plants, the most damaging among them being 'Katte' the killer disease. In India, hardly can a cardamom plantation claim immunity to this disease. Scientific research has yet to yield any disease resistant plant material.

4.22 Of the total production of 27000 tonnes of cardamom in the country in 1974-75 the share of Kerala was estimated at 2050 tonnes (76%), that of Karnataka 350 tonnes (13%) and Tamil Nadu 300 tonnes (11%).

4.23 If only adequate disease control measures are adopted, improved planting materials evolved, and scientific cultural practices introduced, production of cardamom in the country could be stepped up. With better yield, the unit cost of cardamom (which is comparatively high) could be brought down so that our products could compete favourably in the foreign markets with those of Guatemala, Tanzania and Sri Lanka who are our strong competitors in the international cardamom market.

#### *Coffee:*

4.24 Coffee plantations in the country mainly concentrate in the southern States of Karnataka, Kerala and Tamil Nadu. The area under coffee at the all-India level estimated by the Coffee Board was 155,267 hectares in 1973-74 as against 146,780 hectares in the previous year. Kerala accounted for 35,805 hectares (23 per cent) in 1973-74. The estimate of planted area went up to 36,589 hectares in 1974-75, registering an increase of 2.2 per cent over the year. In June 1975, there were 23,165 Coffee estates in Kerala, the average extent of cropped area per plantation being 1.6 hectares. (See Appendix 4:6.)

4.25 Besides the area cultivated, the estates have also a large extent of unplanted area with them. The unplanted area was estimated at 8968 hectares, about 25 per cent of the cropped area in 1974-75, raising the total extent of the estates to 45,557 hectares. Of the cropped area under coffee the area that has been plucked constituted 23,447 hectares (64 per cent) in 1974-75.

4.26 The all-India production of coffee in 1974-75 was provisionally estimated around 92000 tonnes, the increase over the previous year being 5,600 tonnes (6 per cent). The State's

share of the crop stood at 15,784 tonnes (17 per cent) as against 15,459 tonnes (18 per cent) in the previous year, the increase in production over the year being marginal. The yield per hectare of plantations remained almost steady around 430 kg. during the years.

4.27 The Coffee Plantations in Kerala provided employment for 51,875 persons in 1974-75. The permanent garden labour employed constituted 24,270 (47 per cent), the rest being outside labour. Even among the outside labour category, as many as 21,615 (78 per cent) were engaged on a permanent basis.

4.28 The average pool price of coffee showed an improvement in 1975 over the previous year. For plantation 'A' the average price per quintal was Rs 951 in January—October 1975 compared to Rs 882 in 1974. Both Arabica Cherry and Robusta Cherry (AB Category) also recorded similar uptrend, the former from Rs 763 to Rs 844 and the latter from Rs 801 per quintal over ten-month period.

## CHAPTER 5

### INDUSTRY AND POWER

The promulgation of the National Emergency in July 1975 and the subsequent announcement of the Twenty Point Economic Programme have enabled the nation to salvage its economy from the evils of inflation, food scarcity and labour troubles which threatened to precipitate a crisis. Following the declaration of Emergency the labour situation has considerably improved. There has also been no serious shortage of raw materials or power supply; nor has there been any serious transport bottlenecks. The progress achieved by the public sector industrial and commercial undertakings has been a source of great relief and optimism. The major factor in raising productivity in these undertakings is the co-operation that the management has been getting from the workers in cutting down costs, in ensuring quality control and avoiding wastages. The climate of industrial peace which is likely to be stable at least for some time to come is conducive to accelerated economic growth. There has been an evident improvement in the morale of industrial undertakings in the country.

5.2 In Kerala also conditions prior to the Emergency were no better than those prevailing in the rest of India. The stagnation in industrial production during the first half of 1975 was the outcome of the cumulative impact of the shortage of raw materials like cement, aluminium etc., mounting costs of production, credit restraint imposed by the Reserve Bank of India, labour unrest and the general inflationary situation. But the declaration of the Emergency and enunciation of the twenty point programme came as a shock treatment for the State's economic ills.

5.3 The labour front in Kerala today is characterised by a unique atmosphere of peace. The industrial workers in the State are well aware that increased production will bring in its train greater benefits to them. About 3.21 lakh mandays were lost in the State during the pre-emergency period of January 1975 to June 1975. But during the second half of the year the number of mandays lost was only 0.46 lakh. While the monthly average of mandays lost during the period January-June 1975 was 53515, it was only 7681 during the period July-December 1975. Strike notices and threats of action which have been widely prevalent in the State prior to Emergency do not mar the industrial scene today. The constructive attitude of the workers has found a response with



the employers also. The employers also have taken an accommodative approach to labour problems.

5.4 The introduction of workers' representatives in the management of industrial concerns is one of the important schemes included in the New Economic Programme. This scheme is applicable to manufacturing and mining industries employing 500 or more workers in the public, private or co-operative sector. The State Government has evolved a scheme to ensure participation by workers in the management of public sector concerns. Under the scheme, the workers will be associated at three levels viz., the shop floor level, the unit level and at the level of the Board of Directors. The State Sector concerns which have workers' representatives in management include the Kerala State Electricity Board, the Kerala State Road Transport Corporation, the Travancore Rubber Works, Trivandrum, the Kerala Electrical and Allied Engineering Company, Mamala, Kerala Ceramics, Kundara, Travancore Plywood Industries, Punalur, Kerala Drugs and Pharmaceuticals, Alleppey, The Kerala State Coir Corporation, Alleppey and Kerala Soaps and Oils, Kozhikode. Besides the above units, the Central sector concerns in the State such as Hindustan Latex, Trivandrum and FACT, Alwaye also will have workers' Association in management. The Government majority concerns such as Travancore Titanium Products and Travancore Cochin Chemicals also propose to take workers' representatives in management.

5.5 The phenomenal increase in the number of working factories during the years 1973 and 1974 is a sign of the State's steady march towards industrialisation. The working factories which numbered 3499 in 1972 shot up to 5046 in 1973 and again to 6036 in 1974. But a probe into the figures relating to the working force in the factory sector will reveal that most of the new units are very small with low employment potential. However it is a matter for legitimate pride for the State to find that there is brisk activity in the State's industrial sphere.

5.6 As the majority of large scale industries in Kerala are in the public sector, the State Government had to play the major role in the development of industries in the State. The Kerala State Industrial Enterprises is making continued efforts to resuscitate the subsidiary companies through diversification and expansion programmes. While all the units under this holding company were incurring losses in 1972-73, units such as Travancore Plywood Industries, Kerala Electrical and Allied Engineering Company and the Kerala State Drugs and Pharmaceuticals have started making profits in 1974-75. Another State Sector undertaking, the Kerala Premo Pipe Factory, raised its level of profits significantly during the year.

5.7 The Travancore Cochin Chemicals, which is a Government Majority concern, has completed its fourth stage expansion. The Transformers and Electricals, Kerala is on the third stage of its expansion programme and this is expected to be completed in 1976-77. This company wiped off all losses and declared a modest maiden dividend during 1974-75. The United Electrical Industries Ltd., has diversified production and has taken up the production of plastic film capacitors. The Unit will soon be starting the production of carbon film resistors. With this diversification the company hopes to improve its financial results substantially. The Traco Cable Company Limited has implemented a telephone cable project and are preparing for a second cable manufacturing unit at Thiruvella. The Chalakudy Potteries Ltd., is examining possibilities of making superfine refractories with Soviet Collaboration and financial assistance from the Kerala State Industrial Development Corporation. Other undertakings in the State Sector which have made significant strides are the Kerala State Electronics Development Corporation and the Kerala Minerals and Metals Limited.

5.8 The Kerala State Industrial Development Corporation continued to be the premier agency in the promotion of large and medium scale industries in the State. The Corporation has till now assisted 29 companies to establish new projects and 12 companies to effect expansion/diversification/rehabilitation. It also extended financial help to the State Farming Corporation, KITCO, KSEDC and Kerala State Industrial Enterprises. The Corporation could enhance its profits significantly during 1974-75.

5.9 In the Central Sector the Indian Telephone Industries has commissioned their project, the Electronic Switching Factory, at Palghat. The possibility of commercial exploitation of oil from Bombay High is an optimistic sign for the Cochin Refineries Ltd., which is experiencing difficulty in obtaining sufficient quantities of crude petroleum to utilize its expanded capacity of 3.3 million tonnes. The Cochin Ship Building Yard has entered the production stage. The keel of the first ship—75,000 tonne bulk carrier for the Shipping Corporation of India—was laid on 11-2-1976 by the Prime Minister. The work relating to the setting up of the News Print Project of the Hindustan Paper Corporation at Vaikom is also making good progress.

5.10 Small scale industries have to play a vital role in Kerala's industrial sphere. The State Department of Industries has been recently reorganised with a view to accelerating the development of small scale industries in the State. An Industries Development Commissionerate with sufficient field organisation was formed

solely for the development of small scale units. The new programme for the development of small scale industries that has been launched by the State envisages the setting up of 10,000 additional small scale units and revival of 2500 sick units within a period of 4 years at a total cost of Rs 100 crores. The first batch of 11 mini estates (110 small scale units) under this programme has been established. A second batch of 22 mini estates is nearing completion. The infrastructure necessary for the new small scale units will be provided by the Kerala State Small Industries Development and Employment Promotion Corporation which has been recently formed by the merger of the Kerala State Small Industries Corporation and the Kerala Employment Promotion Corporation. The Central scheme for providing subsidy to industries set up in the industrially most backward districts of Alleppey, Malappuram and Cannanore continued during the year 1974-75 as well. The State Government also provided incentives to small scale industries by way of concessions in respect of sales tax, supply of equipment and machinery on hire purchase through the Kerala State Small Industries Corporation and concessional rate of interest on loans from Kerala Financial Corporation.

5.11 Under the Twenty Point Economic Programme an apprenticeship scheme is being implemented in the State. The training places located and filled up before July 1975 were 1941 and 1399 respectively. Since then the scheme has been further speeded up and as on 31-1-1976, 4021 training places for apprentices were located and 3700 places filled up.

5.12 The traditional industries of Kerala viz., the handloom, coir and cashew, not only bring in valuable foreign exchange but also provide employment to a large number of workers in the State. The State Government is making earnest attempts at solving the problems facing these industries. The workers in coir industry have to face under employment though enough raw materials in the form of raw husk is available in Kerala. The State Government have drawn up a comprehensive programme for the reorganisation of coir industry. The entire programme would require an expenditure of Rs 41.72 crores. This reorganisation scheme is pending with the Government of India. The recent notification of Minimum of Wages in coir industry has helped the coir workers to better their lot.

5.13 A comprehensive scheme for the development of handloom industry has been drawn up by a Committee in July 1975 in the wake of the introduction of the Twenty Point Economic Programme. The earlier scheme of the Committee has been modified and submitted to the Central Government for approval. The Centre has

recently agreed to allot two projects, one for the production of handloom cloth intended for the internal market and the other for the production of export varieties. The Government of India have set up a handloom weavers' centre at Cannanore while the State Handloom Weavers' Apex Society has started a Weavers' Service Centre at Trivandrum. The Special Rebate Scheme which was in force during the period 7-1-1976 to 29-2-1976 has helped the handloom industry to sell out the major portion of the accumulated stocks of handloom cloth.

5.14 It will be necessary to bring more area under cashew cultivation to place the cashew industry on a firmer footing. The paucity of raw cashew often resulted in the under utilization of capacity and intermittent closure of factories during 1974-75. However, as the unit price of cashew kernels shot up in foreign markets the industry could make significant profits.

5.15 Effective steps are being taken to exploit the limestone deposits of Walayar. It is hoped that a cement factory of 1200 tonnes per day could be set up in 1977. The total investment needed for the unit will be of the order of Rs 30 crores. Steps are also being taken for the exploitation of the vast deposits of quartz sand available in the Alleppey-Shertalai region.

5.16 On the power front the dedication of the Idukki Hydro Electric Project to the nation by the Prime Minister on 12-2-1976 has been the event of greatest significance during the recent past. The commercial operation of the Idukki Project has been started. With the full commissioning of the first three generators by July 1976 it would be possible for Kerala not only to meet the power demands of the neighbouring States like Tamil Nadu and Karnataka, but also to usher in an area of industrialisation based on cheap hydro power within the State.

#### *Working Factories:*

5.17 The total number of working factories in the State increased from 3499 in 1972 to 5046 in 1973 and then to 6036 in 1974. A district-wise distribution of registered working factories at the end of 1972, 1973, and 1974 along with the annual variation for 1973 and 1974 is given in Table 5.1.

TABLE 5.1

Sl. No.	District	No. of registered factories at the end of			Variation compared to previous year		Total increase in 1974 compared to 1972
		1972	1973	1974	1973	1974	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Trivandrum	176	206	240	30	34	64
2	Quilon	465	579	638	114	59	173
3	Alleppey	317	391	466	74	75	149
4	Kottayam	227	412	540	185	128	313
5	Idukki	114	119	124	5	5	10
6	Ernakulam	530	790	966	260	176	436
7	Trichur	555	740	832	185	92	277
8	Palghat	303	482	545	179	63	242
9	Malappuram	64	83	102	19	19	38
10	Kozhikode	430	706	872	276	166	442
11	Cannanore	318	538	711	220	173	393
Total		3499	5046	6036	1547	990	2537

5.18 Increase in the number of working factories had been significant in Kozhikode, Ernakulam and Cannanore districts during the year 1973. There had only been a nominal increase in Idukki, Malappuram and Trivandrum districts. The year 1974 also witnessed significant increase of factories in Ernakulam, Kozhikode and Cannanore districts. The rate of increase had been more or less the same in Idukki, Malappuram and Trivandrum Districts. A perusal of the increase in the number of working factories during the last two years will reveal that the highest increase was in Kozhikode, followed by Ernakulam and Cannanore while the lowest was in Idukki.

5.19 An industry-wise distribution of working factories and average daily employment in these factories as at the end of 1973 and 1974 are provided in Appendix 5.1 and 5.2. Cotton, saw mill, printing, rubber and coir are some of the industries that have contributed to the substantial increase in the number of working factories. The average daily employment in all the working factories together was 2.26 lakhs in 1972. This increased to 2.43 lakhs in 1973 and to 2.59 lakhs in 1974. During the two year period between 31-3-1972 and 31-3-1974, while the total number

of working factories increased by 72 per cent, employment increased by only about 6 per cent. This is due to the fact that increase has occurred mainly in the factories coming under Section 85 (P) i.e., those which employ less than 10 workers and work with the aid of power and Section 85 (NP) i.e., those which employ less than 20 workers and work without the aid of power.

*Government-Owned Companies:*

*(i) The Kerala State Industrial Enterprises:*

5.20 The Kerala State Industrial Enterprises, a holding company constituted for the development and control of the six companies fully owned by the Government of Kerala, continued to render technical, financial and marketing advice to its subsidiaries. An effective management reporting system was brought into force to assess at frequent intervals the performance of the subsidiary companies and corrective steps were taken to obtain optimum performance. The cost of production for each product or job was assessed and pricing pattern was regulated on the corresponding basis. The holding company also periodically reviewed the ways and means position of the subsidiaries and arranged the flow of funds from Government and other financial institutions to reinforce working capital needs and project costs. It also rendered significant help to the subsidiaries in material management by organising sound practices in procurement, planning and accounting of materials. As the marketing of products by the subsidiary companies posed difficult problems the holding company took vigorous steps for the fuller exploitation of the markets by organising a separate market wing and by building up an export house.

5.21 The holding company is thus rendering all available assistance for the better utilisation of the manufacturing capacity of the subsidiary companies. No wonder the subsidiaries have shown improvement in their working during recent years. The working results of the subsidiary companies for the last three years are presented in Table 5.2.

TABLE 5.2

(Rs. in lakhs)

Sl.No.	Name of Company	1972-73		1973-74		1974-75	
		Value of Sales	Profit (+) Loss (-)	Value of Sales	Profit (+) Loss (-)	Value of Sales	Profit (+) Loss (-)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Trivandrum Rubber Works	78.46	(-) 38.00	107.18	(-) 10.71	122.72	(-) 15.25
2	Kerala Ceramics	30.93	(-) 11.54	38.43	(+) 0.22	43.42	(-) 10.00
3	Travancore Plywood Industries Ltd.	46.97	(-) 10.09	88.42	(+) 3.23	98.50	(+) 6.88
4	Kerala Electrical and Allied Engineering Co.	71.04	(-) 10.31	88.35	(+) 0.50	116.29	(+) 1.37
5	Kerala Soaps and Oils Ltd.	31.52	(-) 15.12	39.80	(-) 11.73	81.19	(-) 2.24
6	Kerala State Drugs and Pharmaceuticals	..	..	..	..	67.83	(+) 3.87
Total		258.92	(-) 85.06	362.18	(-) 18.49	529.95	(-) 15.37

5.22 The sales turnover of the constituent companies which stood at Rs. 258.92 lakhs in 1972-73 was stepped up to Rs. 362.18 lakhs in 1973-74 and to Rs. 529.95 lakhs in 1974-75. It shows a more than 100 per cent increase, value wise, in the total business turnover of the subsidiary companies during the period 1972-73 to 1974-75. The net loss of the subsidiaries has been progressively brought down from Rs. 85.06 lakhs in 1972-73 to Rs. 15.37 lakhs in 1974-75.

5.23 The share capital of the holding company, fully contributed by the Government, has increased from Rs. 5 lakhs to Rs. 55 lakhs during 1974-75. The main source of income for the company is management fees and interest on loans advanced to subsidiary companies. The net income of the holding company during 1974-75 was Rs. 1598 as against Rs. 765 in the previous year.

A short review on the working of four of the subsidiary companies for the year 1974-75 is presented below:—

(a) *Kerala State Drugs and Pharmaceuticals Ltd.*

5.24 The Kerala State Drugs and Pharmaceuticals is the first public sector undertaking of its kind in this country, set up with the objective of providing to the people common and essential drugs of standard quality at moderate prices. The company was inaugurated on 12th September 1974, and within a short period the entire plant was put to commercial operation thus enabling the company to meet promptly the requirements of the Directorate of Health Services. The production commenced from October 1974, and for the remaining part of the year, the company produced 972 lakhs of tablets, 42.63 lakhs of capsules, 0.60 lakh litres of liquids and 1.92 lakh numbers of injectables. Though there was an upward trend in the price of raw materials, and packing materials, the company was able to hold the price line. The business performance of the company as a whole for the year 1974-75 was satisfactory inspite of the various difficulties in the availability of raw materials and interruption in power supply. The company, having a paid up capital of Rs 11 lakhs, during a short span of about six months from the commencement of production was able to obtain a turnover of Rs 67.83 lakhs, and a profit of Rs. 3.87 lakhs.

(b) *Travancore Plywood Industries Ltd.*

5.25 Better supply of raw materials and satisfactory production facilities enabled the company show substantial improvement in the production side in 1974-75. But as market conditions became sluggish during the latter part of the year causing severe restrictions in the business turnover of the company, production has to be restricted. Out of the available production capacity of 22.8 lakhs sq. metres of plywood of 4 mm basis on double shift working the company produced 12.39 lakh sq. metres valued at Rs 137.05 lakhs in 1974-75. The Unit has a paid up capital of Rs. 48.58 lakhs and employs 453 workers. The operating results of the company during 1974-75 showed substantial improvement. In spite of adverse market conditions the sales turnover increased to Rs 98.50 lakhs from Rs. 88.42 lakhs in the previous year. The net profit of the company in 1974-75 was Rs. 6.88 lakhs as against Rs. 3.23 lakhs in 1973-74.

(c) *Kerala Soaps and Oils Ltd.*

5.26 The Kerala Soaps and Oils Ltd., which has a paid up capital of Rs 132.93 lakhs provides employment to 279 persons. It



has an installed capacity to produce 700 tonnes of soaps and 300 tonnes of shark liver oil products. Production during the year 1974-75 consisted of 729 tonnes of soaps valued at Rs. 74.62 lakhs and 62 tonnes of shark liver oil products valued at Rs. 15.13 lakhs. Thus the total value of goods produced during the year was Rs. 89.75 lakhs, while in the previous year it was only Rs. 38.96 lakhs. The sale proceeds also shot up to Rs. 81.19 lakhs in 1974-75 from Rs. 39.80 lakhs in 1973-74. In spite of this high turnover and consequent sales, the company still continues to incur losses. But the company was able to reduce the margin of loss considerably from Rs. 11.73 lakhs in 1973-74 to Rs. 2.24 lakhs in 1974-75. The installation of the 3600 tonnes capacity automatic soap making Mazzoni plant was done recently. The Unit is also implementing a project to produce 260 tonnes of glycerine per annum utilising the spent lye obtained as a by-product of the Mazzoni plant operation. This project costing about Rs. 28 lakhs is expected to go into production soon. With the commissioning of these two plants it is expected that the company will show substantial improvement in respect of business turnover and profitability.

(d) *The Kerala Electrical and Allied Engineering Company:*

5.27 The Kerala Electrical and Allied Engineering Company having a paid up capital of Rs. 75.06 lakhs manufactured 34,916 KVA distribution transformers, 258 electric motors, 2.61 lakhs of meter components, 5626 contactors/starters 187 M. T. of cast iron special pipes and 600 M. T. of structural fabrication during 1974-75. The total sale proceeds of the company for the year was Rs. 109.19 lakhs, as against Rs. 84.26 lakhs in the previous year. The net profit of the company increased from Rs. 0.50 lakh of the previous year to Rs. 1.36 lakhs during 1974-75.

5.28 The company has launched a programme to manufacture brushless alternators in collaboration with a French firm. The capital cost of the project is Rs. 65 lakhs. The Industrial Finance Corporation of India has sanctioned a loan of Rs. 45 lakhs. The project is expected to commence commercial production by April 1976.

(ii) *The Kerala Premo Pipe Factory Ltd.*

5.29 The Kerala Premo Pipe Factory, having a paid up capital of Rs. 18 lakhs, provides employment to 311 persons. In 1974-75 the factory manufactured 5895 pre-stressed concrete pipes, 3902 R. C. C. spun pipes and 1426 R. C. C. collars valued at Rs. 72.09 lakhs. The sale proceeds of the company increased from Rs. 45.6 lakhs in 1973-74 to Rs. 71.5 lakhs in 1974-75. The net profit of the company showed a significant increase in 1974-75; it rose from Rs. 3.53 lakhs in 1973-74 to Rs. 17.28 lakhs in 1974-75.

(iii) *The Kerala Minerals and Metals Ltd.*

5.30 To the Kerala Minerals and Metals Ltd., the year 1974-75 has been a very successful one from the point of view of both production and sales. The Table 5.3 gives the progress of production in the unit during the last three years.

TABLE 5.3

(tonnes)

<i>Product</i>	1972-73	1973-74	1974-75
Ilmenite	15127	15005	19324
Rutile	1412	1527	1449
Zircon	356	243	731
Monazite	92	55	126
Leucoxene	183	161	128
Sillimanite	541	337	8
Total	17711	17328	21766

5.31 The sales turnover has also sharply increased over these years. From Rs. 25.30 lakhs in 1972-73 the sales turnover increased to Rs. 39.56 lakhs in 1973-74 and to Rs. 48.12 lakhs in 1974-75. The net profit earned by the company however decreased from Rs. 3.81 lakhs in 1973-74 to Rs. 2.65 lakhs in 1974-75. The company is exploring the possibilities of setting up units for the manufacture of titanium dioxide, titanium sponge etc., as part of its expansion programme. Geological exploration and detailed survey of the mining area by the Atomic Minerals Division have been completed. The preparation of the detailed project report for the expansion of the existing mineral separation unit by an Australian company is in progress. The Metallurgical and Engineering Consultants (India) Ltd., has submitted a process evaluation report for the titanium dioxide pigment plant. The same consultants (MECON) have been entrusted with the preparation of the detailed project report. Negotiations with foreign firms for technical knowhow and

collaboration agreement have been finalised, subject to the approval of the Government.

Data relating to production and value of important products of the Government-owned Companies are presented in Appendix 5.3.

**Government Majority concerns.**

**(i) The Travancore Cochin Chemicals Ltd.**

5.32 During 1974-75, the paid up capital of the company increased from Rs. 377.25 lakhs to Rs. 434.75 lakhs. The company provides employment to 1051 persons, and manufactures chemicals like caustic soda, sodium hydrosulphite and sodium sulphide. The installed capacity and production of certain selected items of manufacture during the last few years are presented in Table 5.4.

TABLE 5.4

(Tonnes)

<i>Goods manufactured</i>	<i>Installed capacity</i>	1972-73	1973-74	1974-75
Caustic Soda	33,000	23,509	23,336	22,574
Sodium Hydrosulphite	3,000	871	1,127	800
Sodium Sulphide	1,000	675	680	521

5.33 Production during the year 1974-75 was less favourable compared to the previous year. The poor performance of the mercury cells owing to the passage of time, the inadequate availability of sulphur dioxide, market resistance and recession in textile industry are the major factors that contributed to the lower production of the company. The total value of sales in 1974-75 (Rs. 467 lakhs) however was 4 per cent higher than that in the previous year (Rs. 450 lakhs). But the quantity-wise sales of almost all items suffered a drop. The average selling price realised during the year was comparatively higher and this accounted for the increase in sale proceeds. The working of the company for the past few years shows that the losses are increasing year by year. While the net loss in 1973-74 was Rs. 10.60 lakhs, in 1974-75 it was Rs. 14.34 lakhs.

5.34 The sodium sulphide unit included in the fourth stage expansion programme has been put on steam, but due to certain defects, it has not been possible to achieve the installed capacity. The company has also completed the erection of caustic soda/chlorine plant. But due to the delay in obtaining power connections and a few critical instruments, trial production has been delayed.

*(ii) Transformers and Electricals, Kerala Ltd.*

5.35 The production of power transformers and current transformers by TELK during 1974-75 was satisfactory. An increase of thirty percent over the previous year's production was registered. In 1974-75 the company produced 1432.5 M. V. A. power transformers and 546 current transformers. Though the year was generally one of severe stresses and strains for electrical equipment industry owing to the unprecedented cost escalation and the problem of inadequacy of funds with the State Electricity Boards, the company was able to achieve good progress in the sale of transformers. The total sale proceeds of the company during 1974-75 was Rs. 671.67 lakhs. The working results for the year have been fairly satisfactory. The company made a net profit of Rs. 51.52 lakhs. After wiping off all accumulated losses, the company could declare a modest maiden dividend of six percent amounting to Rs. 14.80 lakhs, to be paid out of the current profits. The declaration of this maiden dividend no doubt constituted a land mark in the growth of the company.

5.36 In 1974-75 the company also obtained an industrial licence for increasing its manufacturing capacity from 1080 MVA to 3000 MVA per annum, and for taking up the manufacture of 400 K. V. equipments. This expansion project is progressing satisfactorily, and its implementation will enable the company to meet the requirements of heavy power transformers of the maximum capacity and voltage required at present in the country.

*(iii) Traco Cable Company Ltd.*

5.37 The Traco Cable Company, having a paid up capital of Rs. 114.92 lakhs and employing 214 persons, manufactured goods worth Rs. 81.99 lakhs during 1974-75. The gross sales were worth Rs. 86 lakhs, comprising power cables valued at Rs. 75 lakhs and telephone cables valued at Rs. 11 lakhs. The sales in power cables actually decreased by Rs. 6 lakhs compared to the previous year. The installed capacity and actual production of the company for the last two years are given in Table 5.5.

TABLE 5.5

<i>Goods manufactured</i>	<i>Installed capacity</i>	<i>Production</i>	
		<i>1973-74</i>	<i>1974-75</i>
P. V. C. Cables	10.973 million core meters	3.972 million core meters	1.137 million core meters
A. A. C./A. C. S. R.	1500 tonnes	576 tonnes	416 tonnes
Telephone Cables	1000 L. K. M.	(No production)	80 L. K. M.

5.38 It can be seen that the production figures for 1974-75 recorded a considerable shortfall. The major contributory factor for this shortfall was the shortage of aluminium. As against the company's requirement of 1600 tonnes of aluminium, the Director General of Technical Development allotted only 736.45 tonnes. The actual receipt of this key raw material was still lower at 471.98 tonnes. This represents only 29.5 per cent of the total requirements. The company began commercial production of telephone cables during 1974-75 but the production was only 80 K. M.

5.39 The loss incurred by the Company was increasing over the last few years. During 1972-73 the loss was Rs. 1.83 lakhs and it further increased to Rs. 4.20 lakhs in 1973-74. In 1974-75, the net loss increased to an alarmingly high figure of Rs. 32.50 lakhs.

(iv) *Travancore Titanium Products Ltd.*

5.40 The Travancore Titanium Products which has a paid up capital of Rs. 93.24 lakhs produced 7611 tonnes of titanium dioxide pigments valued at Rs. 738.27 lakhs during 1974. In the production front the company has made substantial improvement. The total production, sales turnover, and net profit for the last three years are given in Table 5.6.

TABLE 5.6

Item	1972	1973	1974
Production of Titanium dioxide (in tonnes)	5886	4369	7611
Sales turnover (Rs. lakhs)	305.93	237.47	547.64
Net profit (Rs. lakhs)	42.08	33.25	63.05

5.41 The total production capacity of the Unit is 24,500 tonnes. The old plant (6500 tonne capacity) was shut down for modernisation, and the new plant (18,000 tonne capacity) was under trial production. But full production capacity could not be achieved due to initial troubles noticed in the Plant. The production was also deliberately curtailed towards the last quarter of 1974, in the light of the unprecedented slump in domestic and foreign markets. As a consequence of the commissioning of the new plant the number of employees in the unit increased from 722 in 1973 to 1016 in 1974.

(v) *United Electrical Industries Ltd.*

5.42 The heavy power cuts enforced in many parts of the country and restrictions on credit facilities contributed to the slackening of the demand for products of the company. This considerably affected the working of the company during 1974-75. The installed capacity and production of the company during the years 1973 and 1974 are presented in Table 5.7.

TABLE 5.7

<i>Goods manufactured</i>	<i>Installed capacity (Numbers)</i>	<i>Production (Nos.) during</i>	
		1973	1974
K. W. H. meters	200,000	114,268	110,212
Motor control gears	11,800	5,419	5,838
L. T. switch gears	600	61	129
Magneto generators	not fixed	329	357
Electronic items	not fixed	603	662

5.43 The sale proceeds of the company in 1974 was only Rs. 121.92 lakhs as against Rs. 110.73 lakhs in the previous year. The steep rise in the cost of living index and the escalation in the cost of raw materials influenced greatly the working of the company. The net profit of the company has been decreasing steadily during the last few years. The net profit which was Rs. 6.57 lakhs in 1972 decreased to Rs. 0.50 lakh in 1973, and again to a nominal sum of Rs. 0.15 lakh in 1974.

5.44 This company which has a paid up capital of Rs. 36.90 lakhs provides employment to 357 persons. The expansion schemes of the company for the manufacture of plastic film capacitors, and carbon film resistors have already been completed. Commercial production of these products is expected to commence shortly. With the implementation of these two projects, the company hopes to improve its financial results substantially.

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

5.45 The working of the Forest Industries (Travancore) Ltd., during 1974-75 resulted in a net loss of Rs. 5.78 lakhs as against a net profit of Rs. 4.88 lakhs in 1973-74. The total sale proceeds of the company in 1974-75 was only Rs. 15.36 lakhs while in the previous year it, was Rs. 39.74 lakhs. There has been considerable delay in handing over forest areas for timber extraction, and this resulted in the acute shortage of timber both for sales and manufacturing purposes. The Government handed over about 200 hectares of forest land to the company only during February 1975 and though extraction work commenced immediately only a small quantity of timber became available for disposal before the close of the year. These factors adversely affected the working of the company and resulted in a net loss of Rs. 5.78 lakhs.

(vii) *Chalakydy Potteries Ltd.*

5.46 In 1974-75 the Chalakydy Potteries Ltd., was mainly engaged in the production of special kind of refractories, such as ingot pouring sets, acid resistant bricks, nozzles etc., in addition to the

standard refractory items. The production during the year was 2308 tonnes of refractories valued at Rs 13 lakhs, which was almost twice that of the previous year. A steady increase in sales was also maintained by the company. The sales turnover of the company which was Rs 2.67 lakhs in 1972-73 increased to Rs 5.52 lakhs in 1973-74 and to Rs 11.03 lakhs in 1974-75. The company anticipated sales worth Rs 16 lakhs in 1974-75. But the closure of the Steel Complex, one of its major customers, for three months made the company declare a lay off of 45 days for fifty per cent of the workers, thereby causing a shortfall in production and sales. This materially affected the company, and caused a net loss of Rs 0.98 lakh during 1974-75 as against Rs 1.38 lakhs in the previous year. It is however gratifying to note that the company is gradually reducing its loss margin.

5.47 The State Government advanced an amount of Rs 4 lakhs to the company in 1974-75. Of this Rs 1 lakh was towards share participation, and the balance of Rs 3 lakhs was long term loan. The company, which has a paid up capital of Rs 6.63 lakhs, provides employment to 171 persons. A team of experts from the Institute of Refractories, U. S. S. R. with representatives of the KSIDC visited this company during the year to examine the possibilities of manufacturing super refractories required for steel units in India. A project involving an expenditure of Rs 77 lakhs has been taken up for the expansion of the company to manufacture special refractories, in collaboration with KSIDC.

(viii) *Pallathra Bricks and Tiles Ltd.*

5.48 In 1974-75 the company was under lay-off for about six months due to serious financial crisis. Hence production was at a very low level that year. The company could produce only 5.61 lakhs of sand lime bricks as against 25.86 lakhs in the previous year. The working of the company resulted in a net loss of Rs 3.15 lakhs for the year. The cumulative loss brought forward by the company reached Rs 18.38 lakhs and this exceeded its paid up capital of Rs 14.56 lakhs by Rs 3.82 lakhs. As it has become clear that the factory cannot work profitably unless diversification to more profitable lines is taken up, the company is considering proposals for a mini steel plant and a chemical lime plant. The Government of India have granted a letter of intent to the company for putting up a plant for the manufacture of 15,000 tonnes of calcium carbide per annum. The company has initiated certain preliminary steps for implementing this project.

Data relating to production and value of important products of Government Majority Concerns are provided in Appendix 5.4.

### *Kerala State Industrial Development Corporation.*

5.49 With a view to increasing the tempo of industrial advancement of the State, the Kerala State Industrial Development Corporation (KSIDC) has taken up for implementation several projects. Most of these projects have been implemented and the remaining are expected to be completed shortly. The Corporation has so far provided financial and promotional assistance to twenty-nine companies to establish new projects. It has also given financial assistance to twelve existing industrial units to effect substantial expansion/diversification/rehabilitation or to tide over temporary financial difficulties. In addition, the Corporation has also extended financial assistance to KITCO, the State Farming Corporation, Kerala State Electronics Development Corporation and the Kerala State Industrial Enterprises.

5.50 Of the twenty-nine companies which were given financial assistance for industrial ventures, twenty-six units went on stream before 31st March 1975. The three new projects which were taken up during 1974-75--Bristol Boats Ltd., (Luxury Yachts) Pearlite Wire Products (wire ropes), Veneers and Laminations India Ltd., (decorative veneers)--reached an advanced stage of construction during 1974-75. They are expected to go on stream shortly. The Corporation has rendered financial assistance to twelve existing companies for undertaking substantial expansion/diversification/modernisation or rehabilitation programmes. Some of these units have more than one expansion or diversification programme. The Corporation has also promoted ten companies of which six went into production before March 1974. Messrs. Excel Glasses Ltd., commissioned their plant in October 1974. Of the remaining three companies, Packing Paper Corporation Ltd., Trivandrum, has not yet finalised its scheme, and Vanchinad Leathers Ltd., Kuttipuram (finished leather) has reached an advanced stage of implementation. The first phase of this project, estimated to cost Rs 155 lakhs, is expected to be completed by February 1976. The third company, the Kerala State Textile Corporation, which managed the five sick textile mills of the State has transferred four mills to the National Textile Corporation and has now under its management only the Trivandrum Spinning and Weaving Mills.

5.51 The promotional efforts of the Corporation during the year 1974-75 have been mostly directed to: (i) implementing letters of intent held by it, (ii) establishing new projects proposed by private parties, and (iii) formulating prospective schemes for future development. The Corporation has made all possible efforts to finalise the projects for the manufacture of cigarettes, soda ash, nylon filament yarn, pulp and paper, conveyer belts, H. D. P. E. sacks, special refractories, rubber threads, ossein, formaldehyde, and three spinning mills for which letters of intent have been received by



the Corporation. These projects when implemented would involve an estimated total outlay of Rs 14120 lakhs. The Corporation's applications for the issue of letters of intent for establishing a chemical complex and diesel engine manufacturing unit are pending with the Government of India. The Corporation has provided promotional assistance to the power loom complex (at Kunnathra), Formic Acid Project, Typewriter Project, Carbon Black Project, Pottassium Chlorate Project and the T. K. Chemical Ltd., all proposed by private parties. A project for the establishment of a cement plant based on the lime stone deposits of Walayar is proposed to be taken up for implementation during 1976-77. The Corporation has also drawn up a programme for the expansion of Chalakudy Potteries Ltd., at an estimated cost of Rs 77 lakhs.

5.52 During 1974-75 the Corporation continued to assist industries in different ways. The total assistance sanctioned during 1974-75 recorded a marked rise reaching a level higher than in any of the previous years. Total effective sanctions that year amounted to Rs 271.27 lakhs as against Rs 188.14 lakhs in 1973-74. The amount sanctioned by the Corporation included Rs 231.93 lakhs to eleven units as loan, Rs 29.34 lakhs to four companies as direct participation in share capital and Rs 10 lakhs to one company as guarantee assistance. The Corporation has increased its effective lending rate from 9 per cent to 11 per cent during the year 1974-75.

5.53 The paid up capital of the Corporation at the end of 1974-75 remained at Rs 464 lakhs. The total resources of the Corporation increased from Rs 971.54 lakhs in 1973-74 to Rs 1037.64 lakhs in 1974-75 (see Appendix 5.13). This increase in resources was made possible through the increase in the borrowings and reserves. The gross income of the Corporation in 1974-75 was Rs 73.65 lakhs as against Rs 52.23 lakhs in the previous year. After providing for interest, administrative expenses, provision for taxation and other miscellaneous expenses the net profit in 1974-75 was Rs 17.09 lakhs as against Rs 8.86 lakhs in the previous year.

#### *Kerala State Textile Corporation Ltd.*

5.54 The Kerala State Textile Corporation was set up in March 1972, as a subsidiary of the Kerala State Industrial Development Corporation. The Corporation advanced loans totalling Rs 66.84 lakhs to the five textile units entrusted to it in order to meet their requirements of working capital, and cost of modernisation. The gross income of the Corporation for the year 1974-75 was Rs 13.15 lakhs as against Rs 11.70 lakhs in the previous year. The net profit after charging interest, administrative expenses, taxation etc., was only Rs 1.70 lakhs as against Rs 3.24 lakhs in 1973-74.

5.55 The Government of India passed the Sick Textile Undertakings (Nationalisation) Act 1974, and the National Textile Corporation transferred the management, direction and control of Alagappa Textiles, Cochin, and Parvathi Mills, Quilon, to their subsidiary Corporation, the National Textile Corporation (Andhara Pradesh, Karnataka, Kerala and Mahe) Ltd., on 21-2-1975. The management of Vijaya Mohini Mills, Trivandrum, and Kerala Lekshmi Mills, Trichur, was also taken away from the Kerala State Textile Corporation on 7-4-1975. Now the Kerala State Textile Corporation is left with the management of the Trivandrum Spinning Mills Ltd., Balaramapuram and the Bleaching and Calendering Plant, and Warping and Sizing Unit at Pappanamcode.

*Kerala State Electronics Development Corporation:*

5.56 The Kerala State Electronics Development Corporation made significant strides in the implementation of its different schemes through the companies incorporated by it. A number of items have been developed and perfected by its Research and Development Division. The Corporation has an installed capacity to manufacture 5,000 television sets per annum. But owing to the acute shortage of picture tubes, only about 1,000 television sets could be manufactured during the year 1974-75. These television sets were being marketed by M/s. Electronics Corporation of India Ltd., under an agreement with them. The Corporation has received licence for the manufacture of 5000 electronic calculators with 60 per cent export commitment. Commercial production of five models of calculators developed and perfected by the Corporation has commenced. The Corporation also started commercial production of three models of variable speed drives, which are essential control equipments used in cement, textiles, paper, plastic and other process industries. The Corporation has developed static invertors which change the D. C. power supply system from a battery into ordinary main supply and provide uninterrupted power supply. This power supply system is necessary for factories and establishments where continuous power supply is indispensable. Commercial production of this item against orders from various parties are in progress. The Corporation has perfected the manufacture of voltage stabilisers of various capacities, and has entered into an agreement with Encotronix, a Division of ENCOS, for the manufacture of this item with the technical know-how and marketing support provided by the Corporation.

5.57 The Research and Development Division of the Corporation has developed and perfected various electronic devices like Electronic Information Display System, Miniature Walkie-Talkie, Audio Acoustics, Ticketing Machines, Electronic Printers etc. The Corporation is taking steps for the commercial production of these items.

**5.58** The Corporation has also promoted the following subsidiary companies to implement the various projects envisaged by it:

- (1) Keltron Components Complex Ltd., for the production of electrolytic and monolythic capacitors.
- (2) Keltron Crystals Ltd., for the manufacture of quartz crystals.
- (3) Keltron Magnetics Ltd., for the assembly of certain magnetic components for Sprague Electromag, Belgium.
- (4) Keltron Projectors Ltd., for the production of 16. m. m. projectors.
- (5) Keltron Entertainment System Ltd., for the manufacture of three models of broadcast receivers.
- (6) Keltron Resistors Ltd., for the production of carbon film resistors.

**5.59** Besides the above activities the Corporation has provided technical, financial and marketing support for the following three companies organised by private entrepreneurs:

- (1) Dielecto Magnetics Ltd., at Kuttipuram for the manufacture of ceramic capacitors.
- (2) Keltron Varistors Private Ltd., at Olavakkot for the manufacture of thermistors and varistors.
- (3) Keltron Ferrites Private Ltd., at Quilon for the manufacture of industrial ferrites.

**5.60** The Corporation acquired more than 51 per cent of the equity share of the Metropolitan Instruments Ltd., the management of which was taken over in 1973 on the advice of the Government of Kerala. The company was reconstituted and made a subsidiary of the Corporation and redesignated as "Keltron Counters Ltd.". All effective steps were being taken to make the company an economically viable unit by diversifying production. The Corporation also proposes to undertake commercial production of some of the items developed and perfected by the Research and Development Division through this company.

**5.61** The Government of Kerala contributed Rs 155 lakhs during 1974-75 towards the share capital of the Corporation thereby raising its share capital from Rs. 65 lakhs to Rs 220 lakhs. The Corporation was able to successfully negotiate with various financial institutions and banks for term loans and cash credit facilities. Almost all the projects taken up by the Corporation, other than the television receivers, are at various stages of implementation.

*Central Sector Units:**(i) The Fertilizers and Chemicals Travancore Ltd.*

5.62 The Fertilizers and Chemicals has a paid up capital of Rs 61.17 crores and employs 6601 persons. A picture of the various products manufactured by the Company (including Cochin Division of FACT) during the last three years is provided in Table 5.8.

TABLE 5.8

(Tonnes)

Sl. No.	Item	Installed Capacity	Production		
			1972-73	1973-74	1974-75
1	Ammonium Sulphate	198000	95946	104358	93313
2	Ammonium Phosphate (16 : 20)	132000	51220	65416	68231
3	Ammonium Phosphate (20 : 20)	49500	3284	19596	23803
4	Super Phosphate	49500	20260	35746	23450
5	Ammonium Chloride	24750	8269	9384	9661
6	Sulphur Dioxide	8250	1532	1392	1345
7	Oleum	..	1285	2182	2380
8	Urea	330000	..	..	63059*

\* From 1-10-1974 to 31-3-1975.

5.63 Because of the limitations and problems faced in the operation of the plants in the Cochin Division, the rated capacity could not be achieved. Deficiencies in equipment necessitated frequent closures of the Plant.

In the Udyogamandal Division, the limitations in production were mainly due to the delay in repairing the high pressure compressor of the Tonnox plant, shortage of sulphuric acid, interruptions in power supply and voltage fluctuations and the work to rule, go slow and other tactics adopted by the workers.

5.64 The sales turnover of the company during 1974-75 was Rs 5784 lakhs as against Rs. 2928 lakhs during 1973-74. In spite of this increased sales turnover the company incurred a net loss of Rs. 305.88 lakhs during 1974-75 as against the net loss of Rs. 196.63 lakhs during the previous year. There have been substantial increase in the cost of raw material, salaries, wages and dearness allowance, freight and marketing expenses in 1974-75. The prices of fertilizers were also high but as they were statutorily fixed or otherwise controlled by the Government, the increases in cost of production were not fully compensated.

5.65 The fertilizer consumption in the country registered a drop during 1974-75 because of the limitations in fertilizer availability earlier this year, unfavourable climatic conditions, stringent distribution controls, high prices and limited availability of distribution credit. However towards the end of the year availability of fertilizers improved as a result of the arrival of large quantities of imported fertilizers.

*(ii) Cochin Refineries Ltd.*

5.66 The difficulty in obtaining sufficient quantity of crude petroleum to utilise the expanded capacity of 3.3 million tonnes, operational difficulties due to the basically different quality of crude processed and the exorbitant cost of crude purchased during the year ended 31-8-1974 were the major reasons for the Cochin Refineries Ltd., to show an unsatisfactory financial outcome. The total crude processed during the year was approximately 2.4 million tonnes, averaging 48,310 barrels per calendar day, as against 2.02 million tonnes averaging 40,650 barrels per calendar day during the previous year. The comparison between the cost of crude purchased during the year (Rs. 126 crores) with that of the previous year (Rs. 29 crores) portrays the heavy impact of crude oil price from the beginning of 1974. Though the sales income of the company increased from Rs 38 crores to Rs 124 crores during the year ended 31-8-1974 the added product price has not been able to counteract the higher cost of crude oil and the result was that the company had to incur a net loss of Rs. 526.07 lakhs during the year.

5.67 The developments on the international level necessitated supplies of crude to refineries in India from abroad to be arranged by the Central Government with the foreign exchange resources available to it. The trade arrangements which cater for crude oil to India in return for the supply of their needs to the oil-rich countries and the definite possibility of commercial extraction of oil from Bombay High are optimistic signs for the future of the company.

*(iii) Indian Rare Earths Ltd.*

5.68 The year 1974-75 which marked the completion of 25 years of existence of the Indian Rare Earths Ltd., was one of the most successful years for the company. During this year the turnover and profits registered a substantial improvement compared to the earlier years. The total sale proceeds of the company exceeded Rs 650.5 lakhs and the net profit increased to Rs. 82.9 lakhs in 1974-75. During 1973-74 the net profit for the company was only Rs 43.9 lakhs. The Rare Earths Division at Alwaye

produced 2607 tonnes of rare-earth chloride, 3155 tonnes of trisodium phosphate, 915 tonnes of thorium hydroxide and 91 tonnes of rare earth fluoride valued at Rs. 175.34 lakhs. The Minerals Division at Chavara produced 90,161 tonnes of ilmenite, 5,284 tonnes of zircon, 4,164 tonnes of rutile, 3,855 tonnes of zircon and minor quantities of certain other minerals valued at Rs. 298.55 lakhs. The company employs 222 technical and 230 non-technical people in its Rare Earths Division at Alwaye and 174 technical and 574 non-technical people in its Minerals Division at Chavara.

(iv) *The Hindustan Latex Ltd.*

5.69 The Hindustan Latex Limited, having a paid up capital of Rs 90 lakhs and employing 546 persons, obtained Rs. 70.76 lakhs through the sale of its finished products during the year 1974-75. The sales turnover during the year was lower than the previous year's record of Rs. 86.47 lakhs.

The production of the company was also lower as compared to the previous year. While the company produced 87.73 million pieces of condoms during 1973-74, the production during 1974-75 was only 85.64 million pieces valued at Rs. 103.86 lakhs. The working of the company resulted in a net loss of Rs. 19.16 lakhs during 1974-75, while the loss for the previous year was Rs. 10.55 lakhs.

(v) *The Hindustan Machine Tools Ltd.*

5.70 The Kalamassery Unit of the Hindustan Machine Tools Ltd. employs 2413 persons. In 1974-75 this Unit produced 41 printing machines worth Rs. 113.51 lakhs and 503 other machines worth Rs. 449.18 lakhs. The total sale proceeds in 1974-75 was Rs. 573.25 lakhs. The net loss incurred by the unit during the year amounted only to Rs. 110.71 lakhs as against Rs. 212.69 lakhs in 1973-74. Certain salient features of H. M. T. as a whole and the Kalamassery Unit separately for the year 1974-75 are given in Table 5.9.

TABLE 5.9

Sl. No.	Item	H. M. T. (all Units)	Of which Kalamassery Unit
1	Employees (Nos.)	16110	2413
2	Feasible capacity (Rs. lakhs)	6553	862
3	Goods produced (Rs. in lakhs)	6013	563
4	Sale proceeds (Rs. in lakhs)	6291	573
5	Net profit (+) Loss (-) (Rs. in lakhs)	(+) 509	(-) 111

5.71 The Quilon District Engineering Technicians Industrial Co-operative Society (QUETCOS) set up a factory at Umayanalloor near Quilon in collaboration with HMT, to manufacture 300 numbers of LT 20 centre lathes per year. The HMT provided the necessary technical guidance, and the assembly of the first batch of 25 lathes from completely knocked down (CKD) components supplied by the Kalamassery Unit is in progress. An agreement to render total plant engineering services was also concluded with Kerala Agro Machinery Corporation Ltd. (KAMCO) under which HMT will assist KAMCO in the preparation of process sheets, cycle timing, selection of machines, accessories, tooling and personnel. HMT has also reached an understanding with KAMCO by which HMT would draw a detailed project report for a gear and shaft project for KAMCO.

(vi) *Hindustan Insecticides Ltd.:*

5.72 The Alwaye unit of the Hindustan Insecticides Ltd., another Government of India enterprise, manufactured 1358 tonnes of technical DDT, 3006 tonnes of formulated DDT, 1693 tonnes of technical BHC and 2284 tonnes of formulated BHC in 1974-75. The total value of the goods produced amounted to Rs. 464.6 lakhs and the total sale proceeds of the company was Rs. 403.75 lakhs. The company, which employs 471 persons, earned a net profit of Rs. 59.54 lakhs in 1974-75.

(vii) *Modern Bakeries (India) Ltd., (Cochin Unit):*

5.73 The Cochin Unit of the Modern Bakeries (India, Ltd.) produced 115.63 lakhs of standard loaves of 400 grams each valued at Rs. 140.16 lakhs during 1974-75. The total sale proceeds during this year in which it earned a net profit of Rs. 13.77 lakhs were Rs. 139.93 lakhs. Certain salient features of the Cochin Unit along with that of Modern Bakeries (India) Ltd., as a whole for the year 1974-75 are given in Table 5.10.

TABLE 5.10

Sl. No.	Item	Of which Cochin Unit	Modern bakeries (India) Ltd. (all units)
1	Number of employees	124	1713
2	Capacity (lakhs of loaves of 400 grams each)	90	1230
3	Production (do.)	115.63	1151.44
4	Value of production (Rs. lakhs)	140.16	1275.92
5	Sale proceeds (do.)	139.93	1254.62
6	Net Profit (do.)	13.77	1.04

**(viii) Cochin Shipyard:**

5.74 The Project area comprising 46,000 sq. metres of shop area, two docks and three quays have gone into production. Some works remain to be completed, but they will be completed side by side with production. When fully operational, the shipyard will have a building dock capable of building ships of 85,000 DWT and a repair dock capable of accommodating ships of size upto 100,000 DWT. The shipyard will be able to provide annual repairs for capacity of about one million GRT. It will have three quays measuring 400 M, 208 M and 435 M. length. When completed this shipyard will be the biggest in India and one of the most modern in the world. The production activities of Cochin Shipyard has commenced when the keel of the first 75,000 DWT bulk carrier was laid on February 11, 1976 by the Prime Minister.

Data relating to the production and value of important products of the Central Sector Units in Kerala are provided in Appendix 5.5.

**Traditional Industries.****(a) Coir Industry:**

5.75 Coir Industry provides employment to about five lakhs of people in Kerala in the various stages of manufacture of coir yarn and coir products. The majority of coir workers are absorbed in various processes of coir yarn manufacture like retting, beating, spinning. An appreciable number of workers is also engaged in the manufacture of coir ropes, mats and mattings. Of the total number of workers about 47% are engaged in the spinning sector, 26% in beating of husks and cleaning of fibre, 10% in the retting sector, and the remaining 17% in the manufacturing sector. About 90% of the workers engaged in hand spinning and 67% in spindle spinning are women. Unemployment and under employment constitute serious problems in the industry. The majority of workers, except perhaps those in the organised manufacturing sector, remain well below the poverty line.

5.76 With a view to make available to the workers the fruits of their labour, various programmes were undertaken during the successive five year plans. Attempts were made to organise co-operative societies for bringing the means of production within the reach of actual workers, to free them from the clutches of middlemen, and to ensure steady employment at reasonable wages. Upto the end of the Fourth Five Year Plan, it was possible to bring 1.25 lakhs of coir workers into the co-operative fold. The Fifth Plan aims at bringing at least 2.4 lakhs workers under the co-operative fold by organising 600 primary co-operative societies.



5.77 As at the end of 1974-75, a total of 337 societies (which included 318 primary coir societies, 2 thondu societies and 4 central coir marketing societies) were functioning in the State. During 1974-75 five manufacturing societies were given financial assistance by way of share capital contribution, working capital loan and managerial subsidy. Two central societies and one manufacturing society were given assistance to open three sales depots outside the State. The Kerala State Coir Corporation was given assistance by way of share capital contribution. The Model Coir Factory at Beypore which was under the administrative control of the Department upto 31-12-1974, was transferred to the Coir Corporation. With a view to strengthening the administrative set up, the Department was reorganised. The State was divided into nine project areas each under the control of a project officer and into 42 inspectorates, each under the control of a co-operative inspector.

5.78 During the half year ending 30-9-1975, the Government participated in the share capital structure of 155 primary co-operative societies to the tune of Rs. 12.34 lakhs. Besides, 99 societies were assisted with working capital loan of Rs. 61.97 lakhs. A sum of Rs. 3.74 lakhs was paid towards managerial subsidy to 177 societies. Besides the above, a sum of Rs. 25 lakhs was given to the Kerala State Coir Corporation for distress relief purchase. A Thondu Vyavasaya Co-operative Society was registered during the period and a sum of Rs. 1 lakh was given to it as share capital and Rs. 9 lakhs as working capital loan.

5.79 Coir Co-operatives were not financed by the Reserve Bank of India for various reasons. This has been a drawback in the provision of credit to these co-operative societies. It has since been possible to get over this difficulty and institutional finance has been arranged for coir co-operatives from the year 1974-75. Government have guaranteed repayment of loan advanced upto an aggregate amount of Rs 300 lakhs. The co-operative banks have sanctioned a total amount of Rs 148.70 lakhs to coir co-operatives. The institutional finance is expected to increase progressively over a period of years, as the societies switch over to bank finance as per the phased programme chalked out by the Government. The marketing societies which function as a federation of the primary societies render business support to them by purchasing and selling their products. These societies have therefore been financially strengthened to equip them to undertake their business. The marketing societies have obtained institutional finance to the tune of Rs 77.50 lakhs. The Government, besides providing share capital contribution to the marketing societies to strengthen their equity base, has also liberally helped them by providing interest subsidy, loan and grant for godown construction etc. The institution of a price fluctuation fund and Government

contribution of Rs 3.07 lakhs during 1974-75 are other measures which enable the societies stand against any business loss.

5.80 The State Government in exercise of the powers under the Defence of India Rules, controlled the movement of coir fibre by a system of permits. The absence of any provisions for the control, movement and sale of fibre in the Husk Control Order of 1973 has been a snag in the price control of husk. This has been plugged by the introduction of the Kerala Coconut Husk and Fibre (Regulation of Movement) order, 1975, and since the introduction of this order the availability of fibre at reasonable prices has vastly improved.

5.81 Notification of price under the statute itself may not help to maintain the price of husk. The primary societies were the only agency to procure husk till recently. With a view to improving the procurement of husk and ensuring the physical control of a sizable quantity of husks, the State Coir Corporation and the marketing societies have been brought into the field. Effective control of the movement of husk, its sale and enforced supply at notified prices have been brought under an intensive drive. The strengthening of the enforcement staff in January 1975 enabled the strict implementation of the Husk Control Order. The continued effort at seizure of husk retted without valid licences has curbed the tendency on the part of private retters to procure raw husk at higher rates. The Mobile Squad organised for this purpose with police personnel has also helped in the enforcement of the Husk Control Order.

5.82 Minimum wages in coir industry were notified twice before without success. The actual earnings of workers were far below the notified minimum wages. Therefore a new scheme of organisation of workers into production-cum-sale societies was undertaken from the year 1973-74. According to this scheme retted husks will be distributed to member workers for defibering and spinning into yarn. The workers who bring back the yarn will be paid the conversion rate, which would assure them the wage as per the notified minimum wages. Production has been started in societies where husk is getting ready for conversion into fibre. So far the societies could produce yarn worth Rs 101.89 lakhs, making available reasonable wages to the members to the tune of Rs. 53.71 lakhs.

5.83 Organised production at a pre-determined cost by the co-operatives will help to stabilise the market, and do away with the present violent fluctuations which has been a curse to the industry. Though the co-operatives have just started production there has been very encouraging results in this field. There has been

improvement in wages paid to the workers in the private sector also, in sympathy with reasonable rates paid by the co-operatives. As the societies develop their production to peak level, the price of yarn is bound to come down, and stabilise at economic levels. This will be a positive contribution to export promotion. The long awaited goal of ensuring minimum wages to the workers in the coir industry has been achieved to a great extent even at this early stage of implementation of this programme.

*(b) Cashew Industry:*

5.84 The year 1974-75 presented a picture of unprecedented spurt in cashew kernel prices. The unit price of cashew kernels has shot up in foreign markets resulting in substantial profits to the cashew industry. The paucity of raw nuts often resulted in under-utilisation of capacity, and intermittent closure of cashew factories. There has been a growing sense of realisation regarding the urgency of this problem and the Cashew Corporation of India—the sole distributors of raw nuts—has taken steps to tackle this problem. The Cashew Corporation of India has established a new policy of raw nut allocation to the processing units, based on the number of workers employed in each unit and this, along with the prohibition of unauthorised movement of nuts from one factory to another, has virtually put an end to the cursed 'kudivaruppu' system.

*Kerala State Cashew Development Corporation:*

5.85 The birth and growth of Kerala Cashew Development Corporation is one of the most spectacular events in the industrial sector of Kerala. It is one of the best examples of the rebirth of a traditional industry that was brought to the brink of fragmentation and even extinction by the private sector. Starting with three cashew factories in 1970, the Corporation has at present 34 major cashew factories, employing about 34,000 workers and staff. The Corporation is at present the biggest processor and exporter of cashew kernels in the whole of India. From the point of view of employment the Corporation is the biggest public sector undertaking in Kerala and accounts for about a quarter of the total processing capacity in Kerala.

5.86 During the year 1974-75, a total of 39,439 tonnes raw nuts were roasted, consisting of 31,479 tonnes of African raw cashew and 7,960 tonnes of local cashew. This compares with a total roasting of 33,324 tonnes of 1973-74. Eventhough an increased quantity of raw nuts was roasted during the year, it was not sufficient enough to work round the year. This resulted in under-utilisation of capacity and intermittent closure of factories. The Corporation

produced 10,481 tonnes of cashew kernels. The total sale proceeds of the cashew kernels, cashew shell liquid, rejections, shells, skins and others amounted to Rs. 2,280.51 lakhs. The export of cashew kernels during 1974-75 was worth Rs. 2,220.23 lakhs. The country-wise break up of export is as follows:—

U. S. S. R.	..	Rs. 1592.80 lakhs
U. S. A. and Canada	..	Rs. 483.16 ,,
G. D. R. and other East European Countries	..	Rs. 35.30 ,,
Other countries	..	Rs. 108.97 ,,
Total	..	<u>Rs. 2220.23 lakhs</u>

The Corporation for the first time since its inception exported cashew shell liquid valued at Rs. 15.84 lakhs.

5.87 The working of the Kerala Cashew Corporation in 1974-75 resulted in a gross profit of Rs. 191.40 lakhs. After providing for income tax and sur-tax to the tune of Rs. 152 lakhs, there was a net profit of Rs. 39.40 lakhs as against a net profit of Rs. 11.52 lakhs in the previous year.

5.88. The earnings and other conditions of service of the workers and staff of the Corporation are the best obtaining in any cashew factory. They get full benefit of minimum wages, D. A., leave facilities, provident fund, gratuity etc. During the year 1974-75, in addition to the annual bonus of 15 per cent, which works about Rs. 46.37 lakhs, each worker was paid Rs. 100 as an interim relief during the period of seasonal closure of factories. The entire contingent of workers and staff of the Corporation were covered by the "life-cum-group gratuity scheme" of the Life Insurance Corporation of India. This step ensures full gratuity and a measure of death benefit to the dependents in case of death of the workers of the Corporation.

5.89 Although the year 1974-75 has been an exceptionally fine one for the cashew industry, the current year (1975-76) presents a gloomy picture. Consequent on the impact of the unprecedented rise in the kernel market last year, the price of imported and indigenous raw nuts has also shot up this year. But there was a perceptible fall in the demand of cashew kernels in foreign markets and the resultant accumulation of unsold stock brought about a chain of unhealthy reaction. The unit price of kernels fell more steeply than it rose during the previous year. Offers to sell kernels at unworkable prices by some private manufacturers also contributed to the eventual

crash in foreign markets. Selling at unworkable prices will be a serious national loss. It is high time the Central Government devised some measures like fixing a floor price for the export of cashew kernels. The wages of cashew workers were also substantially raised during the year, firstly by the annual revision of dearness allowance rates and subsequently by the general revision of minimum wages. The cumulative effect of all these developments is likely to seriously affect the cashew industry in general during 1975-76.

(c) *Handloom Industry:*

5.90 Handloom industry occupies a prominent place among the traditional industries in the State, providing employment to about one and a half lakhs of people. According to a survey conducted in 1973 there are 75,057 active looms in the State. Of this about 23,600 looms are in the co-operative sector. Since 1973 a large number of looms have become activated consequent on the introduction of crepe cloth which had good world market. The active looms in the State at present is estimated to be above one lakh. Minimum wages were introduced in handloom industry with effect from 1-4-1974. Consequently the earning capacity of the weavers has increased. At the same time handloom industry in Kerala has to face competition from neighbouring States which have not enacted such progressive legislations. Compared to Kerala the cost of production and, in turn, the selling prices of handloom cloth are much lower in most other States.

5.91 The industry was facing crisis during 1974-75 and there was heavy accumulation of unsold stock. A special loan of Rs 30 lakhs was sanctioned by the Government of India to Kerala to procure and market the accumulated stock of handloom cloth. The Apex society also procured goods worth Rs 54 lakhs from member co-operatives utilising its own funds. Even then the situation could not be improved. Hence in order to tide over this difficult situation the Government of India sanctioned in December 1975 a special scheme for allowing rebate of 20 per cent on the sale of handloom cloth (10% by the State and 10% by the Centre). This scheme was put into operation from 7-1-1976 to 29-2-1976.

5.92 A Common Facility and Design Centre for weavers has been opened under the management of the Handloom Apex Society at Balaramapuram. This centre has evolved promising designs which has attracted the attention of the public. The main object of the Centre is to evolve new designs, to give training to weavers in weaving, dyeing, printing and to help the societies introduce new designs by providing them technical advice etc. During 1974-75 three new industrial weavers' co-operative societies were

organised in addition to giving assistance for the expansion of six existing industrial co-operative societies. Assistance was also given for starting two new dye-houses and to expand thirteen existing dye houses. Under the scheme of revitalising the weaver's co-operative societies which are not eligible for R. B. I. cash credit, wipe-off-loss grant was given to one society. Also, under the scheme aid to languishing societies working capital loan was given to nine societies. Government took share in the Apex society for an amount of Rs two lakhs. Five collective weaving centres were also started. Grant at the rate of Rs 2,000 was given for renovating 25 houses of weavers. The Department spent an amount of Rs 44.93 lakhs during the financial year 1974-75 as against a provision of Rs 31.24 lakhs. Reserve Bank of India cash credit of Rs 99.05 lakhs was sanctioned to primary weavers' co-operative societies. In addition sums of Rs 50 lakhs and Rs 30 lakhs respectively were given to the Apex society for marketing of cloth and for yarn trade.

5.93 Prices of yarn of lower counts registered a downward trend and this led to accumulation of stock of handloom cloth produced out of yarn purchased at higher prices. A comparative study of yarn prices is given in Appendix 5.6. Cost of dyes and chemicals did not come down during the year 1974-75; in fact it showed an increasing trend.

5.94 In the co-operative sector a total quantity of 296.90 lakh metres costing Rs 902.37 lakhs was produced. The quantity of handloom cloth sold was 252.76 metres costing Rs 875.56 lakhs. Export of handloom cloth marked an increase during 1974-75 compared to the previous year. During 1974-75 the value of handloom cloth exported amounted to Rs 119.40 lakhs, while in the previous year it was only Rs 100.21 lakhs.

5.95 A Committee was constituted by the State Government in July 1975 to formulate a comprehensive scheme for the development of handloom industry in the State, to be presented to the Government of India under the Twenty Point Economic Programme announced by the Prime Minister. This Committee drew up schemes for the development of handloom industry and suggested a time-bound programme for implementing the schemes under the Twenty Point Programme within a period of five years. The Report of the Committee has been forwarded to the Government of India for approval. The salient features of the proposal are:—

- (1) To have two projects in the State, one in the north, and the other in the south, for the intensive development of the industry. Supply of inputs like yarn, dyes, chemicals etc., will be undertaken by these projects.

- (2) By the organisation of 100 factory type weavers' co-operative societies, establishment of 100 collective weaving centres, revitalisation of existing industries etc., it is intended to raise the coverage of looms in the co-operative fold.
- (3) Establishment of two weavers' service centres to evolve new designs and to have facilities for dyeing and printing.
- (4) Establishment of centres for training in the weaving of new designs and in the use of improved appliances.
- (5) Providing adequate storage facilities for the storage of raw-materials and finished goods.
- (6) Revitalisation of existing primary societies by providing assistance for management and finance.

*Kerala State Handloom Finance and Training Corporation:*

5.96 During the year 1974-75, the Corporation received 307 applications for loans from members, for an aggregate amount of Rs 9.67 lakhs. Of this, 145 applications were sanctioned and an amount of Rs 3.80 lakhs was disbursed to the members in cash. Credit loan in the form of yarn and dyes for Rs 1.90 lakhs was also sanctioned to 53 members. Out of the remaining, 56 applications for an amount of Rs 2.42 lakhs were pending and 51 applications for an aggregate amount of Rs 1.55 lakhs were closed during the year. The Corporation has so far sanctioned Rs 38.59 lakhs, of which an amount of Rs 11.60 lakhs from 527 members is outstanding as on 31-3-1975. An abstract of loan operations of the Corporation for the last three years is given in Table 5.11.

TABLE 5.11

(Amount Rs. in lakhs)

Item	1972-73		1973-74		1974-75	
	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Loans sanctioned	177	3.98	144	3.92	256	8.18
Loans rejected	2	0.07	8	0.40	Nil	..
Amount disbursed	177	3.98	139	3.67	200	5.70
Amount outstanding	311	8.85	418	10.44	527	11.60

5.97. The recession in the textile industry affected the business of the Corporation. It was forced to sell some of the stock even below cost, due to the sudden fall in prices. The sales turnover of the Corporation for the year 1974-75 was Rs. 85.72 lakhs. The net profit for the year was only Rs. 0.12 lakhs as against Rs. 4.63 lakhs in the previous year.

### Small Scale Industries.

...

5.98 Small scale industries have a significant rôle to play in achieving the objectives of increasing industrial production, generation of additional employment, and a more equitable distribution of income. They have a potential for achieving these goals at a relatively small capital cost. Realising this importance of small scale industries in the socio-economic field of Kerala, and with a view to accelerating its growth, the Government of Kerala constituted an Industries Development Commissionerate solely for small scale industries in the State.

5.99. The Industries Development Commissionerate launched a massive programme for establishing 10,000 new industrial units involving an investment of Rs. 100 crores, during the ensuing four years. The programme also envisages simultaneously reviving back to energy, 2,500 sick industrial units. Out of the 13710 small scale units in the State as per the small industries Census conducted by the Government of India, 3942 are reported as closed and non-reporting. The vast majority of these small scale units are tiny ones which have gone out of existence. It is estimated that about five hundred of these defunct units are capable of revival. Among other working units, 2,000 can be classified as sick or working below the break even point. Thus there may be a total of 2,500 sick units which need revival.

5.100 The target for the new industries programme shall escalate from 1,000 units in the first year (1975-76) to 2,000, 3,000 and 4,000 units to be commissioned in the subsequent years of the intensive drive period. The industries will be dispersed in a scientific manner, among District, Taluk, and Panchayat Centres but the main body and thrust of the new industries programme will be the Panchayat level "mini estates". Mini estates will consist of an average of ten units to be set up in all the 967 Panchayats of the State. The type of industries which can be started in these mini estates, have been identified, and the preparation of the project reports, as well as the various services required for starting the units are being rendered by the Industries Development Commissionerate, Small Industries Service Institute, Kerala Industrial Technical and Consultancy Organisation, and the newly proposed Small Industries Development Corporation of Kerala.



5.101. The capital outlay required for the new industries programme will be found as follows—ten per cent from Government, ten per cent from the entrepreneurs and the remaining eighty per cent from Kerala Financial Corporation, commercial banks, and other financial institutions. ,

5.102 As a first step for launching this massive programme, district level conventions were held in all the districts, to enthuse the potential entrepreneurs and the public to discuss and debate the various aspects of small industries development drive, and to evolve specific plans of action. About 15,000 entrepreneurs registered at these conventions were trained in a phased manner to set up selected industries. The first batch of eleven mini industrial estates, one in a selected panchayat in each of the eleven districts of the State, for which foundation stones were laid on 15th August 1975, have already been established with production units in a record time of six weeks, and inaugurated on 3rd October 1975, on the occasion of the fifth anniversary of the present Kerala Ministry. The second batch of 22 estates are nearing completion, and they are scheduled to be commissioned shortly.

5.103 The Industries Development Commissionerate and its field organisation are being scientifically organised to undertake this responsibility. Along with the reorganisation of the Government set up, the present corporate set up for small industries will be completely reorganised to enable it to deliver the required services to the sector. With a view to providing a unified and integrated Corporative organisation to give complete package of co-ordinated services to the existing and potential small scale industries, a new Corporation called "The Kerala State Small Industries Development and Employment Corporation" has been formed by merging and re-organising the existing two Corporations, viz., the Kerala Small Scale Industries Corporation and the Kerala Employment Promotion Corporation.

*Kerala Small Scale Industries Corporation:*

5.104 Administration of 18 industrial estates, execution of civil construction works on behalf of Government, running of production-cum-service units, supply of machinery on hire purchase basis and procurement of raw materials and their distribution to small scale units formed the major activities of Kerala Small Scale Industries Corporation during 1974-75 also. The ownership of the 18 industrial estates hitherto owned by Government, but managed by the Corporation on an agency basis has been transferred to the Corporation with effect from 1-4-1975. The final settlement of the transaction has not, however, been completed.

The construction division of the Corporation executed civil works to the value of Rs 20.30 lakhs and earned an amount of Rs 2.20 lakhs towards centage charges during the year 1974-75.

5.105 Out of the nine production-cum-service units run by the Corporation, the Government Ceramic Service Centre, Mangattu-paramba is still owned by the State Government but managed by the Corporation as an agency basis. In 1974-75 the Corporation received Rs 14,400 from Government as managerial remuneration for the management of this Unit. The profit and loss position of remaining 8 units in 1974-75 as compared to the previous year is furnished in Table 5.12.

TABLE 5.12

(Rs. lakhs)

Sl. No.	Name of Unit	Working result	
		1973-74	1974-75
(1)	(2)	(3)	(4)
1	Tile Factory, Amaravila	(—) 1.04	(—) 0.58
2	Government Instrument Workshop, Pappanamcode	(—) 0.45	(—) 0.31
3	Die Casting Unit, Pappanamcode	(+) 3.50	(+) 0.66
4	Kerala Water Proof Products	(—) 0.12	(—) 0.15
5	Straw Board Factory, Parumala	(—) 1.89	(—) 1.19
6	Service Workshop, Ollur	(+) 0.13	(—) 0.28
7	Wood Workshop, Kollakadavu	(+) 0.45	(+) 0.94
8	Wood Workshop, Calicut	(+) 0.66	(—) 0.06

(+) = profit      (—) = loss

Six out of the 8 units run by the Corporation sustained loss during 1974-75.

5.106 Under the hire purchase scheme machinery worth Rs 74.83 lakhs were supplied so far. The profit earned by the Corporation under this scheme worked up to Rs 3 lakhs in 1974-75 as against Rs 3.67 lakhs in 1973-74. The procurement and distribution of raw materials to small scale industrial units was the most profitable activity of the Corporation in 1974-75 also. The value of raw materials purchased, distributed and the profit earned during the years 1973-74 and 1974-75 are as given below:

	(Rs. in lakhs)	
	1973-74	1974-75
Value of materials purchased	210.28	327.44
Value of materials distributed	221.23	311.52
Profit earned	16.38	21.50

The total turnover of the Corporation in 1974-75 was Rs. 357.81 lakhs as against Rs. 254.47 lakhs in the previous year. The net profit earned by the Corporation in 1974-75 was Rs. 12.66 lakhs as against Rs. 11.59 lakhs in the previous year.

#### *Kerala Financial Corporation:*

5.107 The business operations of the Kerala Financial Corporation have recorded a significant increase during the year 1974-75. The total number of 506 loan applications for Rs. 1182.75 lakhs were received during the year compared to 386 applications for Rs. 960.36 lakhs during the previous year. The amount sanctioned and disbursed have also gone up. The total amount sanctioned was Rs. 697.78 lakhs against Rs. 385.92 lakhs during the previous year. Similarly the total disbursements in 1974-75 amounted to Rs. 265.54 lakhs, as against Rs. 209.05 lakhs in the previous year.

5.108 The restrictions in sanctioning assistance to certain types of industries like soft wood industries, aluminium industries, sea food industries, tourist hotels etc. imposed last year continued. A scheme for financing of fishing boats was introduced during 1974-75. The Corporation also formulated another scheme for providing liberalised financial assistance to persons who are technically qualified. According to this scheme, the technically qualified entrepreneurs will be provided with 90 per cent of the fixed cost of the project. During 1974-75 the Corporation received 21 applications involving an amount of Rs. 44.22 lakhs under this scheme. In using the facilities available under I. D. A. line of credit, made available through the Corporation, the performance of the State has been very poor compared to other States like Maharashtra and Gujarat. The Corporation has received only nine applications for foreign credit under this scheme, of which three applications involving a foreign exchange component of Rs. 31.08 lakhs were sanctioned. But the assistance has not been availed of so far, due to the delay on the part of the parties to complete the required formalities:

5.109 The Corporation continued to lay emphasis on the development of small scale industries in the State. The quantum of financial assistance disbursed to small scale industrial units amounted to Rs. 254.47 lakhs in 1974-75 compared to Rs. 179.21 lakhs in 1973-74. The agreement between the Corporation and the Government under which the Government subsidises all loans upto Rs. 3 lakhs continues to be in force. The rate of interest for these loans is only 5½ per cent. The difference between this rate, and the Corporation's lending rate is subsidised by Government.

5.110 The Corporation has decided to increase its present paid up share capital of Rs 100 lakhs to the full extent of its authorised capital (Rs 200 lakhs), out of which Rs 50 lakhs will be special share capital. This special class of share capital is being raised for extending assistance to the weaker sections of the society. The State Government has already contributed Rs 10 lakhs towards the ordinary share capital and Rs 12½ lakhs towards the special share capital.

5.111 In addition to its own resources, the financial commitments of the Corporation during 1974-75 were met by raising funds under bonds, other borrowings, deposits and from refinance. The Corporation successfully issued a series of bonds of Rs 75 lakhs. The Corporation was able to avail itself of refinance facilities to the extent of Rs 88.77 lakhs from Industrial Development Bank of India. It also depended on borrowings from Reserve Bank of India, and to a certain extent on fixed deposits from private parties.

5.112 During the year 1974-75, the Corporation earned a profit of Rs 43.20 lakhs after meeting all expenses, as against Rs 18.48 lakhs during the previous year. After provision for taxation, appropriation to statutory reserves, special reserves and guaranteed dividend, the available surplus of Rs 6.72 lakhs was set apart to cover bad and doubtful debts.

#### *Khadi and Village Industries:*

5.113 The activities of the Khadi and Village Industries Board include provision of financial assistance to Khadi and other village industries recognised by the Khadi Commission, conduct of periodical training to artisans engaged in these industries, and acquisition and distribution of raw material for khadi and village industries. During the year 1974-75, the State Khadi and Village Industries Board distributed an amount of Rs 34.04 lakhs to various units under khadi and village industries. It included Rs 11.67 lakhs as loans and Rs 0.31 lakh as grants disbursed under khadi schemes and Rs 20.68 lakhs as loans and Rs 0.55 lakhs as grants disbursed under village industries schemes. An amount of Rs 0.83 lakh was spent under intensive development programme. The State Board, through its various activities, provided full time employment to 56,162 persons, part-time employment to 20,022 persons and casual employment to 27,982 persons. The Board produced khadi and village industries products costing Rs 631.82 lakhs during 1974-75. The total value of sales of khadi and village industries products was Rs 750.75 lakhs. The wages given to the workers under the various industries amounted to Rs 378.80 lakhs. The production and sales were shared by the khadi and village

industries co-operative societies, and the major institutions directly run by the Board.

5.114 The Payyannur Khadi Centre is the main khadi production centre run by the Board. It has 10 sub centres, 5 visiting centres, and 2 collection centres, besides the central godown and sales depots. This centre alone has produced khadi worth Rs 19.4 lakhs, and sold khadi for Rs 20 lakhs. It also provided employment to 2000 spinners, 456 weavers and 82 others.

5.115 In general the Board's activities had nearly a twelve per cent expansion in production and sales as also in employment compared to the previous year. A statement showing the industry-wise number of units, production, sales, employment, wages given, etc. is given in Appendix—5.14.

### Minerals:

5.116 Among the various minerals available in the State, the beach minerals like ilmenite, monazite, rutile sillimanite and zircon are being worked intensively. The Kerala Metals and Minerals Ltd. and the Indian Rare Earths Ltd. are the two companies engaged in the exploitation of mineral sands of Kerala. The quantity of different minerals exploited and sold during the years 1973-74 and 1974-75 in Kerala is given in Table 5.13.

TABLE 5.13  
Production and sale of Mineral Sands

<i>Minerals</i>	1973-74		1974-75	
	<i>Production</i>	<i>Sale</i>	<i>Production</i>	<i>Sale</i>
Ilmenite	117568	118317	111229	113188
Brown Ilmenite	160	168	127	258
Rutile	7062	5936	5615	7401
Monazite	199	153	204	220
Zircon	7455	7408	6014	7461
Sillimanite	931	1180	224	320

5.117 China clay, limeshell, ball clay, fire clay and glass and white quartz sand are the other major minerals exploited in the State. Figures relating to the production and sale of these minerals in 1973-74 and 1974-75 are given in Table 5.14.

TABLE 5.14

**Production and Sale of Other Minerals***(In tonnes)*

<i>Minerals</i>	1973-74		1974-75	
	<i>Production</i>	<i>Sale</i>	<i>Production</i>	<i>Sale</i>
Glass and white quartz sand	24747	24087	25926	24551
Fire clay	6818	6848	8234	7983
Ball clay	592	634	1010	1016
Limeshell	92569	87761	78228	78453
China clay (Crude)	73345	1671	50420	723
China clay (Processed)	32825	30424	23418	24657

5.118 The State Mining and Geology Department was re-organised during 1974-75. Instead of the three divisions which it had originally, the Department has at present five divisions, one each in Cannanore, Calicut, Trichur, Alleppey and Trivandrum. This reorganisation was effected with an eye on the rationalisation of work and expansion of activities of the Department. The Department is carrying on exploration of geological work regarding the graphite deposits in Kanjirapally area, lime shell in Vembanad and Payyanoor, clays near Kundara, Trichur and Cannanore, and limestone in Mayyanad and Walayar.

5.119 The limestone deposits of Walayar have been investigated in detail by the Mineral Exploration Corporation, (a Public Sector Corporation of Government of India) and resources of about twenty million tonnes have been proved to be available within a depth of 60 to 100 metres, capable of being quarried from the surface downwards. Messers Holtece (cement consultants for the Cement Corporation of India and many other companies) have been appointed as consultants for studying the feasibility of a cement plant of suitable size based on the Walayar deposits. Their report is expected in March 1976, and the indications are that a cement plant of about 1200 tonnes per day may be feasible. Under the prevailing circumstances, the cost of such a project would be of the order of Rs. 30 crores.

5.120 Study of the graphite deposits around Thodupuzha is being continued, and further tests on a pilot scale would be carried on during 1976 with the collaboration of National Metallurgical Laboratory. Work regarding pilot test of iron ores of Calicut, with the help of National Metallurgical Laboratory and MECON are being programmed for 1976. Likewise the pilot test of the

4/744/MC.

bauxite ores of Nileswar, Kumbbla area is also being programmed during 1976. Studies to utilise the quartz sand of Alleppey in a big way are being pursued, with the help of the Glass and Ceramic Research Institute under the CSIR.

5.121 The geological exploration work in Kerala is to be increased multifold in the coming years. In order to assess the full potential of our natural resources, the State Government has put up proposals to the Centre, for assistance under the United Nations Development Programme (UNDP) for a full scale sophisticated mineral exploration and development. The total assistance under this programme is expected to be of the order of 1.2 million dollars, with about Rs 35 lakhs outlay coming from the State sector over a period of three years.

### **Power:**

5.122 Availability of cheap power is an essential pre-condition for rapid industrialisation. Power generation in Kerala is perhaps the cheapest compared to the other States in India. Gifted with a large number of rivers, the State is naturally placed in an enviable position in respect of power development. Due importance was therefore given for generation of hydel power during the two decades of planning in the State. The total installed power capacity rose from 28.5 M.W. at the inception of the First Plan to 621.5 M.W. by the end of 1972-73. The most important project under implementation in the State is the Idukki Hydro Electric Project. The pace of construction of the project was unprecedented during 1975 making rapid strides in the completion of the dam and allied works. The three dams Idukki, Cheruthoni and Kulamavu were completed during the year and the first of the three generating units has gone into commercial production in February 1976 giving rise to 130 M.W. of electric power. With this the total installed power capacity has gone up to 751.5 M.W. as on 12th of February 1976. It is expected that the remaining two units of 130 M.W. each will also be completed in 1976 and the installed capacity further pushed up to 1011.5 M. W. by the end of 1976.

5.123 During 1974-75, 14 villages were electrified against 37 during 1973-74 as a result of which 49,358 consumers were benefited. Also 3427 street lights were installed during the year 1974-75. The total power generated in the State which was 2513 MKWH units during 1973-74 rose to 2650 MKWH units in 1974-75. There was a slight increase in the per capita consumption of electricity from 79.09 units per annum in 1973-74 to 79.65 units in 1974-75. The total sale of electricity during 1974-75 stood at 2203 MKWH units against 2120 MKWH units in 1973-74 (See Appendix 5.15, 5.16, 5.17).

5.124 The total revenue income of the State Electricity Board from sale of energy amounted to Rs 2656.77 lakhs 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 281.86 lakhs. But during the year, a sum of Rs 290 lakhs was released by the State Government towards subsidy for loss incurred on Board's rural electrification works during 1971-72 & 1972-73. This subsidy from the Government was also taken into account for appropriating the interest charges on loans. As interest on institutional creditors has the first priority in the order of priorities stipulated under section 67 of the Electricity Supply Act 1948, the interest amount available for payment to Government loans, was only Rs 45.08 lakhs against the total interest of Rs 872.94 lakhs. Thus the financial working of the Board for the year 1974-75 resulted in a deficit of Rs 827.86 lakhs (see Appendix 5.18).



## CHAPTER 6

### TRANSPORT AND COMMUNICATIONS

Kerala has, in a fairly adequate measure, the usual transportation facilities like railways, roads, road transport vehicles and sea and air ports. In addition it has an extensive system of inland waterways which plays a useful role, especially in the transportation of goods. Road transport clearly constitutes the major mode of transport in the State. The State has a net work of roads connecting important urban and rural centres. The total length of roads in Kerala is nearly 74,000 kms. The registration of motor vehicles in the State is ever on the increase. The Kerala State Road Transport Corporation is expanding its activities by taking over new routes, providing more schedules and stabilising the transport services in the routes already taken over. A string of backwaters connected together by navigable rivers and artificial canals constitute the main arterial route for inland navigation in Kerala. As feeders to this route, the other sections of the State's waterways cater to the local transportation needs. The railway system in the State takes care of a sizeable portion of passenger and goods traffic and the coastal and foreign traffic is handled by the major port of Cochin and the other intermediate and minor ports. Kerala is found to be well placed in the sphere of communication facilities such as posts and telegraphs.

#### Roads:

6.2 The total road length in Kerala (including the roads held by the Panchayats) as on 1-4-1972 is estimated as 74,000 kms. This includes National Highways, roads held by the Public Works Department and other agencies. (See Table 6.1 below):

TABLE 6.1

Roads in Kerala State under different departments as on 1-4-1972

Sl. No.	Category	Length of Roads (Kms.)
1	National Highway	829
2	Public Works Department Roads	14718
3	Panchayats	52561
4	Kerala State Electricity Board	574
5	Military	12
6	Community Development and National Extension Service Blocks	2905
7	Railways	15
8	Department (Irrigation)	284
9	Municipalities & Corporation	1108
10	Other Departments	994
<b>Total</b>		<b>74000</b>

6.3 The length of roads maintained by the Public Works Department as on 1-4-1974 totalled 14,998 kms. The corresponding figures for a few previous years are as follows:—

1-4-1969	13,973 Kms.
1-4-1970	14,206 „
1-4-1971	14,365 „
1-4-1972	14,718 „
1-4-1973	14,824 „

6.4 The total length of roads maintained by the Public Works Department includes 298 kms. of Panchayat Roads taken over by it during the Fourth Plan period. The Public Works Department roads fall broadly under four categories. The length of roads as on 1-4-1974 under each category is provided in Table 6.2.

TABLE 6.2

**Details of P. W. D. Roads as on 1-4-1974 (Kms.)**

<i>Category</i>	<i>State High ways</i>	<i>Major Dist. roads</i>	<i>Other Dist. roads</i>	<i>Village roads</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)
Black topped	2145	5145	2560	..	9850
Metalled	..	..	2998	..	2998
Gravelled	..	..	620	..	620
Earthen	..	..	1530	..	1530
			<b>Total</b>		<b>14998</b>

**Road Transport:****(a) Motor Vehicles Registration:**

6.5 Motor vehicle density in Kerala is fairly high. It has 241 vehicles per 100 sq. km. of area and 439 vehicles per lakh of population. The number of registered motor vehicles as on 31-3-1975 was 1,19,720 as against 1,04,465 as on 31-3-1974. Thus the increase over the year was 15,255 (See Appendix 6.1). This increase had also its reflection on the revenue receipts under the Motor Vehicles Taxation Act which went up from Rs. 633.44 lakhs in 1973-74 to Rs. 685.68 lakhs in 1974-75. The cumulative total arrears of tax under various Motor Vehicles Acts during 1974-75 stood at Rs. 23.44 lakhs whereas in 1973-74, the arrears were

Rs 21.51 lakhs. Receipts under non-motor vehicles was Rs 27.14 lakhs in 1974-75 compared to Rs 23.47 lakhs in the previous year. The number of road accidents which occurred in 1975 was 5146 compared to 4814 during the previous year. In 1975 732 persons were killed and 5467 persons injured as a result of the accidents against 815 and 5005 respectively during 1974 (See Appendix 6.2).

**(b) Passenger Transport:**

6.6 Kerala State Road Transport Corporation is one of the biggest public sector undertakings in the State with a total capital investment of Rs 1576.71 lakhs in 1974-75. The Corporation provides employment to over 19,000 persons. As at the end of 1974-75, the Corporation had a fleet strength of 2212 vehicles against 2057 vehicles in the previous year. The activities of the Corporation expanded considerably during 1974-75 through opening new routes, introduction of new services, and bringing about an increase in the number of schedules. New services were introduced in 58 routes. The number of bus schedules increased from 1596 in 1973-74 to 1726 during 1974-75. The number of routes increased from 1885 to 2322 during this period. Consequently the route length increased by 9231 kms. and the distance operated by 204.7 lakh kms. during the year. A total number of 4216.8 lakhs of passengers were carried by the transport service. The average distance travelled by a passenger worked out to 15.2 kms. The corresponding figures for the previous year were 3513.4 lakhs and 15.7 kms. respectively. The average earnings per passenger was 57.9 paise and the average earnings per vehicle on road was Rs 426 during 1974-75. These figures are indicative of the phenomenal increase in the fleet strength, passenger patronage and the volume of operation of the Kerala State Road Transport Corporation (See Appendix 6.3).

6.7 The gross revenue of the Corporation in 1974-75 was about Rs 2487 lakhs as against Rs 1877.7 lakhs in 1973-74 while the gross revenue expenditure amounted to nearly Rs 2547 lakhs as compared to Rs 1885.4 lakhs in 1973-74. The State Government has contributed Rs 1194.04 lakhs towards the capital of the Corporation and the Government of India, through the Southern Railway, has contributed Rs 382.67 lakhs. Thus the total investment made by the two Governments together comes to Rs 1576.71 lakhs.

6.8 Though nationalisation of routes is an accepted policy, the pace of progress in this field has still been very slow. However, during 1974-75 two routes, viz., Alleppey—Muhamma and Alleppey—Thanneermukkom, were nationalised. Further nationalisation proceedings were in progress in respect of 6 routes in the State during 1974-75.

**(c) Goods Transport:**

6.9 There are no reliable statistics regarding the present goods transport by road. However it is estimated that about 50% of the total volume of goods available for transportation is lifted by lorries. 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 five years from 1971 to 1975 is given in Table 6.3.

**TABLE 6.3**  
**Number of Public Carrier Vehicles**

<i>Year</i>	<i>Number</i>	<i>Index</i>
(1)	(2)	(3)
1971	10062	100.0
1972	10935	108.7
1973	11458	113.9
1974	12007	116.3
1975	14071	139.8

6.10 It can be seen that there had been an increase of over 4,000 public carrier vehicles between 1971 and 1975, i.e. an average increase of 800 vehicles per year. This increase in the number of goods vehicles and consequent increase in the volume of goods traffic has almost exclusively occurred in the private sector.

6.11 In addition to the existing inter-State and zonal permit system, a scheme for the grant of National Permits was included under the Twenty Point Economic Programme. This scheme is aimed at facilitating free flow of goods traffic throughout the country. A quota of 250 permits has been sanctioned to Kerala State. The Centre has issued the Motor Vehicles (Amendment) Ordinance 1975 amending the Motor Vehicles Act, 1939 and providing for the grant of National Permits. 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% to intra-State operators and the remaining 25 per cent to new entrants giving preference to ex-army personnel and unemployed drivers. When the preliminary work relating to scrutiny and selection of applications is over, action will be taken for the issue of permits to operators in the State.

## **Ports and Harbours.**

### ***Cochin Port:***

6.12 The port of Cochin is a vital centre for coastal as well as foreign trade. The volume of traffic handled at this port which was 3.72 million tonnes in 1973-74 increased to 4.81 million tonnes in 1974-75. Imports increased from 2.87 million tonnes to 3.59 million tonnes while exports from 0.84 million tonnes to 1.22 million tonnes during the year (See Appendix 6.4 and 6.5). Corresponding to the increase in the volume of traffic handled, the number of steamers that entered the port increased by 31.

6.13 The volume of income and expenditure also increased considerably. The total income of the Port was Rs 610.23 lakhs as against Rs 415.80 lakhs in the preceding year. The total expenditure of the port amounted to Rs 699.18 lakhs compared to Rs 556.45 lakhs in 1973-74. Thus the revenue account of the port for the year 1974-75 closed with a net deficit of Rs 88.95 lakhs as against Rs 140.65 lakhs during 1973-74.

6.14 During the year 1974-75, no new port facilities were added. The construction work relating to the hopper grab dredger and the hopper suction dredger and the pace of construction of highpower tug were not satisfactory. Four new wharf cranes were commissioned towards the end of the year. Work on the preparation of a Master Plan for the Port Development was in progress at the end of the year.

6.15 There are two intermediate and ten minor ports in Kerala, apart from the major port of Cochin. The volume and content of traffic handled by these ports increased substantially during 1974-75. 37 coastal steamers having a tonnage of 40,600 tonnes and 27 foreign steamers having a tonnage of 129,433 tonnes called at these ports during the year 1974-75. Further 808 coastal sailing vessels and 30 foreign vessels touched these ports with total tonnages of 89,512 and 5,572 tonnes respectively. (Appendix 6.6). A total of 127,833 tonnes of import cargo and 175,077 tonnes of export cargo were handled at these ports during 1974-75 (Appendix 6.7). The revenue collected from these ports amounted to Rs 14.30 lakhs as against Rs 12.44 lakhs during 1973-74.

### ***Railways:***

6.16 The total rail length of Kerala (889.93 Km.) did not undergo any change during 1975; but with the conversion of Ernakulam—Quilon line (156km.) into broadgauge, the proportion of broadgauge to metregauge lines has changed. As at the end of December 1975, the length of broadgauge lines is 709 Kms. and that of metre

gauge lines 181 Kms. The State's position in the railway kilometerage per lakh of population remains the lowest in India. It is only 4 Kms. per lakh of people in Kerala as against 13 Kms. for All-India. The uneven and undulating topography of Kerala always sets a limit to which rail transport can be developed. At the same time Kerala very much needs the improvement of this basic transport infra-structure for the overall development of the State.

6.17 The Traffic-cum-Engineering Survey for the rail link between Trichur and Kuttipuram via Guruvayoor has been completed. The long awaited Ernakulam-Alleppey-Kayamkulam line has been sanctioned and survey work is in progress. This line when completed will serve about 2.5 million people living on the western side of the Vembanad lake which is a backward area. As for conversion of Ernakulam-Trivandrum into broad gauge, the conversion upto Quilon has been completed and that of Quilon-Trivandrum will be completed in 1976. The doubling of Mullukkara-Wadakkancherry line and the construction of Trivandrum-Thirunelveli line is in progress.

6.18 Only five districts in the State are benefited by railways to an appreciable extent—Quilon, Palghat, Trichur, Kozhikode and Cannanore. The area north of Quilon is served by broad gauge lines and the southern region by metre gauge lines. The present inconvenience on account of this gauge difference will be over with the conversion of Quilon-Trivandrum line into broad gauge.

6.19 From the point of view of transport of goods and passengers, railways occupy a predominant position in the transport network of the country. Originating goods traffic at the stations within Kerala State during 1974-75 was about 21.35 lakh tonnes. The passengers carried by the railways in 1974-75 numbered 170.35 lakhs. The number of wagons loaded at the different Stations in the State was about 1.15 lakhs. At the 165 railway stations within the State (including train halts) gross receipt from goods traffic originating in Kerala during 1974-75 were of the order of Rs 13.08 crores. The corresponding figure for passenger traffic was Rs 8.1 crores.

#### *Shipping Corporation:*

6.20 The Shipping Corporation of Kerala was incorporated on 25-5-1974 as a Public Limited Company with an authorised capital of Rs 15 crores, envisaging not less than 26% of its paid up capital to be held by the Government of Kerala. It was contemplated that initially the Corporation should have a paid up capital of Rs 3 crores. The subscribed capital of the company, at present,

is Rs 96.45 lakhs. Another block of shares worth Rs 40 lakhs is being issued to the Government of Kerala, raising the issued capital of the company to Rs 136.45 lakhs.

6.21 The company's registered office is at Ernakulam with a liaison office at Bombay. The first ship of the Corporation was contracted for purchase on 15-12-1975 at a cost of U. S. \$ 6.21 million. The ship's name is m.v. 'OSCOSWORD' since renamed as m.v. 'KAIRALI'. It was built in the year 1967 in Norway and can carry about 20,000 tonnes of cargo. This ship is expected at the ports of Kerala very soon.

#### *Inland Navigation:*

6.22 The inland waterways of the State comprise vast areas stretching continuously from Trivandrum to Hosdrug. There are also cross canals with navigable waterways in various rivers. The canal system is navigable throughout the year. On the other hand, most of the rivers are navigable for a considerable distance during monsoons and at other times within limited reaches. The Ashtamudi and Vembanad lakes which connect Cochin Port with Alleppey and Quilon Districts constitute the centre of gravity of the interior coastal canal system. On the whole, Kerala has a total length of 1687 kilometres of navigation canals.

6.23 The State Water Transport Department which was formed in 1968 operated services in 44 routes, covering a route distance of 1219 kilometres during 1974-75. It had in possession, 63 passenger boats having a total seating capacity of 6476. Fifty-six boats were in operation and about 82.28 lakhs passengers were carried during the year 1974-75. The consolidated revenue earnings of the Department was Rs 49.61 lakhs in 1974-75 as against Rs 40.62 lakhs in the previous year. The total expenditure was Rs 53.76 lakhs as compared to Rs 42.57 lakhs in 1973-74. The activities of the Department, thus, resulted in a net loss of Rs 4.15 lakhs even though there was an increase in revenue by Rs 8.97 lakhs during 1974-75.

6.24 Water transport has very bright prospects in our State. Kerala State, in particular, has certain characteristic features which necessitate special consideration for maintaining an efficient water transport system.

#### *Communication Facilities:*

6.25 Under the Kerala Circle of the Posts and Telegraphs Department, there are 4024 Post Offices functioning under the four categories Head Offices, Departmental Sub-Offices, Extra Departmental

Sub-offices and Extra Departmental Branch Offices as on 31-12-75. The expansion programme for 1974-75 and the current financial year could not be implemented in full because of the ban imposed on opening of additional post offices. On the average a post office in Kerala serves, an area of 9.9 sq. kms. against the all-India average of 24 sq. kms. One post office serves a population of 5546 in Kerala. The average area and population served by a letter box in Kerala circle are 3.9 sq. kms. and 2004 respectively. The ratio of sub post offices to branch post office (1 : 2.5) is perhaps the highest for any Circle in the Country. The expansion of Kerala Postal Circle since its formation on 1-7-1961 can be seen from Table 6.4.

TABLE 6.4

<i>As on</i>	<i>HOs</i>	<i>SOs</i>	<i>EDSOs</i>	<i>EDBOs</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)
1-7-1961	12	468	84	2334	2898
31-12-1975	30	1203	19	2772	4024

6.26 The postal traffic in the year 1974-75 has gone up by 6 per cent compared to that of the previous year. Average total number of ordinary articles delivered daily in 1974-75 was 10.7 lakhs compared to the average of 10 lakhs of articles delivered in the previous year.

6.27 Since the State is covered partly by metre gauge and the rest by broad gauge, the flow of mail beyond the transshipment point was not quite satisfactory. With a view to reducing the delay in the transmission of mails for and from places beyond Quilon, special arrangements have been made between Trivandrum and Quilon.

6.28 There were 2352 Public Call Offices in Kerala as on 31-12-1975. Kerala Posts and Telegraph Circle was formed in the year 1961 with 71 telephone exchanges with a total equipped capacity of 16,445 lines. Thereafter the growth of telephone exchanges has been rapid in that there are 286 exchanges with a total equipped capacity of 70,410 lines as on 31-3-1975. However this expansion is found insufficient to meet the growing demands for telephone connections in the State. There are 15,685 applications in the waiting list for telephone connections as on 31-3-1975 compared with 7350 as on 1-7-1961. To keep pace with the expansion of industries and opening of new factories in Kerala in recent years, there is much to be done to provide telephone, telegraph and telex facilities in the State.



6.29 The jurisdiction of the Kerala Tele-Communication Circle consists of the geographical area covered by the State and the Centrally administered Laccadives Group of Islands and Mahe. The telephone density of the Circle per sq. km. is 1.8 and per 1,000 persons 3.3 (See Appendix 6.8). This compared favourably with the all-India figures and is much better compared with many other States. The circle proposes to expand the capacity of the existing telephone exchanges from 70,410 to 75,450 lines and to open 28 new exchanges. During the latter half of 1974-75 and during the current years there had been considerable difficulty in getting important items of stores cables and equipment. There had also been delay in getting exchange units. This had hindered the progress in achieving the target.

6.30 A new service called 'Quick Mail Service' was started from 1st August 1975 connecting Trivandrum with various State capitals. To enable delivery of letters next day itself, it is necessary that letters are posted in such a way as to connect the appropriate outgoing flights from Trivandrum. To facilitate this and for separate handling of such mails separate letter boxes have been installed in 8 post offices in Trivandrum City, with the distinguishing sign 'Quick Mail Service' written on them. Letters posted in these special letter boxes are expected to be delivered in most of the State capitals, the next day. This facility is available for franked articles and articles under certificate of posting. In the reverse direction, mails received by the aero flight from Madras will be delivered on the same day in eight selected post offices in the city.

## CHAPTER 7

### EXPORT TRADE

India's exports during 1974-75 reached a new high of Rs. 3304 crores, registering 31 per cent increase over the exports in the previous year. Despite this unprecedented increase in exports, our trade deficit during 1974-75 rose to a new record of Rs. 1164 crores more than two and a half times the deficit in the preceding year. This was because while the international price boom inflated our exports, it inflated our imports much more. As a result, the growth of exports was more than offset by the rise in imports. Imports increased by 51 per cent to reach Rs. 4468 crores in 1974-75 against Rs. 2955 crores in the previous year. The trade deficit of Rs. 1164 crores accounted for more than one third of total exports and about one fourth of total imports. In 1973-74 the trade gap was only Rs. 432 crores. This growing imbalance in foreign trade is a matter of great concern.

7.2 India's total exports during the first nine months of the current financial year (April-December) stood at Rs. 2689 crores—an increase of nearly 15 per cent over the exports during the corresponding period of the previous year. If the present trends are maintained during the remaining quarter, exports during 1975-76 may be of the order of Rs. 3800 crores. However, imports have also been increasing simultaneously, with the result that the trade gap during the nine months of the current year has already touched Rs. 1114 crores.

#### *Marine Products:*

7.3 The marine products industry has been encountering very serious problems during 1974-75. India's foreign exchange earnings from the export of marine products suffered a set back during the year and exports totalled only 45,099 tonnes valued at Rs. 68.41 crores as compared to 52,279 tonnes valued at Rs. 89.51 crores in the previous year (1973-74). The quantum of exports declined by 13.7 per cent and earnings by 23.6 per cent. The reasons advanced were poor fish catches in our country and unsteady market conditions abroad, particularly in Japan and the U. S. who were our major buyers.

7.4 Kerala's performance in the field of exports of marine products during the year 1974-75 was also discouraging. The export figures for the year were 25,280 tonnes valued at Rs. 39.58 crores as against 31,561 tonnes valued at Rs. 57.76 crores in 1973-74, a decrease of 19.1 per cent in quantity and 31.5 per cent in value over the previous year. Kerala's contribution to the all India export of marine products during 1974-75 was 56.1 per cent in respect of quantity and 57.8 per cent in respect of value. Table 7.1 shows the details of exports of marine products from Kerala and India for the past 12 years.

TABLE 7.1

**Export Growth of Marine Products from India and Kerala from  
1963-64 to 1974-75**

<i>Year</i>	<i>Exports from Kerala</i>		<i>Exports from India</i>		<i>Average unit value realisation (Rs./Kg.)</i>
	<i>Quantity (Tonnes)</i>	<i>Value (Rs. crores)</i>	<i>Quantity (Tonnes)</i>	<i>Value (Rs. crores)</i>	
(1)	(2)	(3)	(4)	(5)	(6)
1963-64	8249	3.94	19057	6.09	3.19
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

Source: Marine Products Export Development Authority, Cochin.

7.5 Table 7.2 shows the item-wise share of exports of marine products from India.

**TABLE 7.2**  
**Sectoral share of Export of Marine Products from India**  
**1971-72 to 1974-75**

Sectors		Percentages			
		1974-75	1973-74	1972-73	1971-72
(1)		(2)	(3)	(4)	(5)
Frozen	Q	81.0	79.93	86.38	75.14
	V	89.9	90.56	91.75	89.25
Canned	Q	2.6	3.87	4.07	4.46
	V	5.2	6.03	5.43	5.66
Dried	Q	3.6	7.27	7.03	19.69
	V	1.1	1.52	2.44	4.87
Others	Q	12.8	8.93	2.50	0.71
	V	3.8	1.89	0.38	0.22
All	Q	100.00	100.00	100.00	100.00
	V	100.00	100.00	100.00	100.00

Q—Quantity

V—Value

Source: Marine Products Export Development Authority, Cochin.

7.6 As in the previous years in 1974-75 also frozen items constituted the largest single item of export accounting for 81 per cent of the quantity and 89.9 per cent of the value of the total exports of marine products. The percentage share with respect to quantity showed a negligible increase while the share of earnings declined slightly (See Table 7.2).

7.7 India exported 36,539 tonnes of frozen seafoods in 1974-75 resulting in foreign exchange earnings worth Rs 61.47 crores. Earnings from canned items were Rs 3.59 crores (1,160 tonnes) and from dried items were Rs 0.75 crores (1,619 tonnes) while other items (5,781 tonnes) earned Rs 2.61 crores.

7.8 The principal buyer of India's marine products was Japan followed by the U.S. sixty per cent of the total earnings from the export of marine products was from exports to Japan.

7.9 Activities during the first 7 months of 1975-76 (April-October 1975) show a 29.7 per cent quantitative increase over the corresponding period of the previous year while the earnings show a 68.1 per cent increase. Item-wise, there was an increase of 11.730 tonnes

in frozen items and 867 tonnes in dried items whereas canned items registered a fall of 852 tonnes, resulting in a total increase of 7,655 tonnes. (See Table 7.3).

TABLE 7.3  
Item-wise Exports of Marine Products from India

Quantity in Tonnes—Value in Rs. '000

Item	1975		1974		1973	
	April	October	April	October	April	October
(1)	Quantity	Value	Quantity	Value	Quantity	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Frozen Item	30,736	6,43,973	19,005	3,42,935	24,025	4,48,329
Canned	145	3,284	997	31,453	1,130	27,571
Dried	2,119	15,345	1,252	10,106	1,842	9,982
Others	398	4,749	4,489	12,319	1,474	2,817
<b>Total</b>	<b>33,398</b>	<b>6,67,351</b>	<b>25,743</b>	<b>3,96,813</b>	<b>28,471</b>	<b>4,88,699</b>
Increase/Decrease Over 1973	+4,927 (17.31%)	+1,78,652 (36.56%)	—2,728 (—9.58%)	—91,886 (—18.80%)	..	..
Increase/Decrease Over 1974	+7,655 (29.74%)	+2,70,538 (68.18%)	..	..	..	..

Source. Marine Products Export Development Authority, Cochin.

7.10 In the exports of marine products, Cochin port maintained the foremost position among the Indian ports by handling 24,933 tonnes (Valued at Rs 39.51 crores) i.e. 55 per cent of India's total exports of marine product during 1974-75.

#### Spices:

7.11 India's foreign exchange earnings from spices exports during 1974-75 touched a new peak of Rs. 60.48 crores registering an increase of 10.2 per cent over the previous year's earnings. However quantitatively exports were less by about 18 per cent compared to 1973-74.

7.12 Eastern Europe ranked as the largest buyer of Indian Spices, accounting for over 40 % of the earnings. The share of West Asian countries was about 25 per cent. The most important item of spices exported from India during 1974-75 was pepper. The reason for the substantial rise in earnings from pepper exports (viz., Rs 4.84 crores over last year's earnings) was the rise in the share of imports by Eastern Europe. The other major items of spices exported from India were cardamom, ginger and turmeric.

7.13 About 70 per cent of India's earnings from the export of spices during 1974-75 was contributed by Kerala. The item-wise exports of spices from Kerala and India for 1973-74 and 1974-75 is shown in Table 7.4.

TABLE 7.4

## Export of Spices from the Ports of Kerala and India during 1974-75 and 1973-74

Quantity in Tonnes—Value in Rs. '000

Commodities	Kerala			India			Percentage of Kerala exports to India					
	1974-75	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75	1973-74				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
Pepper	25552.95	334726.34	29534.53	278013.68	26255.78	343684.86	31648.12	295308.43	93.3	97.4	93.3	94.1
Cardamom (Small)	636.26	50530.24	416.37	24682.20	1577.00	130083.14	1813.39	115528.00	38.6	38.6	21.8	21.1
Cardamom (Big)	..	..	..	..	69.20	869.17	94.84	1390.88				
Ginger	3509.04	26252.47	3514.09	17484.91	4713.70	35405.73	5083.28	25592.96	74.4	74.1	69.1	68.3
Turmeric	1626.31	7665.49	1760.44	7391.94	9546.76	43471.36	7921.41	36508.49	17.0	17.6	22.2	20.2
Total including other items	31615.92	421151.24	35742.02	331216.41	50092.10	604772.45	61214.18	548675.82	63.1	69.6	58.4	60.4

Source: Spices Export Promotion Council, Cochin.

*Pepper.*

7.14 India's export earnings from pepper increased by Rs 4.84 crores during 1974-75 while quantitatively there was a decrease of 5392 tonnes. The explanation for such an increase in earnings despite a considerable decline in quantity lies in the fact that there was a spectacular rise in the unit price of pepper (viz., 40 per cent rise over previous year's realisation)—the unit price realised was Rs 13.09 per kg. in 1974-75. Rs 9.33 per kg. in 1973-74 and Rs 7.17 per kg. in 1972-73. 97.3 per cent of the quantum of pepper exported from India during 1974-75 was through the ports of Kerala.

*Cardamom:*

7.15 The foreign exchange earnings from Cardamom exports marked an all time record of Rs 13.09 crores against the target of Rs 11.50 crores during 1974-75, but the quantity exported declined by 262 tonnes. In 1973-74 India exported 1908 tonnes of cardamom valued at Rs 11.69 crores compared to 1646 tonnes in 1974-75 valued at Rs 13.09 crores showing a decline of 13.73 per cent in quantity and a rise of 12.0 per cent in respect of value. The average price realisation per Kilogram was Rs 79.56 in 1974-75 as against Rs 61.27/kg. in 1973-74. Saudi Arabia, Kuwait, U. S. S. R., Japan, Germany, etc. were the principal importers of Indian cardamom during 1974-75. Because of shrinkage in production India's supply position became unsteady and it lost the Scandinavian and other West European markets. India is almost on the way-out from the Swedish market which was once her monopoly. High price was also disadvantageous to India. The other two producing countries viz., Guatemala and Tanzania could offer cheaper cardamom. They have made real inroads into India's traditional markets and have established their foothold. Kerala contributed 40.3 per cent of the quantity and 38.8 per cent of the value of India's cardamom exports in 1974-75.

*Ginger:*

7.16 India exported 4714 tonnes of ginger in 1974-75 against 5083 tonnes in 1973-74. The foreign exchange earnings from the export of ginger in 1974-75 and 1973-74 were Rs 3.54 crores and Rs 2.56 crores respectively. This shows a decrease of 7.2 per cent in respect of quantity and an increase of 38.3 per cent in respect of value realised. It was due to better unit value realisation that the earnings during 1974-75 showed a sharp increase in spite of a fall in the volume of exports. The unit price in 1974-75 rose to Rs 7.51/kg. from Rs 5.03 per kg. in 1973-74 (an increase of 49.3 per cent). Kerala's contribution to India's export of ginger was 74.4 per cent in 1974-75 (in volume).

**Turmeric:**

7.17 The export of turmeric increased in respect of both quantity and value in 1974-75. The percentage increase in respect of quantity was 21 per cent and in respect of value it was 19 per cent, Kerala contributed only 17.0 per cent of the quantity exported by India during 1974-75 whereas in 1973-74 her share was 22.2 per cent.

**Cashew Kernels:**

7.18 India earned foreign exchange worth Rs. 96.59 crores through the export of cashew kernels and cashew shell liquid during the first 11 months (January-November) of 1975. According to the Cashew Export Promotion Council, Cochin, 52,962 tonnes of Cashew Kernels valued at Rs. 95.55 crores were exported during the period. Compared to the corresponding period of the previous year, this was higher by about 6 per cent in terms of, both quantity and value. The major importers of cashew kernels were U. S. S. R., U. S. A., Japan, Canada and Australia. U. S. S. R. alone imported 23,134 tonnes of cashew kernels during the period (44 per cent of India's total export of cashew kernels). While exports to U.S.A. Japan & Australia increased during January-November 1975 compared to the corresponding period of the previous year exports to U. S. S. R. and Canada showed a decline.

7.19 As in the past years Kerala maintained her foremost position among other States during this year also by contributing 96.7 per cent to India's total exports of cashew kernels. The export figures of cashew kernels from India to different countries during January-November 1975, with comparative figures for the same period of 1974 are given in Table 7.5.

TABLE 7.5

**Export of Cashew Kernels from India**

Countries	Export during January-November (Tonnes)	
	1974	1975
(1)	(2)	(3)
U. S. S. R.	25501	23134
U. S. A.	11650	15982
Canada	3485	2175
Japan	1356	3517
Australia	1862	2009
Netherlands	942	1269
U. K.	876	627
Hong Kong	771	799
Total including other countries	50066	52962
Value in Rs. crores	90.42	95.55
Unit value Rs. /Kg.	18.16	18.04

Source: Cashew Export promotion Council, Cochin.



*Cashewnut Shell Liquid:*

7.20 India's exports of cashewnut shell liquid during January-November 1975 amounted to 4189 tonnes valued at Rs 103.67 lakhs. as against 5542 tonnes valued at Rs 123.61 lakhs during the corresponding period of the previous year. Kerala's contribution to India's export of this item formed 90.7 per cent against a contribution of only 88.4 per cent during the same months of 1974.

7.21 Country-wise export of cashewnut shell liquid showed that U. S. A. topped the list with 1274 tonnes followed by U. K. 1220 tonnes and Japan 1127 tonnes. The comparative figures of exports for the above period are given in Table 7.6.

TABLE—7.6

**Export of Cashewnut Shell Liquid from India (Tonnes)**

<i>Countries</i>	<i>Export during January—October</i>	
	1974	1975
(1)	(2)	(3)
U. K.	1605	1220
U. S. A.	1515	1274
Japan	1631	1127
Total including other countries	5542	4189
Value in Rs. Lakhs	123.61	103.67
Unit value Rs. per M. T.	2230	2475

*Source:* Cashew Export Promotion Council, Cochin.

*Import of Raw Cashewnut:*

7.22 India imported 116349 tonnes of raw cashewnuts valued at Rs 28.50 crores during January-November 1975. The corresponding figures for the previous year were 160255 tonnes and Rs 36.88 crores respectively. The average unit price of raw nuts during January-November 1975 was Rs 2449 per tonne compared to Rs 2301 per tonne during the same period in 1974.

7.23. Ninety-seven per cent of the total imports of raw cashewnuts into India was through the ports of Kerala.

7.24 According to reports severe shortage of imported raw cashewnuts is expected for some years to come as availability of nuts in East Africa is dwindling year after year. This is because East

African Countries which used to export raw nuts have themselves set up cashew factories for processing them. The country's imports of raw nuts declined from 192879 tonnes in 1972 to 172110 tonnes in 1973 and 177289 tonnes in 1974. In the first 11 months of 1975 the imports were only 116349 tonnes. The export of cashew products from India and Kerala and the respective import figures for January-November 1975 are given in Table 7.7.

TABLE 7.7  
Export and Import of Cashew Products

Name of Products	January-November 1974		January-November 1975	
	Quantity (Tonnes)	Value Rs. crores	Quantity (Tonnes)	Value Rs. Crores
(1)	(2)	(3)	(4)	(5)
<b>A. Export of cashew product</b>				
<b>Cashew Kernels</b>				
India	50066	90.42	52962	95.55
Kerala	49404	89.18	51188	92.21
<b>Cashew Shell liquid</b>				
India	5542	1.24	4189	1.04
Kerala	4900	1.10	3799	0.94
<b>B. Import of Raw cashewnuts</b>				
India	160255	36.88	116349	28.50
Kerala	150053	34.70	112695	27.62

Source: Cashew Export Promotion Council, Cochin.

### Coir and Coir Products:

7.25 The export of coir and coir goods from India during 1974-75 earned foreign exchange to the tune of Rs 17.54 crores—an increase of Rs 1.96 crores over the value of Rs 15.58 crores during 1973-74. In respect of value this year's export touched an all time high, the previous highest figure being that in 1973-74. But in terms of quantity export during 1974-75 suffered a decline of the order of 10 per cent. During 1974-75, India exported 41,834 tonnes of coir and coir goods against the export of 46,759 tonnes during the previous year (1973-74). There was an unprecedented shortage of raw material throughout 1974 and as a result production came down and stood much below the normal level. With a drop in production, the Indian shippers experienced various difficulties to obtain the supplies to meet their commitments. There were various other difficulties also in the export front namely non-availability of shipping facilities, frequent rises in freight charges etc. Table 7.8 shows the item-wise export of coir and coir products from India for the years from 1970-71 to 1974-75.

TABLE 7.8  
Item-wise Export of Coir and Coir Goods from 1971-72 to 1974-75

Item	1970-71		1971-72		1972-73		1973-74		1974-75	
	Q	V	Q	V	Q	V	Q	V	Q	V
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Coir Fibre	437	7.50	392	6.25	298	4.62	276	3.77	161	3.05
Coir Yarn	33440	766.36	30642	722.42	31924	818.58	29373	822.01	24401	826.71
Coir Mats	12258	411.57	13498	507.50	127.42	526.60	12302	573.28	11322	646.53
Coir Mattings, Rugs & Carpets	5550	193.99	7101	240.40	3648	132.53	3457	140.40	5049	263.29
Coir Rope	264	4.34	238	3.85	104	1.64	140	2.84	138	3.47
Curled Coir	266	3.34	441	5.52	773	9.81	1208	15.49	762	10.40
Rubberised Coir Goods	3	0.24	..	..	@	0.01	3	0.39	1	0.17
Total	52218	1387.34	52312	1485.94	49489	1493.79	46759	1558.18	41834	1753.62

@ Negligible

Q: Quantity in tonnes.

V: Value in Rs. lakhs

Source:—India's Production, Exports and Internal Consumption of Coir, 1975.

7.26 Coir yarn is the main item of coir exported from India. Other items of coir include coir mats, coir mattings, rungs and carpets, coir rope, curled coir, rubberised coir goods etc. As shown in Table 7.8 coir yarn constituted 58 per cent of the total quantum of coir exported during 1974-75 while coir mats shared 27 per cent of the total volume.

7.27 Practically the whole of the quantity of coir and coir goods exported from India during 1974-75 was from Kerala (99 per cent of the total exports of India).

#### *Coffee:*

7.28 Coffee export performance during 1974-75 has been heartening. Export has been provisionally placed at 55,706 tonnes valued at Rs 58.44 crores as compared to 52,688 tonnes, valued at Rs 46.01 crores during the previous year. In view of the prospects of a larger crop this year, the Coffee Board has set up a higher target for export. It is estimated that in 1975-76 production would reach the level of 95,000 tonnes and a target of 57,000 tonnes has been set for export. In 1974-75 India's export of coffee was higher by 27 per cent in terms of value and 5.7 per cent in terms of quantity compared to last year's performance. The unit price realisation was only 20 per cent higher during 1974-75 than the previous year's level compared to a 35 per cent increase in 1973-74 over the level of 1972-73. Table 7.9 contains details of coffee exported from India and foreign exchange earned for the years from 1962-63 to 1974-75. U. S. S. R. was the best importer of Indian Coffee.

TABLE 7.9

#### **Exports of Coffee**

<i>Year</i>	<i>Quantity in tonnes</i>	<i>Value realised in Rs. crores</i>
(1)	(2)	(3)
1962-63	20,416	7.61
1963-64	23,336	8.30
1964-65	30,691	13.35
1965-66	26,505	12.94
1966-67	25,833	14.44
1967-68	33,966	18.18
1968-69	28,741	17.96
1969-70	32,383	19.62
1970-71	32,189	25.11
1971-72	35,695	22.07
1972-73	50,855	32.93
1973-74	52,688	46.01
1974-75	55,706	58.44

*Source:* Data upto 1971-72: Indian Coffee: May-June 1973.  
Data for 1972-73 onwards—UPASI

**Tea:**

7.29 India produced 489 M.kgs. of tea in 1974 against a production of 472 M.kgs. in 1973. Exports of tea in 1974 accounted for about 42 per cent of the production. Table 7.10 gives details of production and export of tea during the years from 1969 to 1974.

TABLE 7.10

**Production and Exports of Tea from India**

<i>Year</i>	<i>In million Kgs.</i>	
	<i>Production</i>	<i>Exports</i>
(1)	(2)	(3)
1969	394	169
1970	419	202
1971	435	202
1972	456	204
1973	472	188
1974	489*	206*

\* Provisional

Source: Upto 1973—Digest of Tea Statistics, 1973-74. Data for 1974: Tea Board, Calcutta.

7.30 The principal markets for Indian tea were the U.K., U.S.S.R., and Netherlands.

7.31 India's earnings from the export of tea in 1974-75 scored a straight gain of almost Rs 75 crores over the 1973-74 level. In 1974-75 India exported 220.85 million kgs. of tea valued at Rs 219.93 crores against 190.27 million kg. worth Rs 144.85 crores exported in 1973-74—an increase of 16.11 per cent in terms of quantity and 51.8 per cent in terms of value. In 1974-75, 44.66 million kgs. of tea valued at Rs 41.92 crores were exported through Cochin Port alone. This formed 20.2 per cent of the total quantum of tea exported by India and fetched 14.5 per cent of the foreign exchange earned from tea exports by the country. The table below (7.11) compares the export figures for 1974-75 with the corresponding figures for the past few years.

TABLE 7.11

**Quantity and value of Tea Exported from India during 1967-68 to 1974-75**

<i>Year</i>	<i>Quantity (in Tonnes)</i>	<i>Value (in Rs. '000)</i>
(1)	(2)	(3)
1967-68	203333	1801974
1968-69	200824	1565092
1969-70	174112	1245029
1970-71	199139	1482470
1971-72	214317	1609204
1972-73	198229	1509899
1973-74	190268	1448490
1974-75	220847*	2199262*

\* Provisional

Source: Data upto 1973-74: Digest of Tea Statistics 1973-74.

Data for 1974-75: Tea Board, Calcutta.

## CHAPTER 8

### PRICES AND COST OF LIVING

The spectre of inflation which has been haunting the Indian economy for the past few years has been held in check during 1975. The relative stability in prices achieved especially during the latter half of the year, although attributable to some extent to the dehoarding operations since the proclamation of emergency, is essentially a contribution of the tight money policy and stiff anti-inflationary measures taken a year earlier. The emergency has no doubt imparted a new edge to all these drives. A bumper harvest of food grains and other agricultural commodities and sustained industrial production especially in the public sector are the two significant pointers to improvement in the economic situation.

8.2 The official index of wholesale prices for the week ended January 3, 1976 was lower by 7.7 per cent than the level for the corresponding week last year. This decline in the price index during the current year is in sharp contrast to the annual rate of inflation of about 26 per cent and 30 per cent respectively in 1973 and 1974. Thus, our achievement in the matter of control and management of inflation is far better than that of many developed and developing countries.

8.3. Effective fiscal and monetary measures to limit aggregate demand as well as administrative measures designed to curb hoarding and smuggling have gone a long way to hold the price line. Besides, money supply after increasing at an annual average rate of 15 per cent in each of the three years ending 1973-74, it increased by only 6.3 per cent or about Rs 679 crores in 1974-75. This steep fall was mainly due to currency with the public remaining almost constant, its increase being only Rs 44 crores as compared to Rs 892 crores in the previous year. Similarly the net foreign exchange assets of the banking sector declined by Rs 281 crores and exercised a contractionary influence on money supply. Further, in 1974-75 the incremental bank credit to the commercial sector declined by Rs 369 crores. However, this trend has been reversed in the most recent months. In the current financial year upto December 12, 1975, money supply expanded by Rs 869 crores or 7.5 per cent which was more than double the expansion of Rs 390 crores or 3.6 per cent recorded in the comparable period of last year. During this period currency with the public increased by Rs 322 crores and deposit money by Rs 547 crores compared to a smaller increase of Rs 423 crores in the preceding year. But in the context of

larger availability of consumer goods and improved climate for investment in the economy, this increase in money supply has only helped to stabilize the price level, thereby demonstrating the resilience of the Indian economy.

8.4. During the week ended January 3, 1976 the index of wholesale prices (base 1961-62 = 100) was 291.2 as against 315.5 for the corresponding week of the previous year recording a decline of 7.7 per cent. Food articles dropped by 13.1 per cent over the year. Among food articles, price index for rice moved down by 14.3 per cent while that of wheat by 18.4 per cent. Industrial raw material prices declined by 18.1 per cent over the year. Among industrial raw materials the prices of raw cotton and groundnut declined by 10.8 per cent and 32.4 per cent respectively. The price index for machinery and transport equipment showed a decline of 4.6 per cent.

8.5. The commodities whose price index exhibited upward trends were tobacco and liquor (4.6 per cent) fuel, power, light and lubricants (16.9 per cent) and chemicals (4.2 per cent). Among industrial raw materials jute alone experienced a price increase by 10.4 per cent over the previous year (Table 8.1).

TABLE 8.1  
Index Numbers of Wholesale Prices—All India

(Base 1961-62 = 100)

Item	Week ended		Percentage change over the year
	January 4, 1975	January 3, 1976	
(1)	(2)	(3)	(4)
I. Food Articles	368.2	320.1	-13.1
(i) Rice	349.6	299.6	-14.3
(ii) Wheat	406.5	331.9	-18.4
II. Liquor & tobacco	305.0	319.1	+4.6
III. Fuel, Power, light & lubricants	314.5	367.7	+16.9
IV. Industrial raw materials	317.3	259.8	-18.1
(a) Raw cotton	312.8	278.9	-10.8
(b) Raw Jute	155.5	171.7	+10.4
(c) Groundnut	401.1	271.0	-32.4
V. Chemicals	309.6	325.5	+4.2
VI. Machinery & transport equipment	271.6	259.0	-4.6
VII. Manufactures	253.7	253.3	-0.2
All Commodities	315.5	291.2	-7.7



### ***The Trend of Prices:***

8.6 The shortfall in agricultural output during 1972-73 and the consequent depletion of stocks of food grains, poor procurement, difficulty in obtaining food grains from abroad and their high prices stagnant industrial production for want of crucial inputs like power and other raw-materials further accentuated by oil price hike resulted in the wholesale price index showing one of the sharpest increases ever witnessed since the country achieved its independence. Equally significant was the rise in the money supply by nearly 15 per cent in each of the three years ending 1973-74.

8.7. The price situation took a turn for the worse beginning from early 1974 and the wholesale price index started showing an average increase of about 3 per cent every month. Under its impact the consumer price index also started rising sharply and in 1973-74, the increase was as much as 20.7 per cent. It is against this background that a series of anti-inflationary measures were put into operation from early July 1974. The main features of this policy were: (i) demand management through monetary and fiscal policies to prevent excessive inventory accumulation by business and industry; (ii) fiscal and income policies in the form of additional taxation and voluntary borrowings, (iii) reducing deficit financing to the extent possible, and (iv) a series of administrative and legislative measures to check the proliferation of black money through tax avoidance and evasion, smuggling, black marketing etc. These measures seem to have had an immediate impact on the prices situation.

8.8 From the peak level of 328 points in September 1974, the wholesale price index witnessed a steady decline and reached the level of 317.2 points in December 1974. In January 1975 the all-India index of wholesale prices was 315.8 points. The index continued to fall and reached the level of 312.9 points in June 1975. During the latter part of the year 1975 the index of wholesale prices showed a steeper and continuous decline. The index stood at the level of 294.4 points in December 1975 thereby registering an average fall of 3.1 points after the declaration of emergency.

8.9 The decline observed in the case of wholesale price index was also reflected in consumer price index. The consumer price index from a high level of 328 points in June 1975 started declining steadily and reached 316 points in October 1975. As compared to the all-time high of 355 points in October 1974, the index number in October 1975 represented a fall by 5.7 per cent.

**Consumer Price Index Numbers, Kerala:**

8.10 In keeping with the all-India pattern, the prices of consumer goods have registered a declining trend in the State during the latter part of the year 1975. The fiscal and monetary policies pursued by the Government of India as well as the administrative measures taken by the State Government and the overall improvement in the food situation in the country have been the main contributory factors for this phenomenon. Slight augmentation in the supply of essential commodities and streamlining of the distribution system through a net work of consumer cooperatives and depots of the Civil Supplies Corporation have also helped in bringing down the level of consumer prices.

8.11 From January to December 1975 the decline in the consumer price index ranged from 4 to 7 per cent in the various centres of the State. The decline was more pronounced during the second half of the year, after the declaration of Emergency. The decline ranged from 9 to 13 per cent as against an increase of 5 to 7 per cent the first half of the year. The decline in the Working Class Consumer Price Index Numbers for Kerala for December 1975 has ranged from 67 points at Alleppey to 115 points at Munnar as compared to corresponding month of the last year (on the basis of the former base 1939=100). Also the Consumer Price Index for Kozhikode witnessed a decline of 128 points in the above period (On the basis of the former base 1936=100).

TABLE 8.2

**Consumer Price Index—Kerala**

Centre	1975			1974
	January	June	December	December
(1)	(2)	(3)	(4)	(5)
Trivandrum	1589	1686	1507	1590
Quilon	1587	1684	1491	1587
Punalur	1576	1673	1463	1575
Alleppey	1557	1641	1489	1556
Kottayam	1579	1675	1467	1576
Ernakulam	1586	1685	1507	1589
Trichur	1583	1684	1486	1587
Chalakyady	1578	1683	1498	1583
Munnar	1576	1675	1461	1576
Kozhikode	1769	1876	1644	1772

**Note:**—The Consumer Price Index for Kerala was revised with effect from August 1975 onwards (with base 1970=100) on the basis of a Family Budget Survey conducted by the State

Bureau of Economics and Statistics. For the purpose of comparison of cost of living during the year, the old Consumer Price Index (with base 1939=100) is made use of here.

8.12. With a decline of 125 points the highest fall in prices was noticed at Kozhikode to be followed by 115 points at Munnar, 109 points at Kottayam, 101 points at Trichur, 96 points at Quilon 85 points at Chalakudy, 83 points at Trivandrum, 82 points at Ernakulam and 67 points at Alleppey. This decline in index points was the position in December 1975 when compared to the level a year ago.

8.13 On an analysis of the movement of index points it is evident that the level of prices has moved up from January to June 1975 at all centres in the State. The rise in index points during the period ranged from 84 points at Alleppey to 105 points at Chalakudy. The increase in index points at Kozhikode during the period was 107 points.

8.14 But a definite and steady decline in index points was observed at all centres during the period from June to December 1975—the post-emergency period. The decline in index points during the period ranged from 178 points at Ernakulam to 214 points at Munnar. During the above period the fall in index points at Kozhikode was 232 points.

#### *Retail Prices of Essential Commodities:*

8.15 The decline in the consumer price index can be attributed mainly to the fall in the price of certain essential items of consumption. A comparison of the average retail prices of a few selected essential commodities in December 1974 and 1975 is given in Table 8.3. It is seen that commodities such as rice, dhall, greengram, coconut, coconut oil and tamarind registered fall in prices ranging from 16 per cent to 33 per cent. The price decline was 20 per cent for rice, 21 per cent for coconut oil, 26 per cent for coconut and 33 per cent for dhall. The commodities which have registered increase in prices are tapioca (17%) jaggery (25%), chillies (66%) corriander (51%) blackgram (11%), coffee (16%), tea (3%), milk (5%),

TABLE 8.3

Statement showing the retail prices of essential commodities in Kerala

Commodity	Unit	Average price for (in Rs.)		Percentage variation	
		December 1974	December 1975	Dec. 1975 over Dec. 1974	Dec. 1974 over Dec. 1973
(1)	(2)	(3)	(4)	(5)	(6)
1. Rice	Kg.	3.85	3.08	-20	+53
2. Dhall	"	4.48	3.02	-33	+74
3. Redgram	"	2.44	2.44	..	+6
4. Greengram	"	2.94	2.42	-18	+29
5. Blackgram	"	2.57	2.84	+11	+5
6. Coconut oil	"	12.57	9.28	-26	-5
7. Corriander	"	4.25	6.43	+51	+41
8. Chillies	"	10.57	17.51	+66	+74
9. Onions	"	1.63	1.67	+2	+176
10. Tamarind	"	3.90	2.70	-31	-15
11. Jaggery	"	2.40	2.99	+25	+28
12. Coconut	100 Nos.	107.98	85.34	-21	+2
13. Tapioca	Kg.	0.48	0.56	+17	..
14. Tea	"	14.37	14.74	+3	+48
15. Coffee	"	12.66	14.70	+16	+29
16. Milk (Cows)	Litre	2.10	2.20	+5	+17
17. Firewood	M.T.	125.24	126.57	+1	+46

Source: Bureau of Economics and Statistics, Trivandrum.

onion (2%) and firewood (1%). However, even this increase in prices was relatively much lower than that experienced a year ago. The better availability of some of these essential commodities and the effective entry of the State Civil Supplies Corporation in their distribution have helped to ease the price situation.

#### *Price Behaviour After the Declaration of Emergency:*

8.16. The declaration of national emergency in June 1975 appears to have introduced a stabilising influence on the general price situation. Since the declaration of emergency the retail prices of most of the essential commodities have displayed a steady and steep decline. Table 8.4 compares the retail prices of 40 essential items of consumption on 27th June, 1975 and 30th January 1976. Of these only eleven commodities (milk, corriander, tapioca, tobacco, banana, coconut, coffee, firewood, mundu, toilet soap, tooth paste) have shown increase in prices. Prices of four items (washing soap, anacin, torch battery, coconut oil) remained more or less stationary. For most of the remaining items prices have substantially declined. This salutary effect on the prices situation is the result of better management of supply and distribution, administrative measures against hoarding and blackmarketing and imposition of a sense of discipline on the trading sector.

TABLE 8.4

Statement showing the State Average of Retail Prices of  
Essential Commodities (Rs.)

Sl. No.	Commodity	Unit	27-6-1975	26-12-1975	30-1-1976	Percentage variation of (6) to (4)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Rice (open market)	Kg.	4.55	3.06	2.77	-39
2	Wheat (open market)	"	N.A.	N.A.	N.A.	..
3	Greengram	"	3.62	2.41	2.42	-33
4	Blackgram	"	2.81	2.64	2.54	-10
5	Redgram	"	2.71	2.56	2.30	-15
6	Dhall	"	3.40	3.03	3.04	-11
7	Coconut oil	"	8.60	9.02	8.61	..
8	Groundnut oil	"	9.14	7.31	6.94	-24
9	Gingelly oil	"	10.03	9.04	8.84	-12
10	Tapioca	"	0.54	0.57	0.57	+ 6
11	Chennai	"	0.84	0.65	0.66	-21
12	Banana	"	2.06	2.14	2.17	+ 5
13	Milk (cow's)	Litre	2.25	2.32	2.32	+ 3
14	Egg (hen's)	Doz.	4.70	4.86	4.24	-10
15	Mutton	Kg.	11.70	11.50	11.30	- 3
16	Potato	"	1.46	1.25	1.19	-18
17	Corriander	"	4.24	7.16	5.82	+37
18	Chillies	"	16.76	17.97	11.47	-32
19	Onion	"	2.50	1.31	1.00	-60
20	Tamarind	"	3.45	2.73	2.48	-28
21	Tea (Brook Bond A-1 dust)	"	17.45	17.28	17.12	- 2
22	Coffee powder (Brook Bond, Family Brand)	"	16.00	16.77	16.71	+ 4
23	Sugar (open market)	"	4.54	4.32	4.35	- 4
24	Coconut (without husk)	100 Nos.	77.50	80.80	77.90	+0.5
25	Tobacco	Kg.	11.74	16.58	17.18	+46
26	Firewood—(local split)	Qtl.	17.63	18.10	18.28	+ 4
27	Mundu—Mull	Each	7.48	7.62	7.66	+ 2
28	Mundu—Kora	Each	6.78	6.22	6.26	- 8
29	Paper	24 sheets	2.00	1.79	1.76	-12
30	Washing soda	Kg.	2.24	2.14	2.11	- 6
31	Washing soap (Sunlight Bar)	Each	N.A.	1.72	1.73	..
32	Toilet soap (Lux)	Cake	1.30	1.34	1.34	+ 3
33	Razor blade (Prince)	5 Nos.	0.60	0.59	0.58	- 3
34	Tooth paste (Colgate large tube)	Each	2.54	2.59	2.60	+2
35	Anacin	Each	0.15	0.15	0.15	..
36	Electric bulb (40 W Osram)	Each	2.99	2.85	2.82	- 6
37	Aluminium cooking pot	Kg.	25.33	25.50	25.30	-0.2
38	Cement	Bag	32.05 <sub>s</sub>	20.18 <sub>o</sub>	20.18 <sub>o</sub>	..
39	Baby Food (Amul)	Kg.	22.48	19.25	19.20	-15
40	Torch battery (Eveready 950)	Each	1.67	1.67	1.67	..

s—superfine

o—ordinary

N.A. Not Available.

*Wholesale Price Index of Agricultural Commodities:*

8.17 As against an increase of 30.9 per cent during 1974, the wholesale price index of Agricultural Commodities in Kerala has registered a decline of 6.2 per cent during 1975. This decline in the wholesale price index is mainly contributed by the decline in price of commercial crops such as spices and condiments (—1.8%) fruits and vegetables (—4.2%), oil seeds (—22.4%) and other non-food crops (—17.5%) which have a high bearing on the economy of the State as these commodities together contribute a major share of the State income from agriculture. It is significant that all these commodity groups registered price increases ranging from 29 per cent to 38 per cent during the previous year. Even for commodities such as foodgrains and plantation crops which have experienced price increase during the current year the rate of increase has been much lower than that registered a year ago. In the case of molasses, however, the price increase has been phenomenal. (Table 8.5)

TABLE 8.5

**Wholesale Price Index of Agricultural Commodities**

Sl.No.	Groups	Index for			Percentage variation	
		1973	1974	1975	in 1974 over 1973	in 1975 over 1974
1	Foodgrains (Rice)	233	297	319	+27.5	+ 7.4
2	Molasses	280	282	416	+ 0.7	+47.5
3	Condiments & spices	161	222	218	+37.9	— 1.8
4	Fruits & vegetables	306	402	385	+31.4	— 4.2
5	Food crops	235	302	317	+28.5	+ 5.0
6	Oil seeds	466	617	479	+32.4	—22.4
7	Plantation crops	154	215	247	+39.6	+14.9
8	Non-food crops	372	496	409	+33.3	—17.5
	All crops	285	373	350	30.9	— 6.2

*Parity Index:*

8.18 The index number of parity between prices received and prices paid by farmers indicates the level of their prosperity. While the index of prices received by farmers during 1975 has declined by 19 points, that paid by them has increased by 37 points resulting in a decline in the index of parity by 14 points (Table 8.6). The decline in the prices received is mainly due to the fall in prices of coconuts and non-food crops. The indices

of farm cultivation costs and domestic expenditure which constitute the index of prices paid have both increased during 1975, the former by 40 points and the latter by 33 points. Thus the index of parity which stood at 109 in 1974 declined to 95 in 1975 showing that the terms of trade has turned adverse to the farmer during 1975.

TABLE 8.6

Year	Index number of				
	Prices received by farmers	Domestic expenditure	Farm cultivation cost	Prices paid by farmers	Parity
1965	175	156	171	163	107
1966	184	172	196	183	101
1967	210	186	222	203	103
1968	215	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

### Commodity Review:

#### Pepper:

8.19 The price of black pepper showed a mixed trend during the year under review. The wholesale price of black pepper which began to exhibit a rising trend from May 1974, more or less maintained the trend and the price stood at Rs. 1053.83/Qtl. in January 1975. But in the months of February and March 1975 the price of pepper witnessed a bearish trend and the price stood at Rs. 989.15/Qtl. in March 1975. However during the remaining months of the year the price of pepper exhibited a bullish trend and the prices reached the level of Rs. 1242.81/Qtl. in November 1975. A slight decline in prices of pepper was observed in the month of December 1975—Rs. 1168.36/Qtl. which showed a small increase of 14 per cent as compared to that of corresponding month of the previous year.

8.20 Even though the export of black pepper showed a decline of 17 per cent in terms of quantity, the total export earnings

during the year 1974-75 registered an all time record at Rs 34.34 crores as a result of substantial increase in the unit price, i.e. from Rs 9.33/Kg. in 1973-74 to Rs 13.09/Kg. in 1974-75. As in the previous year European countries continues to be the principal importer of pepper, followed by the American zone. These two accounted for 59.2 per cent and 28.2 per cent respectively of the total value of our export of pepper during 1974-75.

#### *Ginger:*

8.21 The prices of ginger in December 1975 exhibited a rise of Rs 169.17/Qtl. as compared to the level of prices prevailed in the corresponding month of the previous year. Over the year ginger prices ruled high in the months of September, October and November 1975, the prices being Rs 897.92/Qtl. in November 1975.

Ginger exports also registered an all time record in earnings at Rs 3.51 crores in 1974-75. This was possible because of the increase in unit price from Rs 5.03/Kg. in 1973-74 to Rs 7.56/Kg. in 1974-75. As usual Middle East was the most important importer of Indian Ginger accounting for about 53.6 per cent of the total.

#### *Lemongrass oil:*

8.22 During the calendar year 1975 the prices of lemongrass showed a decline. This decline in prices of lemongrass oil was quite in evidence from July 1974 onwards. From the level of Rs 5150.00/Qtl. prices of lemongrass oil has dropped to Rs 3862.51/Qtl. in July 1975. From the month of August 1975 onwards a marginal rise in prices is noticed and gradually it reached the level of Rs 5547.92/Qtl. in December 1975.

#### *Cardamom:*

8.23 Cardamom prices have shown wide fluctuations. Average f.o.b. prices during 1968-69 was Rs 52.17/Kg. It increased to Rs 77.70/Kg. in 1969-70 but declined to Rs 65.78/Kg. in 1970-71 and further declined very steeply to Rs 34.41/Kg. in 1971-72. However, from then onwards there has been an increasing trend. During 1974-75 the average price was Rs 82.49/Kg. as against Rs 63.71/Kg. during the previous year.

8.24 Even within the year the prices of cardamom have fluctuated. It ranged from Rs 80.00/Kg. in February 1975 to Rs 65.92/Kg. in September 1975. The Middle East constituted the major importer of cardamom during 1974-75 accounting for about 69 per cent of the total exports. The total export earnings from this



crop during 1974-75 was higher at Rs 13 crores as against Rs 11.6 crores in 1973-74. This has happened despite the decline in the total quantity exported because of the increase in the unit price.

**Rubber:**

8.25 The rubber prices which stood at Rs. 889.00/Qtl. in January 1975 exhibited a steady decline during the course of the year and the price has fallen to the level of Rs 710.00/Qtl. in December 1975 recording a decline of Rs 179.00/Qtl.

8.26 This decline is mainly due to increase in production accompanied by a decline in consumption of natural rubber. According to the latest data on production and consumption of natural rubber, the production of rubber during the period April to September 1975 increased by about 15 per cent as compared to the corresponding period of 1974, while the consumption during the same period has dropped by about 4 per cent.

**Coconut oil:**

8.27 Coconut oil prices during the year under review showed a decline. Coconut oil prices which stood at Rs 1118.62/Qtl. in January 1975 declined by 25 per cent to Rs 834.76 in December 1975. The fall in prices of coconut oil which began in January 1975 steadily continued and reached the lowest level of Rs 728.03/Qtl. in July 1975. From the month of August coconut oil prices slowly picked up and stood at Rs 834.76 in December 1975 recording a fall of 28 per cent compared to the corresponding month of the previous year.

8.28 The set back for demand for coconut oil began with the ban on the use of coconut oil for the manufacturing of soap and with the availability of other cheaper vegetable oils especially that of groundnut oil. During the period world prices of copra and oil also suffered a set-back. Therefore it is highly necessary that immediate measures are adopted to prop up prices as coconut cultivation is crucial to the Kerala economy.

## CHAPTER 9

### SOCIAL SERVICES

#### *Education:*

Kerala occupies a unique position at the national level in the matter of educational advancement. In literacy, enrolment ratio, proportion of public expenditure on education etc., Kerala leads the other States in India. About 38 per cent of the State budget is set apart for the maintenance and development of educational facilities. Probably Kerala is the only State in India which finances the entire recurring expenditure of the private institutions in the educational sector. Because of the liberal educational policy of the State characterised by generous assistance to the private sector and the inescapable needs of expansion, education has become a major drain on the resources of the State. As the previous years, the year 1975 also witnessed remarkable progress in the field of education in Kerala.

#### 1. *General School Education:*

9.2 During the year 1975-76, there was adequate increase in the number of high schools and upper primary schools. The number of high schools increased from 1488 to 1521 and Upper Primary Schools from 2588 to 2606 between 1974-75 and 1975-76. There were 6975 lower primary schools during 1975-76. Out of the total number of 11102 schools, 6746 (61 per cent) are run by private agencies. During the current year, 471 new schools have been sanctioned (138 high schools, 18 upper primary schools and 144 lower primary schools) to be opened in the academic year 1976-77.

9.3 The total number of students in schools during 1974-75 was 53.59 lakhs which has decreased to 52.85 lakhs during 1975-76, showing a fall of 0.74 lakh. The fall in enrolment during 1975-76 by stages of education is shown in Table 9.1.

TABLE 9.1

#### **State-wise Enrolment in Schools**

	<i>Enrolment in schools</i>		<i>Variations</i>
	1974-75	1975-76	
L. P. Section	2868214	2670817	—197397
U. P. Section	1555033	1706644	+151611
H. S. Section	936042	907896	—28146
<b>Total</b>	<b>5359289</b>	<b>5285357</b>	<b>—73932</b>

9.4 Table 9.1 indicates that the enrolment in L. P. Section and High School Section has decreased considerably. In the high school section, the decrease is observed in Standard X (a fall of 1.58 lakhs) compared to the year 1974-75. This fall is the result of wholesale promotion given to students in Standard IX during 1973-74 and consequent abnormal rise in enrolment in Standard X during 1974-75. But the fall in enrolment in the L. P. Section is not so easy to explain. An analysis of the enrolment in Standard I between 1970-71 and 1975-76 indicates that the annual intake has begun to show a decreasing trend in contrast to the steady increasing trend of the previous decade. Table 9.2 depicts the annual variation of enrolment in Standard I between 1970-71 and 1975-76.

TABLE 9.2

**Trend of Enrolment in Standard I**

<i>Year</i>	<i>Enrolment in Std. I (Lakhs)</i>	<i>Variation (Lakhs)</i>
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

9.5 The steep fall in enrolment during 1972-73 was due to the policy of giving wholesale promotion to students in Standard I. However, this step cannot explain the lower enrolment noticed during the subsequent years. It can be reasonably assumed that the major reason for the declining trend in annual intake of students in Standard I is the reduction in birth rate as a result of past efforts under family planning.

9.6 Between 1956-57 and 1975-76, the total enrolment in primary stage (lower and upper primary together) increased from 24.92 lakhs to 43.77 lakhs showing an increase of 76 per cent while in the secondary stage, the total enrolment increased from 2.16 lakhs to 9.07 lakhs showing an increase of 319 per cent. The fact that the annual growth rate of enrolment in the secondary stage far exceeded the growth rate in the primary stage is an indication of the spread of higher education among the masses.

9.7 Girls constitute 47.3 per cent of the total number of students in Schools. Stage-wise, the proportions are 44.2 per cent in the L. P. Section, 47 per cent in the U. P. Section and 46.9 per cent in the High School Section. The number of students in Standard X has decreased from 3.38 lakhs in 1974-75 to 1.80 lakhs in 1975-76, the decrease being the result of discontinuance of wholesale

promotion from Standard IX in 1974-75. It is estimated that 2.75 lakhs of students (both regular and private) will appear for the S. S. L. C. examination to be conducted in March—April 1976 as against 4.04 lakhs in the previous year. The out-turn of S. S. L. C. examinations (September and March) during 1974-75 was 1.17 lakhs as against 0.56 lakh in 1973-74.

9.8 The total number of teachers in schools was 1.58 lakhs during 1974-75, consisting of 0.33 lakh in the High School Section, 0.49 lakh in the Upper Primary Section and 0.76 lakh in the Lower Primary Section. This shows an increase of 4000 teachers compared to the previous year. About 61 per cent of the total number of teachers is employed in schools run by private agencies.

## 2. Higher Education (General):

9.9 There are 130 arts and science colleges in the State in 1975-76, of which 107 colleges are in the private sector. Six new colleges have been started during the year. The University of Kerala has 79 arts and science colleges (58 first grade colleges and 21 junior colleges) affiliated to it. There are 51 arts and science colleges including 18 junior colleges, affiliated to the University of Calicut. There are no affiliated or constituent colleges under Cochin University at present.

9.10 The number of students in the arts and science colleges including university departments was 154783 during 1974-75, of which 87583 students were undergoing pre-degree course, 61327 students degree course and 5873 students post-graduate course. The number of students during 1973-74 was 1.51 lakhs. Thus there was an increase of nearly 4000 students during 1974-75. Out of the total enrolment in the colleges, girls constitute 46.25 per cent. The number of students (post-graduate) in the University Departments was 1191 in 1974-75. The total number of teachers in the arts and science colleges in the State was 7542 during 1974-75.

## 3. Professional and Special Education:

9.11 There are 18 Polytechnics in the State (12 Government and 6 private) including three Women's Polytechnics. The total enrolment in Polytechnics was 5812 in 1974-75 as against 4177 in the previous year. Junior Technical Schools (21) had a total strength of 3385 during the year under review as against 3014 in the previous year. The number of Industrial Training Institutes remained at 40 (12 Government and 28 private).

9.12 The total enrolment in the 6 engineering colleges (3 Government and 3 private) was 3043 during 1973-74 which has increased to 3537 during 1974-75. The four medical colleges in the State

(all Government) imparted instruction to 3303 students during 1974-75 as against 3375 in 1973-74. The total enrolment in the Ayurveda Colleges (2 Government and one private) was 470 during the year 1975-76 as against 452 in the previous year. There are 19 teachers' training colleges in the State consisting of 4 Government colleges and 15 private colleges. The total strength of teacher training colleges was 1969 as against 1816 in the year 1973-74. Strength of the four law colleges (including one private college) increased from 1061 in 1973-74 to 1861 in 1974-75. New admissions to degree and post-graduate courses in the Agricultural college and Veterinary college were 113 and 57 respectively during the year under review.

#### 4. Expenditure on Education:

9.13 Education claimed 37.2 per cent of the State's budgeted expenditure in 1974-75. The corresponding percentage for all India was only 23.6 in 1972-73. The percentage distribution of educational expenditure among the different stages of education is indicated below:

	<i>*Percentage of expenditure to total expenditure on education</i>
Primary Education	56.65
Secondary Education	25.20
University Education	12.26
Technical Education	3.37
Others	2.52
Total	100.00

\*Revised estimates: 1974-75

Primary education accounts for as much as 68 per cent of the total expenditure on school education. The expenditure on general school education has increased from Rs 67.39 crores in 1973-74 to Rs 86.42 crores in 1974-75 (Revised Estimates). Out of the total expenditure on school education, 62 per cent is spent on private schools. Between 1961-62 and 1974-75 the expenditure on school education has increased by 413 per cent. Cost per pupil on primary education was Rs 49.30 during 1965-66 which has increased to Rs 117.52 during 1974-75. Cost per pupil on secondary education has increased from Rs 90.37 in 1965-66 to Rs 217.90 in 1974-75.

9.14 The expenditure on University Education has increased from Rs 10.80 crores in 1973-74 to Rs 12.88 crores in 1974-75 (Revised Estimates). The expenditure on technical education amounted to Rs 2.29 crores in 1973-74 which has increased to Rs 3.54 crores in 1974-75 (Revised Estimates).

9.15 The total Government expenditure on education increased from Rs. 16.16 crores in 1960-61 to Rs. 105 crores in 1974-75 (Revised Estimates) showing an increase of 552 per cent. The per capita Government expenditure on education has increased from Rs. 9.56 in 1960-61 to Rs. 45.17 in 1974-75. This reveals the fact that education has become a major claimant of our budgetary resources. In the matter of proportion of public expenditure on education to the State income, Kerala is on a par with some of the most advanced countries of the world while this proportion is only 2.7 per cent for India as a whole, it is 5.1 per cent in Kerala. The corresponding percentage is 3.5 in France, 5.9 in U. K. and 4.3 in Japan.

*Welfare of Backward Classes:*

9.16 Scheduled Castes and Scheduled Tribes population constitutes nearly 10 per cent of the total population of the State. A majority of the people belonging to the Scheduled Castes and Scheduled Tribes are agricultural labourers living under conditions of economic insecurity and social inequality. During the year under review a separate department under the Director of Tribal Welfare was formed for the promotion of the welfare of the Scheduled Tribes. As a first step towards the allround development of the tribal areas in the State, an Integrated Tribal Development Project is to be implemented in the Attappady tribal area. The State Planning Board has already prepared a project report for this purpose.

9.17 A major portion of the provision under the welfare of backward classes is utilised for schemes relating to education. Scheduled Castes and Scheduled Tribes students undergoing pre-matric studies are given lump sum grant for the purchase of books, dress etc. During 1974-75 31,952 scheduled caste students and 11,621 scheduled tribe students were given such educational concessions. Boarding grants were given to 206 scheduled caste students and 88 scheduled tribe students staying in subsidized hostels run by private agencies. Special incentive grants ranging from Rs. 100 to Rs. 150 were given to 41 students. One new cosmopolitan hostel was started and a three storeyed building was constructed for the cosmopolitan hostel, Trivandrum. Five welfare hostels for scheduled caste students and 6 hostels for scheduled tribe students were newly started. The scheme for giving subsidy to the trained and qualified persons for getting self-employed in the trade in which they are proficient benefited 235 scheduled caste families and 73 scheduled tribe families. During the year 1974-75 four production-cum-training centres were started at Kulakkada, S. P. Colony, Pathirippally and Kalayapuram. Grants for the construction of houses were given to 133 scheduled caste families and 63 scheduled tribe families. Twelve wells were constructed in scheduled caste and scheduled tribe concentrations. Grants at the rate of Rs. 300 were given to 106 scheduled tribe families for

the purchase of seeds, seedlings, cows, goats etc. Under the colonisation scheme a new colony at Chithalvetty was started during the year 1974-75. A new settlement colony at Thonnakkal has been established for the settlement of the educated unemployed among these communities. Financial support by way of grant was given to 20 couples under the scheme for encouraging inter-caste marriage.

9.18 Educational concessions were given to 29,910 students belonging to other backward communities. Boarding grants were also given to 123 boarders of the above communities during the year.

9.19 Apart from the above schemes post matric scholarships were given to 6437 scheduled caste students and 555 scheduled tribe students under the centrally sponsored scheme.

#### **Health:**

9.20 Medical and public health activities recorded steady progress in the past few years as a result of planned efforts. The total number of medical institutions and beds available have shown steady increase. The number of beds available per lakh of population has registered an increase over the past few years, despite the rapid increase in population. There was, however, a fall in the number of beds per lakh of population from 106 to 105 during the last year. Data relating to the number of medical institutions and beds in Kerala from 1966-67 to 1974-75 are presented in Table 9.3.

TABLE 9.3

#### **Medical Institutions and Beds in Kerala**

<i>Year</i>	<i>Total No. of medical and public health institutions</i>	<i>No. of beds</i>	<i>No. of beds per lakh of population</i>
(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

the purchase of seeds, seedlings, cows, goats etc. Under the during 1973-74 and 1974-75 is given in Appendix 9.24. It can be seen that Trivandrum, Alleppey, Trichur and Kozhikode are well served in respect of the number of beds while Malappuram and Idukki Districts are poorly served. The bed population ratio is below the State average in the Districts of Quilon, Idukki, Palghat, Malappuram and Cannanore. It continues to be the highest in Trivandrum District. Data on bed-population ratio (district-wise) are presented in Table 9.4.

TABLE 9.4  
Bed-Population Ratio

<i>District</i>	<i>No. of beds per lakh of population</i>	
	1973-74	1974-75
(1)	(2)	(3)
Trivandrum	208	205
Quilon	63	64
Alleppey	143	135
Kottayam	122	117
Idukki	32	30
Ernakulam	104	107
Trichur	128	131
Palghat	62	65
Malappuram	39	37
Kozhikode	141	133
Cannanore	72	70
Kerala	106	105

9.22 The per capita expenditure on Health Services rose from Rs 9.87 in 1973-74 to Rs 11.23 in 1974-75. It continues to be much higher than the all India average. The per capita expenditure on Health Services, State-wise, is furnished in Appendix 9.23. For the country as a whole the per capita expenditure rose only from Rs 7.90 to Rs 8.81 between the two years.

#### *Indigenous Medicine:*

9.23 There were 65 hospitals under the Ayurvedic system of medicine with a total bed strength of 1282 at the end of 1974-75. The number of Ayurvedic dispensaries increased from 376 to 382 during the year. There were 8 hospitals and 113 dispensaries under Homoeopathy in 1974-75. The district-wise distribution of institutions and beds is given in the Appendix 9.26. Trivandrum ranks first in the matter of total number of beds available under the



indigenous system of medicine followed by Trichur and Ernakulam. With the establishment of rural dispensaries under the "Special Employment Programme" all the panchayats in the State have now been provided with a Government institution for medical service, Allopathic, Ayurveda or Homoeo.

### *Family Planning:*

9.24 The State has recorded fair progress in family planning during the year as compared to the previous year, judged from the number of sterilization operations conducted. The number of vasectomy operation performed doubled during the year as compared to the previous year. District-wise details of achievements under family planning are given in Appendix 9.28. Kozhikode District tops the list in respect of sterilization operations conducted (9253) followed by Trivandrum (9151) and Alleppey (8825) Districts. Regarding the record of induced abortions, Trivandrum District has the first place followed by Ernakulam and Kozhikode Districts. An expenditure of Rs 259.54 lakhs was incurred during 1974-75 as against Rs. 260.50 lakhs in the previous year on family planning programme. Expenditure incurred on the programme for the last few years ~~is~~ furnished in Table 9.5.

TABLE 9.5

#### **Expenditure on Family Planning Programme**

<i>Year</i>	<i>Total expenditure on family planning (Rs. in lakhs)</i>
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

9.25 Population problem is much more acute in Kerala than at the all India level. It has assumed such appalling proportions that the State's economic prospects and prosperity would depend largely on the success achieved in arresting the growth of population within a short period. Thus family planning programme deserves top priority in the State's economic development. The low tempo of activities and achievements on this front that is evident of late should therefore cause some concern. It is worth noting in this

connection that the number of sterilisation operations (vasectomy and P. P. S.) which had reached 151 thousands in 1971-72 came down to 45 thousands in 1973-74. There is a sign of improvement in the performance in 1974-75, but the number of sterilisations effected (61 thousand) is still much less than the 1971-72 figure.

*Medical Practitioners:*

9.26 The number of medical practitioners under the various systems of medicine as on 31-3-1975 is given in Table 9.6. The number of medical practitioners under the major systems of medicine, viz., Allopathy, Ayurveda and Homoeopathy shows substantial increase in 1974-75 compared to the previous year.

TABLE 9.6

System (1)	Class of Registration (2)	1973-74 (3)	1974-75 (4)
I. Modern Medicine	A	6512	7269
	B	635	635
	Listed	204	204
	Sub total		7351
II. Homocopathy	A	838	999
	B	1486	1489
	Listed	278	279
	Sub total		2602
III. Ayurveda	A	3252	3454
	B	6101	6101
	Listed	602	595
	Sub Total		9955
IV. Sidha	A	37	37
	B	1218	1218
	Listed	41	41
	Sub Total		1296
V. Unani	A	Nil.	Nil.
	B	51	51
	Listed	5	5
	Sub Total		56
Grand Total:		21260	22377

**Water Supply:**

9.27 Water supply schemes both urban and rural have made much headway during the year under review. Four urban water supply schemes were completed during the year and eighteen schemes were under implementation. The number of towns having protected water supply increased to 19 at the end of 1974-75 from 15 during the previous year. Under Rural Water Supply, 59 schemes were completed and there were 266 schemes under various stages of construction during the year. Progress of work under water supply and sanitation is given in Appendix 9.29.

9.28 A total expenditure of Rs 562.85 lakhs was incurred for water supply schemes during 1974-75 from the L.I.C. funds

**Housing.**

9.29. Construction of houses under the "one lakh houses scheme" continued during the year. 42000 houses have been completed so far. Construction of 10,000 houses are in progress. Thus there is a shortfall in achievement compared to the target. Considering the huge size of the programme and the investment involved what has been achieved is no mean achievement.

9.30. During the year 1974-75, 12 housing schemes were under implementation by the State Housing Board, of which two schemes were completed. The Rental Housing Scheme—Chevayoor a Government work undertaken by the Board at a total estimated cost of Rs 47.5 lakhs was completed in September 1975. The scheme consists of a total number of 264 flats. The rental housing scheme, Trikkakara, consisting of 369 flats at an estimated cost of Rs 82 lakhs has also been completed. An amount of Rs 140.89 lakhs has been spent during the year for the execution of various works undertaken by the Board.

**Rural Development:**

9.31. The Kerala State Rural Development Board has been entrusted with the Rural Water Supply and Sewerage Schemes and the Remunerative Development Schemes in panchayat areas. 204 Rural Water Supply Schemes were taken up by the Board in 1971 and 135 schemes have so far been completed. The Board has now prepared 202 new schemes for execution and has submitted the same to L.I.C. of India for loan assistance. These schemes covering different panchayats could be taken up immediately utilising the funds available from Government in anticipation of L.I.C. loan.

9.32. Remunerative Development Schemes comprising construction of modern market stalls, shopping centres, lodging houses, community halls and the like in panchayat areas form the other major

constituent of the Board's programme. These schemes are the first of their kind in the country and provide a perennial source of income to the panchayats and better amenities of life to the rural public. The Remunerative Development Schemes are taken up in a phased manner and the first 100 schemes were taken up in 1972. In the second phase of this programme 206 schemes have been formulated. They have been completed in 69 panchayats. In 55 panchayats they are in different stages of implementation.

9.33. Of the total estimated cost of Rs 448 lakhs for the 204 Rural Water Supply schemes taken up in 1971, an amount of Rs 170 lakhs has already been obtained from the L.I.C. as loan. The Board has so far floated debentures for Rs 247.50 lakhs and the amount spent for the Remunerative Development works is Rs 140 lakhs as on 30-11-1975.

## CHAPTER 10

### EMPLOYMENT AND MANPOWER

During the year 1975 there was an unprecedented increase in the number of work-seekers on the live register of employment exchanges. As at the end of the year, there were 6.91 lakhs of work-seekers compared with 5.88 lakhs a year ago. Nine years ago, i. e., as on 31-12-1966, there were only 1.57 lakhs of work-seekers on the live register. The increase during the nine years was nearly four and a half times. These figures indicate the dimensions of the problem of unemployment in the State, though 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 6.91 lakhs of persons who are registered with the employment exchanges are not unemployed. A 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. That means there were 4.51 lakhs of unemployed on the live register. There may be a number of unemployed persons who are not registered with the employment exchanges, particularly among the uneducated. Therefore, it can be safely concluded that more than 4.51 lakhs of persons are totally unemployed in Kerala.

10.2 Table 10.1 shows the distribution of work-seekers according to their levels of education. It is seen that nearly 48 per cent of the registrants have no educational qualifications in the sense that they are below S. S. L. C. Their number has been steadily increasing. Last year alone nearly 57,000 such persons, additionally registered themselves with the exchanges. It would appear that even uneducated persons are becoming increasingly conscious of the facilities provided by the Employment Exchanges.

TABLE 10.1

**Distribution of Work seekers in Kerala by Education Levels**

<i>Period ending</i>	<i>Below S.S.L.C.</i>	<i>% to total work-seekers</i>	<i>S.S. L.C.</i>	<i>Pre-degree</i>	<i>Graduate</i>	<i>Post Graduate</i>	<i>S.S. L.C. and above</i>	<i>% to total work seekers</i>	<i>Total work seekers</i>
(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	54.40	201876
31-12-1969	96153	40.13	124469	6275	11002	1687	143433	59.87	239586
31-12-1970	115304	39.25	151279	7469	17703	1994	178450	60.75	293754
31-12-1971	166305	45.27	167814	10168	20841	2253	201076	54.73	367381
31-12-1972	194848	42.93	218880	16457	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	53.20	587935
31-12-1975	331628	47.98	281989	28329	44456	4840	359614	52.02	691242

*Source:* Directorate of Employment.

10.3 The number of educated work-seekers also increased significantly. During the year 1975, nearly 46,000 persons, with educational qualifications S. S. L. C. and above additionally registered themselves with the employment exchanges. These include about 7500 graduates and 1000 post-graduates. This means that nearly all those who took their degrees in 1975 registered themselves with the exchanges. These figures also indicate that very few graduates and post-graduates are able to secure jobs through the employment exchanges, because very little new opportunities arise for educated persons.

10.4 The unemployment situation among technically and professionally qualified persons has not improved during the year. The number of such work-seekers on the live register is shown in Table 10.2.

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TABLE 10.2  
Number of Professional and Technical Work Seekers

<i>Period ending</i>	<i>Medical graduates</i>	<i>Engineering graduates</i>	<i>Diploma holders in Engineering</i>	<i>I.T.I. Certificate holders</i>	<i>Agricultural graduate</i>	<i>Veterinary graduate</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
31-12-1966	19	417	N.A.	N.A.	N.A.	N.A.
31-12-1967	20	654	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	1852	3547	8380	133	70
31-12-1971	405	2068	3450	9894	128	116
31-12-1972	654	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	1850	3690	20163	32	117

Source: Directorate of Employment.

N.A. Not Available.

10.5 As on 31-12-1975, there were 809 medical graduates on the live register. This number is about two year's outturn. Similarly, 1850 engineering graduates and 3690 diploma holders in engineering remain on the live register. But their numbers have not increased substantially during the last two or three years. This indicates that in recent years, medical and engineering graduates and diploma holders in engineering are being absorbed every year in numbers almost equal to the annual outturn. In the case of I. T. I. certificate holders, however, there has been a steady increase. At the end of December last there were over 20,000 I. T. I. Certificate holders on the live register. It would appear, that this category is facing very bleak employment prospects.

10.6 Graduates in Agriculture and Veterinary Science have again appeared on the live register. At the end of December 1974, there was no agricultural or veterinary graduate on the live register. They were all absorbed. At present, there are 32 agricultural graduates and 117 veterinary graduates seeking employment.

10.7 It does not mean that all these technically and professionally qualified persons are totally unemployed. The survey by the

Director General of Employment referred to above, shows that only 62.9 per cent of them were actually unemployed. 32.2 per cent were employed, and they have registered themselves with the employment exchanges for better jobs, presumably because their present jobs are not inkeeping with their qualifications. The rest, equal to 4.9 per cent, were prosecuting higher studies.

10.8 The data on employment in the organised sector (both public and private) published by the Directorate of Employment show that there was only a marginal increase in employment in these sectors. As on 30-6-1975 only 8.09 lakhs of persons were employed in such establishments, compared with 7.90 lakhs on 31-12-1974 and 7.78 lakhs on 31-12-1973. It may be mentioned here that 8½ years ago i.e. as on 31-12-1966, 6.96 lakhs of persons were employed in the organised sector. The growth in organised employment was only 16.2 per cent over a period of 8½ years or barely 1.8 per cent per annum. The relevant figures are given in Table 10.3.

TABLE 10.3

**Employment in the Public and Private Sectors in Kerala**

<i>Period ending</i>	<i>Public Sector</i>	<i>Private Sector</i>	<i>Total</i>
(1)	(2)	(3)	(4)
31-12-1966	261321	434562	695883
31-12-1967	266366	425851	692217
31-12-1968	279475	438672	718147
31-12-1969	291082	427715	718797
31-12-1970	293318	409562	702880
31-12-1971	333247	415105	748352
31-12-1972	343837	423008	766845
31-12-1973	365445	413230	778675
31-2-1974	375943	414477	790420
30-6-1975	380486	428668	809154

*Source:* Directorate of Employment

10.9 The above figures of 1.8 per cent per annum growth rate in organised employment may be compared with the average annual growth rate in the number of persons registered with the employment exchanges. The average annual growth rate of the live register may be taken as a crude indicator of the increase



in unemployment. It is seen that the live register increased by nearly 17.9 per cent per annum, while organised employment rose only by 1.8 per cent per year. No wonder, if unemployment, particularly among the educated increased by leaps and bounds.

10.10 Examining the figures for the public and private sectors separately it is seen that during the 8½ years from 31-12-1966 to 30-6-1975, public sector employment rose by 45.5 per cent, whereas private sector employment showed a marginal decline of 1.2 per cent. In fact the performance of the organised private sector has been erratic, as regards employment. Frequent ups and downs in employment have been experienced. These figures indicate a virtually stagnant private sector in Kerala, though it is true that a small part of the decline in private sector employment is the result of some enterprises shifting to the public sector, particularly as in the case of cashew factories taken over by the Kerala State Cashew Development Corporation.

10.11 During the first six months of 1975, however, there was a significant increase in private sector employment. It is seen that nearly 14,200 persons got employment in the private sector during this period. This is an encouraging trend.

10.12 Data on placings through the employment exchanges in Kerala is given in Table 10.4.

TABLE 10.4

**Number of placings through the Employment Exchanges in Kerala.**

<i>Year</i>	<i>Number of Placing</i>	<i>Monthly average number of employers using the employment exchanges</i>
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

Source: Directorate of Employment.

10.13 The number of placings through the Employment Exchanges has reached a peak in 1975. During this year 23878 persons have been placed in employment through the services of the exchanges

in Kerala. 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.

10.14 A brief review of the working during the year 1974-75 of the Kerala Employment Promotion Corporation Ltd., which has been set up to promote self employment among educated persons in the State is given below. The Corporation is a fully government-owned company incorporated on 28-1-1974 with an authorised share capital of Rs. 3 crores, divided into 30,000 equity shares of Rs 1000 each. Its paid up share capital as on 31-3-1975 is Rs 145.14 lakhs. After its incorporation, the Corporation formulated the following schemes for implementation:

1. Subscription to share capital of co-operative societies.
2. Subscription to share capital in private and public limited companies incorporated under the Companies Act.
3. Underwriting of share capital of public limited companies.
4. Advance for providing loans towards margin money.
5. Margin money credit guarantee scheme.
6. Scheme for the supply of indigenous machinery/tools/equipments on hire purchase to the self employed.
7. Scheme for assistance to entrepreneurs at the pre-investment stage.
8. Functional Industrial Estates for rubber and rubber products, paper and paper products and wire and wire products.
9. Supply of indigenous machinery under the bills rediscounting scheme of the I. D. B. I.

10.15 During the first year, the Corporation invested Rs 94,89,700 in the share base of 39 Co-operative Societies and 3 limited Companies. An amount of Rs 15,54,600 was also disbursed as margin money loan to 32 small scale industrial units/entrepreneurs on the basis of the recommendations made by various banks and the Kerala Financial Corporation. An advance loan of Rs 30 lakhs was also paid to the ENCOS in March, 1975 for and on behalf of the Kerala Government thus bringing the total assistance rendered by the Company till the end of March 1975 to Rs 140.44 lakhs helping to mobilise resources of over Rs 11 crores through banks and entrepreneurs and generating an employment potential of over 5000 in the State.

10.16 During 1974-75 the Corporation made a gross profit of Rs 6.07 lakhs and a net profit of Rs 3.96 lakhs.

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**APPENDIX**

**STATISTICAL TABLES**

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## LIST OF APPENDICES

<i>Subject</i>	<i>Table No.</i>	<i>Page No.</i>
1. Population and Income	Appendix 2.1 to 2.8	219
2. Agriculture	„ 3.1 to 3.10	226
3. Plantations	„ 4.1 to 4.6	235
4. Industry and Power	„ 5.1 to 5.18	240
5. Transport and Communication	„ 6.1 to 6.8	260
6. Prices and Cost of Living	„ 8.1 to 8.5	269
7. Social Services	„ 9.1 to 9.31	274

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## APPENDIX—2.1

**Population and Percentage Area of States in India—1971**

<i>State</i>	<i>Population 1971 Census (in lakhs)</i>	<i>Percentage of area</i>	<i>Percentage of population</i>	<i>Sex ratio (females per 1000 males)</i>
(1)	(2)	(3)	(4)	(5)
<b>INDIA</b>	5479.50	100.00	100.00	930
<b>STATES</b>				
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 & 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
18. Tamil Nadu	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	..

## APPENDIX—2.2

**Decadal variations in Population since 1901—KERALA***(Persons in lakhs)*

<i>Year</i>	<i>Persons</i>	<i>Decade variation</i>	<i>Percentage decade variation</i>	<i>Males</i>	<i>Females</i>
(1)	(2)	(3)	(4)	(5)	(6)
1901	63.96	..	..	31.91	32.05
1911	71.48	7.52	11.75	35.50	35.88
1921	78.02	6.54	9.16	38.79	39.29
1931	95.07	17.05	21.85	47.03	48.04
1941	110.32	15.25	16.04	54.44	55.88
1951	135.49	25.17	22.82	66.82	68.67
1961	169.04	33.55	24.76	83.62	85.42
1971	213.47	44.43	26.29	105.88	107.59

APPENDIX—2.3

Birth and Death Rates—Kerala and India

Year	KERALA						INDIA							
	Births per 1000 population		Deaths per 1000 population		Births per 1000 population		Deaths per 1000 population		Births per 1000 population		Deaths per 1000 population			
	Rural	Urban	State	Rural	Urban	State	Rural	Urban	Rural	Urban	All India	Rural	Urban	All India
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1966	37.4	..	..	..	10.5	..	..	..	..	..	..	..	..	..
1970	32.3	30.9	32.1	9.2	9.2	9.0	9.2	38.9	29.7	36.8	17.3	10.2	15.7	15.7
1971	31.9	30.2	31.6	9.2	9.2	8.6	9.1	38.9	30.1	36.9	16.4	9.7	14.9	14.9
1972	32.1	29.5	31.7	9.4	9.4	7.8	9.1	38.4	30.5	36.6	18.9	10.2	16.9	16.9
1973	29.9	..	..	..	8.7	..	..	35.9	28.9	34.6	17.0	9.6	15.5	15.5

APPENDIX—2.4

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. Live stock, Forestry, Fishing, Hunting and plantation, 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 & 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
<b>TOTAL WORKERS</b>	<b>40.09</b>	<b>12.72</b>	<b>52.81</b>	<b>7.55</b>	<b>1.80</b>	<b>9.35</b>	<b>47.64</b>	<b>14.52</b>	<b>62.16</b>

**APPENDIX—2.5**  
**Net Domestic Product at Factor Cost by Industry of Origin—Kerala**  
 (At current prices)  
 (Rs. lakhs)

Industry/Sector	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Primary sector	24196	25097	25807	27022	33078	39737	41630
2. Secondary sector	6585	7476	7539	8102	9504	10286	11220
3. Transport, Communication and trade	5769	6947	7671	8308	9373	10340	11717
4. Finance and Real Estate	1573	1673	1934	2261	2516	2811	2971
5. Community and Personal Services	5099	5521	5801	6087	6642	7895	8957
6. Net Domestic Product at factor cost	43222	46714	48752	51860	61113	71069	76495
7. Per Capita income (Rs.)	259	273	279	290	334	380	399

**APPENDIX—2.5 (Contd.)**

Industry/Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
(1)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1. Primary Sector	51838	53641	59977	67323	62018	74562	101443
2. Secondary Sector	13741	14538	16062	16321	17791	18871	19172
3. Transport, Communication and trade	12687	15860	17581	20064	21616	25195	28273
4. Finance and Real Estate	3300	3485	3795	4244	5067	5555	6750
5. Community and Personal Services	10372	11878	13711	15052	16474	17979	20808
6. Net Domestic Product at factor cost	91938	99402	111126	123004	122966	142162	176446
7. Per capita income (Rs.)	469	496	542	586	572	647	785

Source: Bureau of Economics & Statistics, Kerala, Trivandrum.



APPENDIX—2.6

**Net Domestic Product at Factor Cost by Industry of Origin—Kerala**  
(At 1960-61 prices)

(Rs. lakhs.)

Industry/Sector	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Primary sector	24196	23414	24145	24326	24728	24705	26249
2. Secondary sector	6585	7066	7554	7907	8767	8710	9030
3. Transport, Communication and trade	5769	6287	6479	6599	6974	7049	7432
4. Finance and Real Estate	1573	1646	1744	1872	1968	2004	1998
5. Community and Personal Services	5099	5413	5523	5645	5901	6362	6654
6. Net Domestic Product at factor cost	43222	43826	45445	46349	48338	48830	51363
7. Per capita Income (Rs.)	259	256	260	259	264	261	268

223

APPENDIX—2.6 (Contd.)

Industry/Sector	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
(1)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1. Primary sector	27651	28835	30028	31651	32052	32277	32355
2. Secondary sector	10169	9954	10715	10657	11979	12548	12637
3. Transport, Communication and trade	7937	9261	9497	9906	10206	10407	10466
4. Finance and Real Estate	2044	2142	2168	2302	2647	2732	2825
5. Community and Personal Services	6969	7211	7383	7886	8112	8473	9290
6. Net Domestic Product at factor cost	54770	57403	59791	62402	64996	66437	67573
7. Per capita Income (Rs.)	279	286	291	297	302	302	300

Source: Bureau of Economics & Statistics, Kerala, Trivandrum.

**APPENDIX—2.7**  
**Net Domestic Product at Factor Cost by Industry of Origin—India**  
 (At Current Prices)  
 (Rs. crores)

Industry/Sector (1)	1960-61 (2)	1961-62 (3)	1962-63 (4)	1963-64 (5)	1964-65 (6)	1965-66 (7)	1966-67 (8)
1. Primary sector	6965	7202	7369	8543	10410	10194	12122
2. Secondary sector	2549	2751	3007	3478	3898	4218	4692
3. Transport, Communication and trade	1870	2026	2213	2484	2927	3173	3694
4. Finance and Real Estate	552	593	669	759	845	920	975
5. Community and Personal Services	1399	1513	1645	1825	2068	2296	2565
6. Net Domestic Product at factor cost	13335	14085	14903	17089	20148	20801	24048
7. Per capita Income (Rs.)	306	315	326	366	422	425	481

**APPENDIX—2.7 (Contd.)**

Industry/Sector (1)	1967-68 (9)	1968-69 (10)	1969-70 (11)	1970-71* (12)	1971-72* (13)	1972-73* (14)	1973-74** (15)
1. Primary sector	15137	14885	16376	17569	18104	19302	26186
2. Secondary sector	5136	5494	6400	6984	7522	8228	9089
3. Transport, Communication and trade	4237	4520	4867	5279	5641	6247	7470
4. Finance and Real Estate	1044	1105	1189	1332	1500	1677	1881
5. Community and Personal Services	2876	3116	3408	3745	4112	4445	5002
6. Net Domestic Product at factor cost	28430	29120	32240	34909	36879	39899	49628
7. Per capita Income (Rs.)	557	557	604	640	661	698	850

Source: Central Statistical Organisation, National Accounts Statistics 1960-61—1972-73.

\*Provisional estimates.

\*\*Quick estimates.

APPENDIX—2.8

Net Domestic Product at Factor Cost by Industry of Origin—India  
(At 1960-61 Prices)

(Rs. crores)

Industry/Sector	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Primary sector	6965	7032	6869	7061	7682	6667	6566
2. Secondary sector	2549	2744	2930	3223	3467	3553	3669
3. Transport, Communication and Trade	1870	1999	2116	2272	2414	2469	2531
4. Finance and Real Estate	552	584	607	634	652	666	673
5. Community and Personal Services	1399	1466	1581	1692	1813	1879	1970
6. Net Domestic Product at factor cost	13335	13825	14103	14882	16028	15234	15409
7. Per Capita income (Rs.)	306	309	308	318	335	311	308

225

APPENDIX—2.8 (Contd.)

Industry/Sector	1967-68	1968-69	1969-70	1970-71*	1971-72*	1972-73*	1973-74*
(1)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1. Primary sector	7629	7712	8182	8795	8648	8056	8529
2. Secondary sector	3814	4020	4232	4252	4326	4499	4460
3. Transport, Communication and trade	2636	2772	2918	2998	3099	3205	3216
4. Finance and Real Estate	680	712	737	769	815	845	856
5. Community and Personal Services	2043	2141	2269	2405	2591	2717	2849
6. Net Domestic Product at factor cost	16802	17357	18338	19219	29479	19322	19910
7. Per capita income (Rs.)	328	332	343	352	348	337	340

Source: Central Statistical Organisation, National Accounts Statistics 1960-61—1972-73.

\*Provisional estimates.

\*\*Quick estimates.

APPENDIX 3.1

District-wise Average Monthly Rainfall

(in m. m.)

District	January 1974	February 1974	March 1974	April 1974	May 1974	June 1974	July 1974	August 1974	September 1974	October 1974
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Trivandrum	..	23	28	160	246	135	471	389	301	122
Quilon	2	21	30	216	262	178	544	385	376	176
Alleppey	2	13	17	234	403	276	719	437	418	192
Kottayam	..	20	28	252	453	230	623	531	445	142
Idukki	3	2	4	110	213	288	933	729	381	198
Ernakulam	2	..	25	158	235	290	993	445	366	106
Trichur	1	3	13	87	101	367	1077	496	367	123
Palghat	..	..	15	112	128	204	884	510	280	83
Malappuram	..	..	10	155	173	319	1311	474	411	141
Kozhikode	..	1	20	173	228	278	1637	803	568	89
Cannanore	..	..	4	44	234	330	1422	590	401	126
State	7	7	18	255	243	263	965	526	392	136
Normal	17	18	43	111	245	677	683	417	236	302

Source: Bureau of Economics and Statistics, Government of Kerala. (Actual figures have been rounded off to the nearest m. m.)

APPENDIX 3.1 (Contd.)

District	November 1974	December 1974	Total 1974	January 1975	February 1975	March 1975	April 1975	May 1975	June 1975
(1)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Trivandrum	44	3	1922	21	33	58	228	227	400
Quilon	80	..	2270	4	40	77	249	194	597
Alleppey	94	5	2810	6	73	124	207	182	666
Kottayam	72	2	2798	14	58	63	158	103	573
Idikki	124	3	2988	3	30	39	123	158	823
Ernakulam	66	..	2686	6	7	59	135	145	731
Trichur	33	..	2668	4	..	48	71	258	830
Palghat	48	..	2264	..	7	55	58	152	825
Malappuram	46	..	3040	..	10	75	73	152	1080
Kozhikode	45	..	3842	2	3	70	79	174	1273
Cannanore	26	..	3177	1	..	53	54	129	1257
State	62	1	2769	6	24	66	130	170	823
Normal	187	49	2985	17	18	43	111	245	677

Source: Bureau of Economics and Statistics, Government of Kerala. (Actual figures have been rounded off to the nearest rmm.).

APPENDIX 3.2

Land Use Pattern in Kerala during 1974-75

(Area in hectares)

District	Total geographical area according to village papers	Forest uses	Land put to non-agricultural uses	Barren and uncultivable land	Pastures and grazing land	Land under miscellaneous crops	Fallow land other than current fallow	Current fallow	Net area sown more than once	Total cropped area		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	216096	43860	17534	498	550	476	340	691	224	151923	94740	246663
Quilon	469051	209074	18042	6902	1300	984	1985	769	484	229511	147937	377448
Alleppey	186790	513	12450	753	250	6350	800	760	530	164384	80329	244713
Kottayam	215695	5912	13805	1683	2513	4516	1308	1166	1849	182943	88962	271905
Idukki	506775	297626	14557	7128	1388	1646	13556	302	3711	166861	3055	169916
Ernakulam	221183	1312	22638	1521	1599	650	1716	2405	3644	185698	40840	226538
Trichur	299149	131634	18748	2156	500	3326	1493	414	1546	139332	107025	246357
Palghat	437087	67185	52897	10575	2810	1432	4017	3053	2082	293036	54693	347729
Malappuram	363045	97627	14389	4602	2369	5082	23323	523	4677	210453	52025	262478
Kozhikode	366991	128607	44670	9774	2521	3022	7126	2935	1910	166426	113990	279816
Cannanore	576661	63932	65383	19295	12000	70203	16286	7790	3888	317884	36628	354512
STATE	3858523	1047282	295113	64887	27800	97687	71950	20808	24545	2208451	819624	3028075

Source: Bureau of Economics and Statistics.

## APPENDIX 3.3

## Area, Production and average yield of Principal Crops in Kerala

Crops	Area (hectares)		Production (tonnes)		Average yield (Kg./Hect.)	
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>I. Food Crops</b>						
1. Rice	874675	881466	1257069	1333931	1437	1513
2. Pulses	37417	37262	12620	12674	337	340
3. Sugarcane (Gur)	9530	9506	51345	53912	5388	5671
4. Pepper	118245	118408	27745	27228	233	230
5. Ginger	12044	12201	26683	26040	2215	2134
6. Turmeric	4320	4263	4586	4480	1062	1051
7. Cardamom	<del>47492</del> 46630	46630	<del>1502</del> 2050	2050	32	44
8. Betel nuts*	90701	93042	13459	13777	148389	148072
9. Banana and other Plantains	46772	47143	353620	356583	7569	7564
10. Cashewnut	103162	104885	115747	117679	1122	1122
11. Tapioca	306446	317880	5659523	5625116	18468	17696
12. Other food crops	208650	213190	..	..	..	..
Total food crops	1859404	1885876	..	..	..	..
<b>II. Non-food crops</b>						
1. Groundnut	17167	17510	18043	19471	1051	1112
2. Sesamum	11782	11782	3489	3264	296	277
3. Coconut*	744328	748174	3703	3719	4975	4971
4. Cotton	7476	7551	1555	1714	208	227
5. Tobacco	668	762	1386	1327	2053	1741
6. Tea	37685	37572	48358	48899	1283	1301
7. Coffee	35805	36589	15459	15784	432	431
8. Rubber	199604	202318	118016	121558	591	601
9. Other non-food crops	85662	79941	..	..	..	..
Total non-food crops	1140177	1142199	..	..	..	..
Total Cropped area	2999581	3028075	..	..	..	..

\* In Million Nuts.

Source: Bureau of Economics and Statistics, Government of Kerala.

## APPENDIX 3.4

**Consumption of Fertilisers in Kerala***(In tonnes)*

<i>Year</i>	<i>Nutrients</i>			
	<i>Nitrogen (N)</i>	<i>Phosphorus (P<sub>2</sub> O<sub>5</sub>)</i>	<i>Potash (K<sub>2</sub> O)</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)
1956-57	2425	1052	68	3545
1957-58	3604	1049	508	5161
1958-59	3892	2258	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
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

*Source:* Department of Agriculture.



APPENDIX 3.5

Area, Production and Productivity of high yielding varieties of Rice in Kerala—1974-75

District	Autumn 1974			Winter 1975			Summer 1975			Total		
	Area (Hectares)	Production (tonnes) (Rice)	Productivity Kg./Hectare (Rice)	Area (Hectares)	Production (tonnes) (Rice)	Productivity Kg./Hectare (Rice)	Area (Hectares)	Production (tonnes) (Rice)	Productivity Kg./Hectare (Rice)	Area (Hectares)	Production (tonnes) (Rice)	Productivity Kg./Hectare (Rice)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	796	1243	1561	2307	3810	1652	785	1059	1349	3888	6112	1572
Quilon	3420	5388	1575	576	711	2134	57	73	1279	4053	6172	1523
Alleppey	7694	8639	1123	3295	4886	1483	15253	35245	2311	26242	48770	1858
Kottayam	1889	2966	1579	6187	9959	1610	4613	10274	2227	12689	23199	1828
Idukki	1099	1981	1802	2813	6090	2165	..	..	..	3912	8071	2063
Ernakulam	9083	15593	1717	5453	10497	1925	3366	4792	1424	17902	30882	1725
Trichur	8836	12028	1361	7336	13486	1838	6945	13378	1826	23117	38892	1683
Palghat	28032	60555	2160	4015	7674	1911	985	2200	2234	33032	70429	2132
Malappuram	7230	8911	1232	8861	13454	1518	2896	6205	2142	18987	28570	1505
Kozhikode	2488	2136	859	5687	7357	1294	2495	4573	1833	10670	14066	1318
Cananore	6970	11132	1597	4458	5916	1360	1733	2591	1495	13161	19639	1492
State	77537	130572	1542	50988	83840	1644	39128	80390	2054	167653	294802	1758

## APPENDIX 3.6

## Yearly average prices of certain live stock products and cattle feed in Kerala in 1974

	<i>Item</i>	<i>Unit</i>	<i>Prices (Rs.)</i>
	(1)	(2)	(3)
1	Eggs (Fowl's)	100 Nos.	31.75
2	Eggs (Duck's)	100 Nos.	38.60
3	Milk (Cow's)	Litre	1.96
4	Milk (Buffaloe's)	Litre	2.25
5	Butter (Cow's)	Kg.	20.15
6	Ghee (Cow's)	Kg.	23.0
7	Rice bran	Kg.	0.41
8	Paddy Straw	Tonnes	313.00
9	Green grass	Tonnes	211.00
10	Cattle meat	Kg.	4.10
11	Goat meat	Kg.	10.19
12	Cattle hide	Kg.	2.35
13	Goat skin	1 Number	12.75
14	Dung	Tonnes	45.00

Source: Animal Husbandry Department. Bulletin of Animal Husbandry Statistics year ending 31-12-1974.

## APPENDIX 3.7

## Marine Fish landings in Kerala

<i>Species</i>	1974 (January—December)		1973 (January—December)	
	<i>Quantity</i> (‘000 tonnes)	<i>Percentage</i>	<i>Quantity</i> (‘000 tonnes)	<i>Percentage</i>
	(2)	(3)	(4)	(5)
1. Oil Sardine	102.1	24.3	122.8	27.4
2. Other Sardines	31.3	7.4	62.4	13.9
3. Mackerel	10.3	2.5	19.8	4.4
4. Prawns	60.8	14.5	86.0	19.2
5. Elasmobranch	10.3	2.5	8.8	1.9
6. Catfish	33.5	8.0	17.3	3.9
7. Soles	12.8	3.0	8.6	1.9
8. Tunnies	5.9	1.4	2.7	0.6
9. Lactarius	2.9	0.7	6.7	1.5
10. Ribbon fish	30.2	7.2	23.9	5.3
11. Caranx	5.3	1.3	14.2	3.2
12. Sciaenids	9.2	2.2	11.8	2.6
13. Others	105.7	25.0	63.7	14.2
<b>Total</b>	<b>420.3</b>	<b>100.0</b>	<b>448.7</b>	<b>100.0</b>

Source: Central Marine Fisheries Research Institute, Cochin.

## APPENDIX 3.8

## 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

Source: Marine Products Export Development Authority, Cochin.

## APPENDIX 3.9

## Fishermen Co-operatives in Kerala

Category	1974-75			1973-74		
	No. of societies	Member- ship	Paid up share capital (Rs. in lakhs)	No. of societies	Member- ship	Paid up share capital (Rs. in lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Credit Societies	189	37027	5.75	189	37178	5.78
2. M. U. C. S.	849	71906	21.25	846	71755	21.28
3. Regional Marketing Societies	19	1098	31.58	19	1098	19.75
	1057	..	58.58	1054	..	46.81

Source: Department of Fisheries.

4/744/MC.

## APPENDIX 3.10

## Forest Plantation in Kerala

<i>Species</i>	<i>1973-74 (Hectares)</i>	<i>1974-75 (Hectares)</i>
1. Teak Plantation	60554	62044
2. Soft wood	18474	19219
3. Hard Wood	1533	1533
4. Cashew	3335	3335
5. Bamboo	886	886
6. Wattle	498	498
7. Mixed	1094	1094
8. Rubber	1139	1190
9. Eucalyptus	30914	31342
10. Cardamom	185	185
11. Kongu	20	20
12. Balsa	34	56
13. Mahogany	76	87
14. Fuel	223	223
15. Other Plantations	1206	1336
<b>TOTAL</b>	<b>120171</b>	<b>123048</b>

Source: Forest Department.

APPENDIX 4.1

Statement of area under, production and labour employed in Rubber estates in Kerala 1974-75  
official estimates (Provisional)

(Area in hectares and quantity in tonnes)

Districts	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Daily average number of persons employed			(12)	(13)	(14)
									Garden labour (Permanent)	Outside labour (Permanent)	Outside labour (Temporary)			
Trivandrum	4434	7640	..	92	7732	3302	11034	3009	2303	3716	6116	1616	5042	
Quilon	18367	32380	3	235	32612	11556	44168	17583	8395	8570	27051	5561	22660	
Alleppey	4453	3788	4	31	3815	1052	4867	1901	911	937	3447	568	2179	
Kottayam	52273	52314	620	1468	53162	1402	54564	15411	4887	7801	42739	10423	32277	
Idukki	10107	15150	46	253	15357	414	15771	4617	1464	2277	12617	2740	9701	
Ernakulam	14223	19856	773	979	20062	534	20596	5953	1888	2936	15971	4091	11507	
Trichur	1453	8929	40	63	8952	4955	13907	4139	2077	6236	7465	1487	6823	
Palghat	1524	7697	4	384	8077	1476	9553	2683	1094	1694	5386	2691	3460	
Malappuram	3372	16818	..	123	16941	5085	22026	5784	2365	3653	12090	4851	8932	
Kozhikode	5044	16051	15	949	16385	14701	32086	5766	2358	3644	12693	3692	9392	
Canaraore	8833	18981	9	251	19223	7270	26493	6759	2764	4285	15881	3642	9595	
State	125083	199604	1514	4228	202318	51747	254065	73505	30506	45548	160956	41362	121558	

## APPENDIX 4.2

**Area, Production and Productivity of Rubber in Kerala**

<i>Year</i>	<i>Area (hectares)</i>	<i>Production (Tonnes)</i>	<i>Yield per hectare (kg.)</i>
(1)	(2)	(3)	(4)
1972-73	194476	91948	473
1973-74	199604	118016	591
1974-75	202318	121558	608

*Source:—The Rubber Board.*

## APPENDIX 4.3

**Price of Natural Rubber in Kottayam Market  
(Rs./Quintal for RMA 3, 4 & 5 grades)**

<i>Month</i>	<i>1973</i>	<i>1974</i>	<i>1975</i>
(1)	(2)	(3)	(4)
January	472.40	599.58	904.40
February	470.10	647.92	874.37
March	475.56	650.31	826.40
April	468.21	689.40	831.72
May	473.60	836.40	793.70
June	478.29	899.40	807.12
July	482.96	986.67	795.77
August	498.03	1003.80	764.78
September	495.40	957.50	763.02
October	490.20	777.30	701.39
November	494.71	716.85	721.75
December	495.41	718.35	..
<b>AVERAGE</b>	<b>482.91</b>	<b>782.79</b>	

*Source: The Rubber Board.*

## APPENDIX 4.4

## Distribution of Tea Estates in Kerala

Size Group (Hectares)	No. of Tea Estates as on 31st March		Area (in hectares) as on 31st March	
	1973	1974*	1973	1974*
(1)	(2)	(3)	(4)	(5)
Upto 5	3812	3920	1763	1823
5 to 50	117	123	1888	1835
50 to 100	20	19	1463	1410
100 to 200	34	33	4965	4790
200 to 400	61	59	17967	17138
400 and above	17	19	9100	9911
<b>TOTAL</b>	<b>4061</b>	<b>4173</b>	<b>37146</b>	<b>36907</b>

\*Provisional.

Source: Tea Board.

APPENDIX 4.5

Area, Production and yield per hectare of Tea in different States

States	Area in hectares as on 31st March				Production in tonnes				Average yield per hectare in Kg.			
	1972	1973	1974*	1974*	1972	1973	1974*	1974*	1972	1973	1974*	1974*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Assam	184244	185113	187408	239206	251825	265281	1298	1360	1416			
West Bengal	88556	89025	88224	108576	110489	118028	1175	1241	1388			
Tripura	5446	5463	5421	3011	3857	4166	553	706	768			
Bihar	459	459	459	23	23	37	50	50	81			
Uttar Pradesh	1818	1810	1817	613	840	908	337	464	500			
Himachal Pradesh	4183	4183	4183	1258	1127	1388	301	269	332			
Tamil Nadu	34748	35044	35370	55099	56020	54676	1856	1599	1546			
Karnataka	1873	1865	1874	3307	2873	2830	1766	1540	1510			
Kerala	37348	37146	36907	44903	44898	42161	1202	1209	1142			
Total	358675	360108	361663	455996	471952	489475	1271	1911	1959			

\*Provisional.

Source: Tea Board.



APPENDIX 4.6

Statement of area under, production and human labour employed in Coffee Estates of Kerala during 1974-75—Official Estimates—Provisional

(Area in Hectare)

District	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Trivandrum	2	45	3	..	42	283	325	14	14	14	14	42	..	14	14
Quilon	157	275	..	..	275	479	754	78	?	230	72	203	203	31	4
Kottayam	3476	848	..	..	848	841	1689	712	64	719	726	122	122	299	68
Idukki	664	1446	..	150	1596	1425	3021	1353	124	1365	1379	217	217	568	128
Ernakulam	74	68	..	..	68	70	138	60	5	61	62	6	6	25	6
Palghat	142	4553	..	6	4559	2891	7450	9321	507	283	2904	1655	1655	258	2447
Kozhikode	12201	23138	61	307	23384	1142	24526	10687	16736	2583	13614	9770	9770	4567	4932
Cannanore *	6449	5432	..	385	5817	1837	7654	2045	4163	735	4648	1169	1169	2337	56
State	23165	35805	64	848	36589	8968	45557	24270	21615	5990	23447	13142	13142	8099	7685

\* The estimates of the District are prepared by taking the trend of increase in area during 1973-74.

APPENDIX 5.1

District-wise and Industry-wise Distribution of Registered Factories and Workers in Kerala—1973

(Registered under the Factories Act, 1948).

Industry	Trivandrum		Quilon		Alleppey		Kottayam		Idukki		Ernakulam	
	A	B	A	B	A	B	A	B	A	B	A	B
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Oil	24	128	18	89	57	411	18	72	8	46	43	240
Tea	5	176	8	232	..	..	5	76	79	3518	..	..
Cashew	20	7718	225	99056	6	6069	..	..	..	..	4	963
Beedi	..	..	..	..	..	..	..	..	..	..	3	36
Cotton Textiles	10	1455	1	955	2	428	1	220	1	10	4	1132
Coir	3	27	5	199	166	3103	2	91	..	..	21	444
Saw Mill	6	37	57	455	20	108	33	202	4	58	113	1082
Plywood & Splints	5	227	27	1101	10	486	14	767	..	..	19	571
Printing	35	1321	26	374	23	167	58	802	2	16	65	1102
Rubber	2	457	19	524	1	154	92	1734	7	107	12	163
Chemical and												
Chemical products	5	478	3	94	6	159	9	435	1	48	24	4160
Matches	1	38	5	58	3	18	1	9	..	..	3	107
Soaps	..	..	..	..	2	21	2	5	..	..	15	917
General Engineering	7	399	4	230	7	73	11	138	2	123	44	455
Tiles	1	48	42	2143	3	79	6	65	..	..	26	640
Automobile Repairing	19	2081	9	215	6	194	37	602	4	147	26	640
Others	63	1444	130	4275	79	2180	123	1621	11	239	368	16164
<b>TOTAL</b>	<b>206</b>	<b>16034</b>	<b>579</b>	<b>110000</b>	<b>391</b>	<b>13670</b>	<b>412</b>	<b>6779</b>	<b>119</b>	<b>4362</b>	<b>790</b>	<b>28816</b>

APPENDIX 5.1 (Contd.)

Industry	Trichur		Palghat		Malappuram		Kozhikode		Cannanore		State	
	A	B	A	B	A	B	A	B	A	B	A	B
(1)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Oil	91	628	9	45	6	46	23	97	15	91	312	1898
Tea	1	73	3	128	..	..	13	830	5	160	119	5193
Cashew	4	1867	..	..	..	..	2	1128	3	1488	264	118309
Beedi	3	58	15	543	..	..	1	25	10	279	32	941
Cotton Textiles	7	2357	10	954	1	183	30	1642	201	7670	268	17006
Coir	6	58	1	5	..	..	24	541	4	44	232	4452
Saw Mill	99	699	68	432	19	103	81	1290	51	774	551	5240
Plywood & Splints	26	743	43	1171	9	182	41	1100	29	1884	222	8232
Printing	44	631	29	349	8	54	46	1026	36	251	372	6093
Rubber	12	303	7	86	4	104	20	285	3	80	179	3997
Chemical & Chemical products	18	375	7	134	1	52	13	612	2	16	89	6583
Matches	20	292	10	257	..	..	9	122	2	21	54	922
Sosps	5	94	2	10	..	..	11	264	1	9	38	1320
General Engineering	38	655	13	236	1	8	24	301	20	129	171	2747
Tiles	133	4705	12	615	1	197	28	3450	8	681	260	12623
Automobile Repairing	36	414	28	249	8	68	79	980	46	356	298	5946
Others	198	4554	225	3547	25	156	261	5937	102	1702	1565	41689
<b>TOTAL</b>	<b>740</b>	<b>18506</b>	<b>482</b>	<b>8781</b>	<b>83</b>	<b>1153</b>	<b>706</b>	<b>19630</b>	<b>538</b>	<b>15635</b>	<b>5046</b>	<b>243366</b>

A. Number of Factories  
 B. Average Daily Employment.

## APPENDIX 5.2

## District-wise and Industry-wise Distribution of Registered Working Factories and Workers in Kerala—1974

Names of Industry	Trivandrum		Quilon		Alleppey		Kottayam		Idukki		Ernakulam	
	A	B	A	B	A	B	A	B	A	B	A	B
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Oil	26	150	19	113	52	359	18	72	8	64	46	248
2. Tea	5	171	8	228	..	..	5	34	77	3555	..	..
3. Cashew	20	7670	229	101923	4	5116	..	..	..	..	4	999
4. Beedi	..	..	..	..	..	..	..	..	..	..	3	36
5. Cotton Textiles	10	1453	1	1139	3	454	1	299	1	10	5	1155
6. Coir	4	35	1	52	191	3075	2	33	..	..	20	424
7. Saw Mills	6	37	59	419	24	140	47	315	2	39	132	1193
8. Plywood & Splints and Veneers	5	231	29	1163	11	701	19	616	2	82	22	627
9. Printing	45	1576	26	394	24	158	67	862	3	25	87	1910
10. Rubber	4	475	20	528	3	158	125	2077	6	57	15	190
11. Chemical & Chemical products	5	606	2	81	8	161	13	472	2	57	27	5252
12. Matches	2	62	7	87	5	84	2	59	..	..	2	98
13. Soaps	—	..	..	..	2	21	2	5	..	..	16	1003
14. General Engineering	7	387	8	325	10	90	12	86	3	176	58	584
15. Tiles	1	48	43	2268	3	78	15	149	..	..	29	682
16. Automobiles Repairing	24	2324	17	265	8	290	44	581	8	239	43	864
17. Other Industries	76	1630	169	5056	118	2834	168	2183	12	294	457	18285
<b>TOTAL</b>	<b>240</b>	<b>16855</b>	<b>638</b>	<b>114041</b>	<b>466</b>	<b>13719</b>	<b>540</b>	<b>7783</b>	<b>124</b>	<b>4598</b>	<b>966</b>	<b>32890</b>

APPENDIX—5.2 (Concl'd.)

243

Name of Industry	Trichur		Palghat		Malappuram		Kozhikode		Cannanore		Total	
	A	B	A	B	A	B	A	B	A	B	A	B
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
1. Oil	99	690	10	52	8	74	32	185	18	119	336	2126
2. Tea	1	78	3	128	..	..	13	745	5	141	117	5080
3. Cashew	4	1983	..	..	..	..	1	958	3	1410	265	119999
4. Beedi	3	58	15	543	..	..	1	25	10	337	32	999
5. Cotton Textiles	7	2596	11	865	1	180	40	1844	295	8771	375	18706
6. Coir	7	52	1	5	2	18	28	575	4	44	260	4313
7. Saw Mills	100	1026	73	477	22	124	92	1398	60	863	617	6031
8. Plywood & Splints and Veneers	27	712	43	1110	10	222	46	1116	30	2003	244	8583
9. Printing	57	796	28	340	11	80	61	1121	40	277	449	6939
10. Rubber	13	331	10	100	5	113	23	320	3	55	227	4404
11. Chemical & Chemical products	20	386	8	167	2	448	16	358	4	41	107	8029
12. Matches	27	366	10	254	..	..	9	133	2	21	66	1164
13. Soaps	7	111	2	10	..	..	12	388	2	14	43	1552
14. General Engineering	40	676	13	197	1	4	25	324	21	147	198	2996
15. Tiles	135	4480	13	614	2	310	31	3411	8	649	280	12689
16. Automobile Repairing	35	402	31	254	9	75	88	1211	58	458	365	6963
17. Other Industries	209	4740	274	4092	29	229	354	6914	148	2130	2055	48387
<b>TOTAL</b>	<b>832</b>	<b>19483</b>	<b>545</b>	<b>9208</b>	<b>102</b>	<b>1877</b>	<b>872</b>	<b>21026</b>	<b>711</b>	<b>17480</b>	<b>6036</b>	<b>258960</b>

A. Number of Factories.

B. Average daily employment

APPENDIX—5.3

Government-owned Companies—Quantity and Value of Major Products 1972-73 to 1974-75

(Value Rs. in lakhs)

Name of Company	Name of Major Product	Unit of production	1972-73		1973-74		1974-75	
			Qty.	Value	Qty.	Value	Qty.	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Kerala Minerals and Metals Ltd.	Ilmenite	M.T.	15127	6.62	15005	12.22	19324	19.92
	Rutile	,	1412	8.74	1526	19.84	1449	18.89
	Zircon	"	356	0.69	242	1.23	731	4.75
	Soaps	"	413 } 78 }	40.00	377	27.37	729	74.62
Kerala Soaps and Oils Ltd.	Shark Liver Oil & Vitamins	"			62	11.60	62	15.19
	Plywood	Sq. Metres	914113	47.61	1190786	79.61	1239125	137.05
Kerala Premo Pipe Factory	Prestressed Concrete Pipes	Nos.	7086		6811	65.38	5895	67.19
	R. C. C. Pipes	"	1626	38.87	3569	4.06	3902	4.66
	R. C. C. Collars	"	N.A.		2028	0.25	1426	0.23
Kerala State Drugs and Pharmaceuticals	Tablets	Lakh Nos.					972	44.64
	Injectibles (1) Transfusions	Bottles					43000	2.32
	(2) Vials	Nos.					72000	0.69
	(3) Ampoules	"					77000	0.46
	Capsules	Lakhs					42.63	12.01
	Liquids	Litres					60000	14.55

Name of Company	Name of Major Product	Unit of production	1972-73		1973-74		1974-75	
			Qty.	Value	Qty.	Value	Qty.	Value
			(4)	(5)	(6)	(7)	(8)	(9)
	(2)	(3)						
Trivandrum Spinning Mills	Yarn	Lakh Kg.	4.59	70.05	6.59	122.08	N.A.	N.A.
Kerala Electrical and Allied Engineering Company	Distribution Transformers	KVA.	41750	N.A.	47281	33.70	34916	32.23
	Electric Motors	Nos.	117	"	116	1.16	250	
	Meter Components	"	68645	"	21598	N.A.	26000	27.4
	Electrical Wiring Accessories	"	90733	"	26919	0.88	N.A.	
	C.I. Specials, Pipes etc.	M.T.	160	"	191	N.A.	107	N.A.
Trivandrum Rubber Works	Cycle Tyres	Nos.	246471	"	381716	"	466500	N.A.
	Cycle Tubes	"	165712	"	38977	"	Nil	"
	Rubber Hoses	Meters	48570	"	35436	"	28000	"
	Rubber Sheets	Sq.	347307	"	458041	"	400000	"
	Latex Goods	"	17356	"	N.A.	4.05	N.A.	8.49
	Camel Black	"	92185	"	101618	N.A.	295600	N.A.
	Cycle Rims	Nos.	242483	"	246012	"	290727	"
	Cycles	"	1760	"	1476	"	Nil.	
Kerala Ceramics Ltd.	Porcelain	M.T.	540	N.A.	510	N.A.	500	27.46
	China Clay	"	5160	"	7469	"	5641	28.44

APPENDIX -5.4

Government Majority Companies—Quantity and Value of Major Products

Name of Company	Name of Product	Unit of production	1972-73		1973-74		1974-75	
			Qty.	Value	Qty.	Value	Qty.	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Transformers & Electricals, Kerala Ltd.	Power transformers—220KV.	M.V.A.	862	N.A.	1038		1370	533.60
	Current transformers—229KV.	Nos.	465	"	580	325.00	557	138.07
Travancore-Titanium Products Ltd.	Titanium dioxide	M.T.	5886	306.00	4369	N.A.	7611	738.26
Travancore Cochin Chemicals Ltd.	Caustic soda	MI.	23509		23336		22574	317.16
	Hydrosulphite of soda	"	871	383.00	1127	466.92	800	128.06
	Sodium sulphide	"	675		680		521	15.11
	Bye-products (chlorine etc.)	"	N.A.		20536		19865	34.39
United Electrical Industries Ltd.	Electricity metres	Nos	139819	N.A.	114268	65.99	128805	54.52
	Motor control gears (oil immersed)	"	4699	"	5419	40.39	5586	62.92
	Do. (air break)	"	"	"	"	"	252	
	Switch gear	"	38	"	61	1.85	129	4.28
	Magnets generator and other Electronic items	"	531	"	932	1.08	1019	1.25
	Traco Cable Company Ltd.	P.V.C. Cables	Core K.M.	179	25.00	784	77.42	1137
AAC/ACSR		MT.	258	18.01	568		416	81.99
Telephone cables		L.K.M.	"	"	"	"	80	
Pallathra Bricks and Tiles Ltd.	Sand lime bricks	Nos.	2673239	2.36	2575101	2.48	560571	0.70
Chalaky Potteries Ltd.	Refractories	Tonnes	1070	N.A.	1920	6.80	2308	12.89
Forest Industries (Trv) Ltd.	Doors, Windows, furniture	"	"	10.41	"	9.22	"	14.56



APPENDIX—5.5

Government of India Companies in Kerala—Quantity and Value of Major Products

(Value Rs. lakhs.)

Name of company	Name of product	Unit of production	1972-73		1973-74		1974-75	
			Qty.	Value	Qty.	Value	Qty.	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Fertilizers and Chemicals Limited, Travancore	Ammonium sulphate	M. T.	95946	484.38	104358	591.24	93313	788.26
	Ammonium phosphate 16:20	"	51220	435.88	65416	822.85	68231	1549.70
	Do. 20:20	"	3284	29.83	19596	276.04	23803	584.42
	Ammonium chloride	"	8269	59.95	9384	80.79	9661	129.94
	Super phosphate	"	20260	70.33	35746	161.16	23450	198.00
	Urea	"	"	"	"	"	65059	1175.10
	Sulphur dioxide	"	1532	19.91	1392	18.58	1345	33.62
	Oleum	"	1285	6.10	2182	5.73	2380	19.04
	Ultrafos	"	808	2.89	N.A.	N.A.	1018	12.33
	Hindustan Machine Tools Limited	Machine tools	Nos.	587	390.45	402	300.02	503+25*
Printing machines		"	29	24.57	29	52.55	41	113.51
Hindustan Insecticides Limited	Technical D.D.T.	Tonnes	1129	66.63	N.A.	N.A.	1358	129.1
	Formulated D.D.T.	"	1859	87.41	N.A.	N.A.	3006	164.6
	Technical B.H.C.	"	1681	21.86	N.A.	N.A.	1693	76.2
	Formulated B.H.C.	"	"	"	N.A.	N.A.	2284	94.7
Modern Bakeries Limited	Loaves	Lakhs of standard loaves of 400 grms.	113.76	92.85	118.42	91.39	115.63	140.16

(Value Rs. lakhs)

Name of company	Name of product	Units of production	1972-73		1973-74		1974-75	
			Qty.	Value	Qty.	Value	Qty.	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Hindustan Latex Limited	Nirodh (contraceptive condoms)	million pieces	102.16	110.59	87.73	90.67	85.64	103.85
Indian Rare Earths Limited	Rare earth chloride	M.T.	4988	91.46	4157	109.00	2607	94.5
	Trisodium phosphate	"	5174	59.40	5111	69.00	3155	59.7
	Rare earth fluoride	"	88	N.A.	N.A.	N.A.	91	10.9
	Ilmenite	"	148187	N.A.	156468	108.00	159683	175.6
	Monazite	"	2972	N.A.	3768	12.00	4167	11.0
	Zircon	"	10261	N.A.	12460	52.00	10969	176.7
	Rutile	"	559	N.A.	7164	68.00	6105	60.6
	Garnet	"	2205	N.A.	2059	4.00	3087	7.1
	Sillimanite	"	621	N.A.	810	7.00	395	3.8
	Zircon opacifiers products	"	1056	N.A.	4143	94.00	4010	74.3
Zirconium oxychloride	"	6	N.A.	4	1.00	11	3.1	
Cochin Refineries Limited †	Naptha	M.T.	N.A.	N.A.	152045	462.90	..	..
	Motor spirit	"	N.A.	N.A.	158229	944.57	..	..
	H.S.D. oil	"	N.A.	N.A.	667147	3395.94	..	..
	Furnace oil	"	N.A.	N.A.	882150	2244.35	..	..
	Bitumen	"	N.A.	N.A.	35476	101.98	..	..
	L.P. gas	"	N.A.	N.A.	3763	32.18	..	..
	Light diesel oil	"	N.A.	N.A.	21081	93.00	..	..
	Superior kerosene	"	N.A.	N.A.	336660	2023.65	..	..

\* Sets of L. T. 20 components to QUETCO'S.

† The accounting year of the company is from 1st September to 31st August.

**APPENDIX—5.6**  
**Comparative Study of Yarn Rates (Rs.)**

<i>Count</i>	<i>1972-73 till March</i>	<i>1973 April to November 1973 (allotment)</i>	<i>Revised Rate</i>	<i>Agreement with SIMA</i>	<i>Price during 3/75</i>	<i>Current rate (February 1976)</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
20s	48— 58	40— 41	48— 52	67	59— 60	48
26s	52— 54	46	54	72.50	65— 67	48—51
40s	72— 84	62— 68	75— 77	89	75— 78	58
60s	98—140	80—100	105—110	120—144	106—110	69— 95
80s	98—160	107—120	120—170	170—185	140—160	120—140
100s	160—171	132—164	..	285	240—263	200—240
2/17s	60— 70	46— 48	54— 62	70	67— 69	60— 65
2/40s	69— 83	63	79— 82	94	83— 85	75— 80

Source: Kerala State Handloom Weaver's Co-operative Society

SIMA: Southern India Manufacturers' Association.

APPENDIX—5.7

Summary of applications received, sanctioned, disbursed etc., up to the year ending 31st March 1976, by the Kerala Financial Corporation

(Rs. in lakhs)

	During the year			Since inception of the Corporation			Total					
	Small		Others	Small		Others						
	No.	Amount	No.	Amount	No.	Amount		No.	Amount			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Applications received	486	886.40	20	296.35	506	1182.75	1940	3711.99	220	1569.89	2160	5281.88
Applications sanctioned	351	607.93	8	97.35	359	705.28	1314	2067.74	178	1104.87	1492	3172.61
Applications rejected/ withdrawn	62	173.01	1	3.45	63	176.46	189	458.96	1	3.45	190	462.41
Applications cancelled/ reduced	2	7.50			2	7.50	31	42.61	17	119.41	48	162.02
Applications sanctioned (effective)	349	600.43	8	97.35	357	697.78	1283	2025.13	161	985.46	1444	3010.59
Amount disbursed	250	254.47		11.07	250	265.54	910	975.65	143	770.67	1053	1746.32
Amount pending	445	961.69	11	288.98	456	1190.67	445	961.69	11	288.98	456	1190.67

## APPENDIX 5.8

**Industry-wise Disbursement of Loans and Advances of the Kerala Financial Corporation during the year 1974-75**

Type of industry	(Rs. in lakhs)					
	Small Scale		Others		Total	
	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Stone quarrying, clay and sand pits	1	1.22	..	..	1	1.22
2 Food manufacturing industries except beverages	45	49.94	..	..	45	49.94
3 Beverage industries	..	7.00	..	..	..	7.00
4 Manufacture of textiles	5	5.39	..	..	5	5.39
5 Manufacture of footwear, other wearing apparels & other made up textile goods	3	2.05	..	..	3	2.05
6 Manufacture of wood and cork except furniture	1	1.85	..	..	1	1.85
7 Manufacture of furniture and fixtures	11	4.81	..	..	11	4.81
8 Manufacture of paper and paper products	4	7.54	..	..	4	7.54
9 Printing, publishing and allied industries	15	12.88	..	..	15	12.88
10 Manufacture of rubber products	13	14.79	..	..	13	14.79
11 Manufacture of chemical and chemical products	19	18.18	..	..	19	18.18
12 Manufacture of non-metallic mineral products	5	5.99	..	..	5	5.99
13 Basic metal industries	3	0.73	..	..	3	0.73
14 Manufacture of metallic products except machinery and transport equipments	6	7.50	..	..	6	7.50
15 Manufacture of machinery except electrical machinery	13	14.30	..	..	13	14.30
16 Manufacture of electrical machinery, apparatus, appliances and supplies	3	8.42	..	..	3	8.42
17 Manufacture of transport equipments	3	4.07	..	..	3	4.07
18 Manufacture of jewellery and miscellaneous industries	22	23.83	..	..	22	23.83
19 Hotel	..	..	..	11.07	..	11.07
20 Transport	77	61.36	..	..	77	61.36
21 Motion picture production, distribution and projection	1	2.62	..	..	1	2.62
<b>Total</b>	<b>250</b>	<b>254.47</b>	<b>..</b>	<b>11.07</b>	<b>250</b>	<b>265.54</b>

## APPENDIX 5.9

**District-wise Disbursement of Loans and Advances of the Kerala Financial Corporation as on 31-3-1975**

*(Rs. in lakhs)*

District	Small Scale		Others		Total	
	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Trivandrum	155	130.48	16	69.51	171	199.99
2 Quilon	188	137.58	12	58.47	200	196.05
3 Alleppey	86	95.15	15	79.53	101	174.68
4 Kottayam	58	86.76	25	137.42	83	224.18
5 Ernakulam	131	214.33	38	201.00	169	415.33
6 Trichur	104	125.14	16	83.43	120	208.57
7 Palghat	13	12.40	2	27.00	15	39.40
8 Malappuram	52	48.84	1	1.00	53	49.84
9 Calicut	71	73.94	13	86.06	84	160.00
10 Cannanore	47	47.27	5	27.25	52	74.52
11 Idukki	1	0.70	..	..	1	0.70
12 Mahe and other areas	4	3.06	..	..	4	3.06
<b>Total</b>	<b>910</b>	<b>975.65</b>	<b>113</b>	<b>770.67</b>	<b>1053</b>	<b>1746.32</b>

## APPENDIX 5.10

**Progress of Kerala Financial Corporation at a Glance**

*(Rs. in lakhs)*

Year	Loans sanctioned (cumulative)	Loans disbursed (cumulative)	Loans outstanding (cumulative)	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	1013.15	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	1300.24	18.47	9.33
1974-75	3010.59	1746.32	1451.91	43.20	28.48

## APPENDIX 5.11

Statement showing the nature of assistance given by the Kerala  
State Industrial Development Corporation

(Rs. in lakhs)

<i>Item</i>	<i>Year</i>	<i>Applied</i>	<i>Sanctioned</i>	<i>Disbursed</i>
(1)	(2)	(3)	(4)	(5)
Share Capital	1972-73	16.25	16.25	81.25
	1973-74	2.75	2.75	5.13
	1974-75	29.34	29.34	7.54
Loans	1972-73	72.50	72.50	114.65
	1973-74	167.00	162.00	110.16
	1974-75	231.93	231.93	188.23
Under writing	1972-73	..	..	..
	1973-74	..	..	..
	1974-75	..	..	..
Guarantee	1972-73	112.50	112.50	2.58
	1973-74	23.39	23.39	1.12
	1974-75	10.00	10.00	2.10

*Note*:—Figures shown as disbursed under guarantee represents the actual amount paid by the Corporation on behalf of defaulted companies.

APPENDIX 5.12

Industry-wise classification of assistance sanctioned (effective) by the Kerala Industrial Development Corporation

(Rs. in lakhs)

Industry	No. of Companies	Financial assistance (cumulative)					Total
		Loan	Under writing	Direct subscription	Guarantee		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1. Cotton textiles	16	290.24	38.50	70.05	357.94	756.73	
2. Electrical lamps	1	13.00	..	25.00	90.00	128.00	
3. Inorganic heavy chemicals	4	158.00	7.00	53.72	3.00	221.72	
4. Iron and steel products	5	73.83	15.00	19.66	..	108.49	
5. Non-ferrous metals and alloys	1	38.00	34.00	..	..	72.00	
6. Electrical cables and wires	2	40.00	25.00	10.00	35.00	110.00	
7. Industrial instruments	3	22.40	5.00	9.36	4.00	40.76	
8. Electronic components	2	8.00	..	10.00	..	18.00	
9. Rubber goods	3	5.50	9.00	1.55	20.99	36.44	
10. Ceramics	2	4.75	7.35	..	..	12.10	
11. Miscellaneous chemicals	1	..	7.00	..	..	7.00	
12. Vegetable oils	1	5.00	..	6.50	..	11.50	
13. Electrical equipments	2	10.00	..	53.88	..	63.88	
14. Dry cells	1	20.00	8.37	17.50	..	45.87	
15. Fermentation	1	..	..	1.25	..	1.25	
16. Glass	1	27.00	..	23.06	..	50.06	
17. Steel	1	70.00	..	52.50	..	122.50	
18. Drugs and pharmaceuticals	1	30.00	..	..	..	30.00	
19. Fibre glass boats	1	20.00	..	..	..	20.00	
20. Wood based units	1	10.00	..	6.50	..	16.50	
21. Leather	1	..	..	15.60	..	15.60	
22. Others	5	40.00	..	1.72	..	41.72	
<b>Total</b>	<b>56</b>	<b>885.72</b>	<b>156.22</b>	<b>377.85</b>	<b>510.93</b>	<b>1990.12</b>	



## APPENDIX 5.13

**Financial Highlights of Kerala State Industrial Development Corporation**

(Rs. in lakhs.)

<i>Item</i>	1970-71	1971-72	1972-73	1973-74	1974-75
(1)	(2)	(3)	(4)	(5)	(6)
<b>Resources:</b>					
Share capital	415.00	415.00	415.00	464.00	464.00
Reserve	32.62	33.35	33.00	41.87	57.64
Borrowings	249.71	403.77	511.22	465.67	516.00
<b>Total</b>	<b>697.33</b>	<b>852.12</b>	<b>959.22</b>	<b>971.54</b>	<b>1037.64</b>
<b>Financial Assistance:</b>					
Sanctioned during the year	165.27	168.94	201.25	188.14	271.27
Gross sanctions (cumulative)	1315.15	1484.09	1685.34	1873.48	2144.75
Assistance not availed/cancelled (cumulative)	166.87	177.87	214.18	214.63	214.63
Net sanctions (cumulative)	1148.28	1306.22	1471.16	1658.85	1930.12
Net assistance cleared (cumulative)	968.17	1094.82	1399.12	1546.89	1752.66
<b>Earnings:</b>					
Gross revenue	23.49	32.06	40.07	52.23	73.65
Net income	3.27	0.73	0.06	13.98	30.55

APPENDIX 5.14

Khadi and Village Industries—Production, Sale, Employment and Wages During 1974-75

Industry	No. of Units working		Production value in Rs. lakhs		Employments		Wages
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Khadi	48	40.63	52.39	3179	1825	211	21.47
2. Handmade Paper	15	4.42	3.66	140	79	..	1.55
3. Non-Edible Oil and Soap	15	6.38	5.13	19	337	7182	3.02
4. Gurkhandsari	18	43.49	94.86	1170	644	408	12.94
5. Village Oil Industry	36	24.33	23.94	112	161	154	1.70
6. Palmgur	60	51.72	52.89	248	12600	7050	29.50
7. Village Pottery	88	46.02	47.88	3534	375	..	30.23
8. Lime Manufacturing	28	16.61	17.83	723	572	..	16.22
9. Carpentry and Blacksmithy	25	8.67	7.90	161	..	..	1.61
10. Fibre	70	307.46	359.51	45960	1654	..	240.58
11. Village Leather	..	37.37	40.54	444	232	..	14.46
12. Cottage Match	..	3.16	2.80	34	61	..	0.43
13. Beekeeping	35	32.04	32.40	81	..	12950	Not applicable
14. Cane and Bamboo	25	9.13	8.67	344	1489	..	4.30
15. Forest Plants	2	0.27	0.25	7	93	27	0.12
16. Fruit Preservation	1	0.12	0.10	6	..	..	Not applicable
17. Handpounding of Paddy	..	..	..	..	..	..	..
	371	631.82	750.75	561.62	20022	27982	378.80

Source: Kerala State Khadi and Village Industries Board, Trivandrum.

## APPENDIX 5.15

## Statistics Relating to Kerala Power System as on 31-3-1975

Description	Unit	Achievement during	
		1973-74	1974-75
(1)	(2)	(3)	(4)
1. Towns and villages electrified	Nos.	37	14
2. Consumers	"	66185	49358
3. Street lights installed	"	12936	3427
4. Generation capacity	M.W.	621.5	621.5
5. Maximum demand	"	500.2	571.0
6. Units generated	Million KWH	2513.0037	2650.5393
	Units		
7. Units sold (including internal sales)	M.K.W.H.	2120.45	2202.99
8. Units purchased	"	0.0558	0.9720
9. Punched load	K.W.		
10. Total connected load	M.W.	103688	68940
11. Per capita consumption per annum	Units	79.09	79.65

## APPENDIX 5.16

## Consumption of Power and Revenue Collected (1974-75)

Category	No. of Consumers as on 31-3-1975	Connected load as on 31-3-1975	Energy Consumed (Percentage)	Revenue Collected (Percentage)
(1)	(2)	(3)	(4)	(5)
1. Domestic lights and fans	579224	356614	9.16	28.65
2. Domestic heat and small power				
3. Commercial lights and fans	174543	96181	4.14	15.20
4. Commercial heat and small power	11212	22677	0.75	1.40
5. Industrial (low and medium voltage)	22981	240856	8.59	13.36
6. Industrial (high voltage) + EHT	333	354941	65.48	25.98
7. Irrigation	35373	140932	5.54	5.50
8. Public lighting (No. of street lights) (277487 No.)	1395	14154	1.70	6.16
9. Water works and sewage pumping	339	9085	0.93	0.84
10. Bulk supply to licencees and others	5	64965	3.71	2.92
Total	825405	1300405	..	..

APPENDIX 5.17

Statement showing total quantity of power sold and receipts by the sale of electricity

Particulars of receipts	During 1972-73			During 1973-74			During 1974-75		
	K.W.H. sold (in MKWH)	Income (in lakhs)	Average revenue per K.W.H. (Rs.)	K.W.H. sold in (M.K.W.H.)	Income (in lakhs)	Average revenue per K.W.H. (Rs.)	K.W.H. sold (in M.K.W.H.)	Income (in lakhs)	Average revenue per K.W.H. (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Net revenue by sale of electricity for cash and credit									
I. Domestic residential									
(a) Light and fans	125.24	430.20	34.00	144.41	492.23	34.08	168.46	620.93	36.84
(b) small power									
II. Commercial									
(a) light & fans	69.91	285.93	40.80	71.64	301.89	42.13	76.23	332.24	43.58
(b) small power	13.93	30.21	21.60	12.76	28.40	22.25	13.76	30.52	22.18
III. Industrial									
(a) low and medium voltage	139.25	246.93	17.70	151.64	271.86	17.93	158.07	291.92	18.46
(b) high voltage	1194.17	519.68	4.40	1213.44	530.27	4.37	1204.38	567.58	4.71
IV. Public lighting	29.59	116.74	39.00	28.88	123.18	42.65	31.19	134.69	43.18
V. Irrigation—agricultural dewatering	76.27	88.76	12.00	92.12	111.87	12.14	101.89	120.12	11.79
VI. Public water works and sewage pumping	12.05	12.42	10.00	17.21	15.14	8.79	17.06	18.34	10.75
VII. Other bulk supply	69.01	63.90	9.30	70.50	65.14	9.24	68.28	63.71	9.33
VIII. Total sale and receipts by sale of electricity	1729.42	1794.77	10.40	1802.60	1939.98	10.76	1839.32	2180.05	11.85

## APPENDIX 5.18

**Financial position of the Kerala State Electricity Board****(Rs. in lakhs)**

<i>Item</i>	<i>During 1973-74</i>	<i>During , 1974-75</i>
1. Gross revenue	2379.13	2656.77
2. Expenditure	2030.77	2374.91
3. Net operating surplus	348.36	281.86
4. Capital investment of the Board	23448.52	25920.05
5. Total loans outstanding	21334.99	23197.69
6. Loans raised during the year	1761.09	2044.47
7. Loans repaid during the year	81.35	181.77
8. Total interest payable	1198.23	1320.83
9. Interest available for repayment during the year	413.46*	492.96*
10. Interest on A. I. D. Loan		

\*During the years 1973-74 and 1974-75, a sum of Rs. 140 lakhs and Rs. 290 lakhs respectively have been received from the State Government towards subsidy for loss incurred on Rural Electrification works.

## APPENDIX 6.1

**Number of motor vehicles having valid registrations as on 31-3-1975 in Kerala State (District-wise)**

District	Goods vehicles	Stage carriages	Taxi cabs	Cars	Jeeps	Motor Cycles	Auto-rickshaws	Tractor Trailers	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Trivandrum	3900	3590	1214	9277	1156	6352	322	72	1205	27088
2. Quilon	1707	350	1484	4176	432	1648	49	83	..	9929
3. Alleppey	830	377	1258	3314	158	1683	40	69	18	7747
4. Kottayam	1049	436	1107	5906	707	3442	198	228	208	13092
5. Idukki	257	79	496	795	386	339	6	39	139	2725
6. Ernakulam	2313	600	1527	6866	385	4028	586	302	152	16759
7. Trichur	1283	673	1376	2589	179	2273	231	304	158	9066
8. Palghat	833	333	979	2694	259	1820	373	1003	162	8456
9. Malappuram	529	251	582	943	79	414	31	194	47	3070
10. Kozhikode	2139	644	589	4590	1708	2531	581	283	365	13429
11. Cannanore	1036	495	913	3347	410	1239	708	158	53	8359
Total	15875	7828	11525	44497	5859	25769	3125	2735	2507	119720

APPENDIX 6.2

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	1975	1974	1975	1974	1975	1974	1975
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum City	399	438	399	438	303	398	32	37
Trivandrum Rural	339	367	339	362	369	376	36	39
Quilon	452	515	452	515	590	598	97	96
Alleppey	439	487	439	489	581	471	54	59
Kottayam	406	118	406	120	386	206	85	28
Idukki	103	133	103	133	174	182	55	53
Ernakulam City	455	670	455	670	431	661	56	47
Ernakulam Rural	295	320	299	320	362	389	87	69
Trichur	321	362	321	365	358	367	80	76
Palghat	336	370	336	370	306	434	85	69
Malappuram	337	365	337	365	177	208	21	21
Kozhikode	536	575	536	575	677	686	71	83
Cannanore	396	426	398	436	291	491	56	75
<b>Total</b>	<b>4814</b>	<b>5146</b>	<b>4820</b>	<b>5158</b>	<b>5005</b>	<b>5467</b>	<b>815</b>	<b>752</b>

APPENDIX 6.3

K.S.R.T.C routes, route distance, number of passengers etc.

	No. of schedules as on		No. of routes as on		Route kilometre as on		Gross distance operated (in lakhs) during		Number of passengers carried during	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<i>Transport Districts</i>										
	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75	1973-74	1974-75
1. Trivandrum Central	303	302	436	492	17600	17011	235.7	282.1	629.8	811.8
2. Trivandrum City	204	207	346	526	3620	6041	108.9	113.8	609.7	678.6
3. Quilon	161	170	142	168	8146	9344	136.5	166.6	382.9	467.1
4. Kottarakkara	96	103	165	188	7370	7407	69.9	97.6	208.7	284.5
5. Kottayam	232	255	320	369	18656	18063	207.4	237.2	527.5	604.5
6. Alleppey	98	111	108	107	3692	3658	94.9	101.1	271.9	319.4
7. Ernakulam	104	117	83	117	4901	8156	104.7	123.0	185.6	211.5
8. Alwaye	117	130	91	121	3726	4631	97.4	110.4	254.8	342.7
9. Trichur	163	191	122	166	11666	12582	170.1	180.8	270.1	313.5
10. Kozhikode	118	140	84	100	8663	10378	128.9	147.5	172.4	183.2
11. Workshops and Offices	..	..	..	..	..	..	4.2	3.3	..	..
<b>Total</b>	<b>1596</b>	<b>1726</b>	<b>1885</b>	<b>2322</b>	<b>84539</b>	<b>93770</b>	<b>1358.6</b>	<b>1563.3</b>	<b>3513.4</b>	<b>4216.8</b>



## APPENDIX 6.4

**Tonnage of principal commodities of imports into Cochin Port during the year 1974-75**

<i>Commodities</i>	<i>Coastal</i>	<i>Foreign</i>	<i>Total</i>
(1)	(2)	(3)	(4)-
Rice and paddy	6	7105	7111
Other grains including pulses & flour	87105	113809	200914
Coal	66261	..	66261
Cashewnuts	..	137590	137590
Machinery	548	12306	12854
Iron and steel	936	5006	5942
Tin plate	..	2779	2779
Motor vehicles and parts	6	24	30
Chemicals and chemical preparations	2422	1341	3763
Oil seeds including copra and ground nuts	180	..	180
Drugs and medicines	130	..	130
Paper, old newspaper and stationery	389	15775	16164
Cotton, raw and waste	..	3818	3818
Oilman stores, provisions and spices	491	6902	7393
Sulphur	..	88775	88775
Rock phosphate	..	140514	140514
Fertilizers	..	58780	58780
Salt	30585	..	..
Zinc concentrate	..	21527	21527
Calcined bauxite	10088	..	10088
Soda	7554	..	7554
Candles, paraffin wax and tallow	8	4120	4128
P. O. L.	45439	2693918	2739352
Transshipment cargo	8	1522	1530
Miscellaneous	4003	18123	22126
<b>Total</b>	<b>256159</b>	<b>3333729</b>	<b>3589888</b>

## APPENDIX 6.5

**Tonnage of principal commodities of exports from Cochin Port during the year 1974-75**

<i>Commodities</i>	<i>Coastal</i>	<i>Foreign</i>	<i>Total</i>
(1)	(2)	(3)	(4)
Coir products	1013	45306	46319
Tea	1	48270	48271
Rubber	21238	194	21432
Coffee	..	40820	40820
Coconuts	..	..	..
Copra	13989	..	13989
Cashew kernels	..	73621	73621
Chemicals	5286	3991	9277
Cotton, raw and waste	21	347	368
Rice and other food grains	2253	..	2253
Pepper	122	27987	28109
Ginger	330	3952	4282
Cardamom	..	923	923
Turmeric	9	2002	2011
Coconut oil	1149	..	1149
Cashew shell liquid	627	6052	6679
Lemongrass oil	..	280	280
Timber	591	14671	15262
Marine products	..	31862	31862
Oilcakes	..	1116	1116
Machinery	885	6203	7088
Iron and steel	449	1113	1562
Mineral sand including granite	2384	20098	22482
Cement	4307	..	4307
P. O. L.	767984	32936	800920
Transshipment cargo	1071	459	1530
Miscellaneous	8822	28706	37528
<b>Total</b>	<b>832531</b>	<b>390909</b>	<b>1223440</b>
<b>Bunkers</b>	<b>48913</b>	<b>10004</b>	<b>58917</b>
<b>Total including bunkers</b>	<b>881444</b>	<b>400913</b>	<b>1282357</b>

**APPENDIX 6.6**  
**Number and Tonnage of Steamers and Sailing Vessels which called at the Intermediate and**  
**Minor Ports of Kerala 1974-75**

Ports	Coastal/Foreign		Steamers		Sailing Vessels		Total	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			No.	Tonnage	No.	Tonnage	No.	Tonnage
Alleppey	C		2	8537	..	..	2	8537
	F		5	18300	..	..	5	18300
Calicut (including Beypore)	C		35	32063	599	67878	634	99941
	F		8	49278	30	5572	38	54850
Neeandakara	C		..	..	1	124	1	124
	F		12	53115	..	..	12	53115
Trivandrum	C		Nil					
	F		Nil					
Quilon	C		..	..	..	..	..	..
	F		2	8740	..	..	2	8740
Ponnani	C		..	..	18	2197	18	2197
	F		..	..	..	..	..	..
Badagara	C		Nil					
	F		Nil					
Azhikkal	C		Nil	..	175	17821	175	17821
	F		..	..	..	..	..	..
Tellicherry	C		..	..	12	1302	12	1302
	F		..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Cannanore	C	..	..	2	190	2	190
	F	..	..	..	..	..	..
Kasargod	C	..	..	1	..	..	..
	F	..	..	..	..	..	..
All	C	37	40600	807	89512	..	..
	F	27	129433	30	5572	..	..
Total for 1974-75		64	170033	837	95084		
Total for 1973-74	C	47	82521	971	86115		
	F	55	267489	12	2162		
		102	350010	983	88277		
Total for 1972-73	C	36	33506	924	85109		
	F	49	208226	16	2562		
		85	241732	940	87871		

APPENDIX 6.7

Import and Export Tonnage of Cargo Handled at the Intermediate and Minor Ports of Kerala during 1974-75

Ports	Import			Export			Total		Revenue during		
	Coastal	Foreign	Total	Coastal	Foreign	Total	Coastal	Foreign	Total 1973-74	1974-75	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Alleppey	11061	9899	20960	..	1575	1575	11061	11474	22535	177930	142104
2. Calicut (including Beypore)	31465	58203	89668	51538	14120	65658	83003	72323	155326	400426	465200
3. Trivandrum	Nil	..	..	..	..	..	..	..	..	41395	10004
4. Quilon	Nil	..	..	..	877	877	..	877	877	51959	11236
5. Neendakara	..	13699	13699	..	91855	91855	..	105554	105554	470013	747404
6. Ponnani	113	..	113	..	..	..	113	..	113	5420	2031
7. Badagara	Nil	..	..	..	..	..	..	..	..	667	1756
8. Azhikkal	3312	..	3312	13564	..	13564	16876	..	16876	85249	42586
9. Tellicherry	49	..	49	1451	..	1451	1500	..	1500	3211	4321
10. Cannanore	32	..	32	97	..	97	129	..	129	6759	2145
11. Kasaragod	..	..	..	..	..	..	..	..	..	1585	1613
<b>Total</b>	<b>46032</b>	<b>81801</b>	<b>127833</b>	<b>66650</b>	<b>108427</b>	<b>175077</b>	<b>112682</b>	<b>190228</b>	<b>302910</b>	<b>1244914</b>	<b>1430400</b>

APPENDIX 6.8

Number of Telephone Sets in Kerala State

Centres	As on 31-3-1975		As on 30-9-1975		Anticipated 31-3-76		Anticipated 31-3-1977		Total Area					
	No. of Tele- phones 1000	No. per Sq.Km. popu- lation	No. of Tele- phones 1000	No. per sq.km. popu- lation	No. of Tele- phone sets 1000	No. per sq.km. popu- lation	No. of Tele- phone sets 1000	No. per sq.km. popu- lation	Population (in Kms.) as per 1971 census	Area (in Kms.)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>District Hqs Towns.</b>														
Trivandrum (Excludes Sreekarayam)	8657	21	115	8814	21	117	8900	21.5	119	10000	24	13	409627	74.93
Kottayam (Inclusive of Satellites)	3228	55	208	3268	55.5	211	3500	59.5	227	4000	68	258	59714	15.55
Quilon	2686	21.5	145	2796	22	151	3000	24	162	3300	26	178	124208	18.48
Alleppey	1886	11	40	1892	11	40	1950	12	41	2250	13.5	48	160166	46.77
Ernakulam (Including Kalama- sery and Tripunithura)	11533	27.5	132	11930	28.5	136	13500	29.7	142	14500	32	152	439066	94.88
Trichur (Excludes Satellites)	3174	41.5	252	3425	45	272	3800	50	301	4000	52	317	76241	12.65
Palghat (Excludes Olavakkot)	1538	15	58	1566	15.5	58	1700	17	64	1900	19	72	95788	26.60
Malappuram	204	6	6	207	6	6	220	6.5	7	300	9	9	32002	33.60
Calicut (Excludes Feroke)	7077	21	85.5	7192	21.5	86	7300	22	88	7900	24	95	333979	82.67
Cannanore (Excludes Baliapatam)	1639	28	149	1634	28	149	1800	31	164	2000	34	182	55162	11.03
<b>Kerala State</b>	<b>69455</b>	<b>3.2</b>	<b>1.7</b>	<b>71650</b>	<b>3.3</b>	<b>1.8</b>	<b>75500</b>	<b>3.5</b>	<b>1.9</b>	<b>82500</b>	<b>3.8</b>	<b>2.1</b>	<b>21947975</b>	<b>38864</b>

APPENDIX 8.1

Wholesale Price Index —All India

Base: 1961-62 = 100

Items	1975											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(a) All Commodities	315.8	313.5	308.4	308.9	313.1	312.9	309.2	311.0	309.3	307.9	301.5	294.4
(i) Food articles	368.5	365.3	357.7	361.1	371.2	371.2	361.0	364.6	363.0	362.0	346.4	328.5
(ii) Industrial raw materials	316.4	306.4	292.9	286.6	286.7	282.9	273.5	281.0	268.5	260.3	259.6	255.3
(iii) Machinery and transport equipment	270.4	266.1	267.0	268.1	268.0	269.6	269.6	261.9	263.4	263.2	262.7	260.9
(iv) Manufacturers	254.0	255.2	253.3	252.2	251.9	251.5	252.2	252.2	253.0	253.0	252.8	253.1
(b) Agricultural Commodities	353.3	348.6	337.3	333.9	338.8	339.4	330.1	333.0	324.8	315.6	N.A.	N.A.
Security Prices (Ordinary Shares) (1970-71 = 100)	103.8	102.4	101.8	96.6	94.8	91.7	93.9	98.8	98.6	95.3	N.A.	N.A.

\* Provisional figures.

Source: R. B. I. Bulletin.

N.A. Not Available

APPENDIX 8.2

Consumer Price Index Numbers for Industrial Workers in India—1975

(Base: 1960 = 100)

Centre	January	February	March	April	May	June	July	August	September	October
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Ahmedabad	311	305	304	307	310	308	298	298	296	293
2. Bangalore	335	340	336	336	345	340	337	336	338	337
3. Bombay	298	300	301	303	308	309	305	303	301	305
4. Calcutta	289	279	275	280	287	285	285	293	296	301
5. Coimbatore	341	353	335	334	335	334	334	334	333	324
6. Delhi	342	335	335	339	337	341	341	332	333	336
7. Hyderabad	325	320	317	319	322	327	326	318	320	320
8. Madras	327	326	323	325	325	328	337	334	330	320
9. Mundakayam	353	349	366	377	375	378	366	344	345	339
10. Nagapur	322	336	332	331	336	345	341	342	341	337
ALL INDIA	326	325	321	323	327	328	324	321	319	316

Source: Labour Bureau, Simla



APPENDIX 8.3

Month-wise consumer price Index Numbers, Kerala 1975

1975

Centre	1975												
	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. Trivandrum	1589	1577	1590	1655	1661	1686	1610	1558	1558	1541	1550	1507	
2. Quilon	1587	1575	1586	1653	1658	1684	1597	1542	1550	1533	1533	1491	
3. Punalur	1576	1566	1577	1640	1647	1673	1597	1537	1537	1521	1512	1463	
4. Alleppey	1557	1543	1552	1612	1617	1641	1568	1523	1531	1523	1531	1489	
5. Kottayam	1579	1568	1581	1643	1649	1675	1589	1536	1528	1510	1510	1467	
6. Ernakulam	1586	1575	1587	1650	1658	1685	1605	1551	1559	1542	1542	1507	
7. Trichur	1583	1574	1586	1650	1656	1684	1606	1547	1538	1521	1521	1486	
8. Chalakudy	1578	1567	1580	1645	1653	1683	1606	1550	1542	1524	1533	1498	
9. Munnar	1576	1564	1576	1639	1646	1675	1597	1524	1517	1493	1501	1461	
10. Kozhikode	1769	1757	1769	1838	1846	1876	1788	1720	1720	1701	1692	1644	

Source: Bureau of Economics & Statistics.

Note: The Consumer Price Index for Kerala was revised with effect from August 1975 onwards (with Base 1970=100) on the basis of a Family Budget Survey conducted by the State Bureau of Economics & Statistics. For the purpose of comparison of cost of living during the year the old Consumer Price Index is made use of.

APPENDIX 8.4

Wholesale Price Index of Agricultural Commodities Kerala

Base : 1952-53=100

Group	1956	1961	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Food Grains (Rice)	101	131	149	155	181	208	209	209	209	233	297	319
2. Molasses	78	82	153	256	289	175	172	239	272	280	282	416
3. Condiments & Spices	103	125	158	179	179	212	234	171	139	161	222	218
4. Fruits & Vegetables	90	95	167	185	214	195	217	208	234	306	402	385
5. Food Crops	99	122	154	167	190	205	213	203	204	235	302	317
6. Oil Seeds	88	141	244	272	273	263	369	303	287	466	617	479
7. Plantation Crops	101	112	130	118	123	133	141	138	139	154	215	247
8. Non-Food Crops	92	132	209	226	228	223	300	253	242	372	496	409
9. All Crops	96	126	174	188	204	212	245	222	218	285	373	350

Source : Bureau of Economics and Statistics.

## APPENDIX 8.5

## Wholesale price of selected Agricultural Commodities in Kerala (in Rupees)

Month	Pepper/Qtl.		Ginger Dry/Qtl.		Lemongrass/Qtl.		Cardamom/Kg.		Rubber/Qtl.		Coconut oil/Qtl.	
	1974	1975	1974	1975	1974	1975	1974	1975	1974	1975	1974	1975
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1 January	777.94	1053.83	499.69	601.25	6712.50	5150.00	52.67	76.33	503.70	889.00	1302.88	1118.62
2 February	829.01	1013.50	561.67	568.23	7058.33	4997.92	60.89	80.00	618.10	857.61	1193.32	989.53
3 March	914.03	989.15	550.33	557.13	7223.33	5002.08	67.00	73.75	642.50	818.23	1075.75	914.34
4 April	982.61	1048.04	610.94	601.25	7250.00	4250.00	72.25	73.75	685.00	828.44	1128.08	894.25
5 May	1076.38	1051.98	674.63	631.10	7045.00	4226.67	75.50	73.13	834.00	785.50	1147.86	850.90
6 June	1108.13	1092.17	701.56	613.75	6842.71	3906.25	77.50	72.50	877.19	804.38	1140.24	803.34
7 July	1067.94	1124.10	629.17	610.42	6734.38	3862.51	95.00	70.00	980.94	793.75	1129.23	728.03
8 August	1061.16	1099.35	663.33	636.33	6320.00	4022.50	92.00	69.50	996.25	762.88	1120.36	745.99
9 September	1018.69	1131.68	650.00	701.25	5250.00	4068.75	69.13	65.92	948.13	757.35	1114.14	767.44
10 October	1011.39	1214.76	639.58	855.42	4781.25	4167.50	70.50	71.40	776.25	697.13	1072.51	799.70
11 November	1051.15	1242.81	594.00	897.92	4790.63	4709.38	68.33	74.92	713.50	713.44	1168.32	891.03
12 December	1023.36	1168.36	605.31	774.48	4881.25	5547.92	73.58	75.83	706.56	710.00	1161.39	834.76

Source:—Bureau of Economics &amp; Statistics, Trivandrum

## APPENDIX 9.1

**Distribution of High Schools in Kerala 1975-76**  
(Revenue District-wise)

<i>Revenue District</i>		<i>Government</i>	<i>Private aided</i>	<i>Private unaided</i>	<i>Total</i>
(1)		(2)	(3)	(4)	(5)
1.	Trivandrum	75	67	6	148
2.	Quilon	66	117	6	189
3.	Alleppey	41	141	1	183
4.	Kottayam	34	122	5	161
5.	Idukki	22	30	2	54
6.	Ernakulam	51	124	16	191
7.	Trichur	55	104	6	165
8.	Palghat	42	51	3	96
9.	Malappuram	61	29	..	90
10.	Kozhikode	51	58	3	112
11.	Cannanore	68	60	4	132
Grand Total		566	903	52	1521

## APPENDIX 9.2

**Distribution of Primary Schools in Kerala 1975-76**  
(Revenue District-wise)

<i>Revenue District</i>	<i>U. P. Schools</i>				<i>L. P. Schools</i>				
	<i>Government</i>	<i>P.A.</i>	<i>P.U.A.</i>	<i>Total</i>	<i>Govt.</i>	<i>P.A.</i>	<i>P.U.A.</i>	<i>Total</i>	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1.	Trivandrum	89	100	3	192	350	170	6	526
2.	Quilon	81	182	2	265	416	282	4	702
3.	Alleppey	96	131	1	228	288	344	9	641
4.	Kottayam	60	137	..	197	208	239	7	504
5.	Idikki	39	41	..	80	98	104	4	206
6.	Ernakulam	79	112	5	196	227	277	6	510
7.	Trichur	52	168	1	221	142	416	1	559
8.	Palghat	57	156	2	215	196	349	3	548
9.	Malappuram	98	132	..	230	358	445	..	803
10.	Kozhikode	90	226	1	317	275	590	1	866
11.	Cannanore	199	326	..	465	352	763	5	1110
Total		880	1711	15	2606	2910	4019	46	6975

## APPENDIX 9.3

**Progress of Educational Institutions—Lower Primary Schools**

<i>Year</i>	<i>Government Schools</i>	<i>Private Schools</i>	<i>Total</i>
(1)	(2)	(3)	(4)
1960-61	2719	3987	6706
1961-62	2835	3910	6745
1962-63	2985	3919	6904
1963-64	2928	3991	6919
1964-65	2898	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

## APPENDIX 9.4

**Progress of Educational Institutions—Upper Primary Schools**

<i>Year</i>	<i>Government Schools</i>	<i>Private Schools</i>	<i>Total</i>
(1)	(2)	(3)	(4)
1960-61	530	1402	1932
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
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

## APPENDIX 9.5

## Progress of Educational Institutions—High Schools

Year	Government Schools	Private Schools	Total
(1)	(2)	(3)	(4)
1960-61	244	651	895
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	1282
1968-69	410	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

## APPENDIX 9.6

## Progress of Enrolment in the Different stages 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
1956-57	2492557	100	216714	100	2709271	100
1957-58	2594715	104	218988	101	2813703	104
1958-59	2817019	113	219607	101	3036626	112
1959-60	2784696	112	347826	160	3132522	116
1960-61	2939408	118	330893	153	3270301	121
1961-62	3041388	122	416364	192	3457752	128
1962-63	3131503	126	490564	226	3622067	134
1963-64	3263617	131	554819	256	3818436	141
1964-65	3424765	137	585336	270	4010101	149
1965-66	3552693	143	615143	284	4167836	151
1966-67	3688679	148	639959	295	4328638	160
1967-68	3784864	152	666773	308	4451637	165
1968-69	3912830	157	702384	324	4615204	170
1969-70	3989363	160	709290	327	4698653	173
1970-71	4074808	163	724724	334	4799532	177
1971-72	4229533	170	750198	346	4979731	184
1972-73	4375389	176	780886	360	5156275	190
1973-74	4404716	177	865861	399	5270577	195
1974-75	4423247	178	936042	432	5359289	198
1975-76	4377461	176	907896	419	5285357	195

**Primary:** From 1956-57 to 1958-59 the Primary Section consisted of Standard I to VIII, from 1959-60 onwards Primary stage consists of Standard I to VII. Hence the decrease in the year 1959-60 compared to the previous year.

**Secondary:** From 1956-57 to 1958-59 Secondary Section consisted of Standard IX to XI. During 1959-60 it was Standards VIII to XI. Hence abnormal increase in strength of students. From 1960-61 onwards Standards VIII to X was the Secondary stage and hence the decrease during 1960-61.

## APPENDIX 9.7

## Standard wise strength of students 1975-76

Standard	Government Schools		Private aided Schools		Private unaided Schools		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I	144322	133549	190999	179506	2999	2774	338320	315829
II	153747	141822	190003	178889	3051	2652	346801	323363
III	150001	137661	184816	172891	2812	2546	337629	313098
IV	163176	144526	199525	183742	2467	2341	365618	330609
Lower Primary Section Total	611246	557558	765343	715028	11329	10313	1387918	1282899
V	141943	123783	228782	206842	2341	2205	373066	332830
VI	99036	85122	179108	160717	2208	2007	280352	247846
VII	85732	73030	163577	146538	1884	1889	251193	221457
Upper Primary Section Total	326711	281935	571467	514097	6433	6101	904611	802133
VIII	84172	68710	132594	116892	2270	2310	219036	187912
IX	64011	54222	103506	95579	1813	1905	169330	151706
X	34092	29584	58450	55276	1246	1264	93788	86126
High School Section Total	182275	152516	294550	267747	5329	5479	482154	425742
Total	1120232	992009	1631360	1496782	23091	21893	2774683	2510774

## APPENDIX 9.8

Number of Students that Passed S. S. L. C. Examination  
in the State 1961-62 to 1974-75

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
Total	674083	492511	1166594

## APPENDIX 9.9

**Number of Students that Passed T. T. C. Examination  
(Final) 1961-62 to 1973-74**

<i>Year</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
(1)	(2)	(3)	(4)
1961-62 (September & March)	2096	1529	3625
1962-63            "	2687	1724	4411
1963-64            "	2530	2415	4945
1964-65            "	2270	2702	4972
1965-66            "	2263	3535	5798
1966-67            "	1858	2607	4465
1967-68            "	2953	3935	6888
1968-69            "	2754	3674	6428
1969-70            "	2072	2259	4331
1970-71            "	2580	4046	6626
1971-72            "	1099	1309	2408
1972-73            "	1027	1547	2574
1973-74            "	649	942	1591
<b>Total</b>	<b>26838</b>	<b>32224</b>	<b>59062</b>

## APPENDIX 9.10

**Number of Teachers Section - wise 1974-75**

<i>Section</i>	<i>Trained</i>			<i>Untrained</i>			<i>Total</i>		
	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>I. High School Section</b>									
Regular Teachers	16809	13244	30053	71	52	123	16880	13296	30176
Special Teachers	1408	979	2387	112	141	253	1520	1120	2640
Sub Total	18217	14223	32440	183	193	376	18400	14416	32816
<b>II. Upper Primary Section</b>									
Regular Teachers	20731	19562	40293	966	1086	2052	21697	20648	42345
Special Teachers	3264	2632	5896	457	475	932	3721	3107	6828
Sub Total	23995	22194	46189	1423	1561	2984	25418	23755	49173
<b>III. Lower Primary Section</b>									
Regular Teachers	35507	36120	71627	1312	316	1628	36819	36436	73255
Special Teachers	216	2304	2520	43	457	500	259	2761	3020
Sub Total	35723	38424	74147	1355	773	2128	37078	39197	76275
<b>IV. Training School</b>									
<b>Training Section</b>									
Regular Teachers	291	191	482	..	..	..	291	191	482
Special Teachers	17	17	34	..	..	..	17	17	34
Sub Total	308	208	516	..	..	..	308	208	516
<b>Grand Total</b>	<b>78243</b>	<b>75049</b>	<b>153292</b>	<b>2961</b>	<b>2527</b>	<b>5488</b>	<b>81204</b>	<b>77576</b>	<b>158780</b>



## APPENDIX 9.11

**Progress of Expenditure of General School Education**

<i>Year</i>	<i>Rs. (Crores)</i>	<i>Index of Increase</i>
(1)	(2)	(3)
1961-62 (Actuals)	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 (Revised Estimates)	86.42	513

## APPENDIX 9.12

**Cost per Pupil in the Different stages of School Education**

<i>Year</i>	<i>Primary stage Rs.</i>	<i>Secondary stage Rs.</i>
(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

## APPENDIX 9.13

**Per capita Government Expenditure on Education in Kerala**

<i>Year</i>	<i>Population (lakhs)</i>	<i>Government Expenditure on education (Rs. lakhs)</i>	<i>Expenditure per head (Rs.)</i>
(1)	(2)	(3)	(4)
1960-61	169.04	1616.30	9.56
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	10500.17 (R.E.)	45.17

\*Estimated population.

## APPENDIX 9.14

**Percentage of Public Expenditure on Education to State Budget in  
the Different States/Union Territories of India**

<i>State/Union Territory</i>	<i>1972-73 (Budget Estimates)</i>
(1)	(2)
1. Andhra Pradesh	23.3
2. Assam	22.3
3. Bihar	18.6
4. Gujarat	23.4
5. Haryana	17.2
6. Himachal Pradesh	23.6
7. Jammu and Kashmir	11.3
8. Kerala	36.7
9. Madhya Pradesh	29.4
10. Maharashtra	21.0

## APPENDIX 9.14—(contd.)

<i>State/Union Territory</i>	<i>1972-73 (Budget Estimates)</i>
(1)	(2)
11. Manipur	26.1
12. Meghalaya	15.1
13. Karnataka	22.7
14. Nagaland	12.8
15. Orissa	21.1
16. Punjab	21.9
17. Rajasthan	22.8
18. Tamil Nadu	26.4
19. Tripura	23.8
20. Uttar Pradesh	22.6
21. West Bengal	22.8
All States	23.4
All Unions Territories	27.4
India	23.6

## APPENDIX 9.15

## Polytechnics in Kerala 1975-76 \*

<i>Name of District</i>	<i>Government</i>	<i>Private</i>	<i>Total</i>
(1)	(2)	(3)	(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 9.15 A

**Students and staff strength in Poly technics during 1974-75**

<i>Sl. No.</i>	<i>District</i>	<i>No. of institution</i>	<i>Students</i>	<i>Teachers</i>
(1)	(2)	(3)	(4)	(5)
1	Trivandrum	2	853	72
2	Quilon	1	332	76
3	Alleppey	2	766	78
4	Kottayam	1	238	47
5	Idukki	..	..	..
6	Ernakulam	1	622	191
7	Trichur	4	1250	177
8	Palghat	1	84	14
9	Malappuram	2	506	96
10	Kozhikode	2	787	102
11	Cannanore	2	374	95
<b>Kerala</b>		<b>18</b>	<b>5812</b>	<b>888</b>

## APPENDIX 9.15 B

**Students and Staff strength in Junior Technical Schools**

<i>Sl. No.</i>	<i>District</i>	<i>No. of institutions</i>	<i>Students</i>	<i>Teachers</i>
(1)	(2)	(3)	(4)	(5)
1	Trivandrum	2	353	54
2	Quilon	2	360	57
3	Alleppey	2	339	57
4	Kottayam	2	390	52
5	Idukki	..	..	..
6	Ernakulam	1	170	28
7	Trichur	4	682	112
8	Palghat	2	312	57
9	Malappuram	1	163	28
10	Kozhikode	2	262	49
11	Cannanore	3	420	75
<b>Kerala</b>		<b>21</b>	<b>3385</b>	<b>569</b>

## APPENDIX 9.16

**Industrial Training Institute in Kerala 1975-76**

<i>Name of District</i>		<i>No. of Industrial Training Institute</i>		
		<i>Government</i>	<i>Private</i>	<i>Total</i>
(1)		(2)	(3)	(4)
1.	Trivandrum	3	4	7
2.	Quilon	1	4	5
3.	Alleppey	1	6	7
4.	Kottayam	1	2	3
5.	Idikki	Nil	Nil	Nil
6.	Ernakulam	1	9	10
7.	Trichur	1	1	2
8.	Palghat	1	..	1
9.	Malappuram	1	1	2
10.	Kozhikode	1	1	2
11.	Cannanore	1	..	1
Kerala		12	28	40

## APPENDIX 9.17

**Number of Arts and Science Colleges and Training Colleges in Kerala—District-wise—1975-76**

<i>District</i>	<i>No. of Arts and Science Colleges</i>			<i>No. of Training Colleges</i>			
	<i>Government</i>	<i>Private</i>	<i>Total</i>	<i>Government</i>	<i>Private</i>	<i>Total</i>	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1.	Trivandrum	5	12	17	1	2	3
2.	Quilon	..	13	13	..	2	2
3.	Alleppey	..	14	14	..	3	3
4.	Kottayam	1	16	17	..	4	4
5.	Idikki	..	2	2	..	..	..
6.	Ernakulam	2	15	17	..	2	2
7.	Trichur	3	13	16	1	..	1
8.	Palghat	3	5	8	..	1	1
9.	Malappuram	2	4	6	..	..	..
10.	Kozhikode	4	7	11	1	1	2
11.	Cannanore	3	6	9	1	..	1
Total		23	107	130	4	15	19

## APPENDIX 9.18

**No. of Colleges under the different Universities of Kerala  
1974-75**

<i>Type of Colleges</i>	<i>Kerala University</i>	<i>Calicut University</i>	<i>Cochin University*</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)
1. Arts & Science College (1st Grade)	58	38	..	96
2. Junior Colleges	21	13	..	34
3. Training Colleges	14	5	..	19
4. Engineering Colleges	3	3	..	6
5. Medical Colleges	3	1	..	4
6. Ayurveda College	2	1	..	3
7. Law Colleges	3	1	..	4
Total	104	62	..	166

No. affiliated colleges.

## APPENDIX 9.19

**Number of students in Arts & Science Colleges in Kerala  
1974-75**

<i>Course</i>	<i>No. of Students</i>		<i>Total</i>
	<i>Boys</i>	<i>Girls</i>	
(1)	(2)	(3)	(4)
1. Pre-Degree	46627	40956	87583
2. Degree	33256	28071	61327
3. Post-Graduate*	3315	2558	5873
Total	83198	71585	154783

\* Includes the number of students in the University Department.

## No. of students in the University Department of Kerala 1974-75

## No. of Post graduate students

Name of Department	Kerala University		Calicut University		Cochin University		Total												
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls											
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)											
(1)																			
1 Department of Economics	38	10	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2 Do. Politics	35	11	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3 Do. Psychology	12	21	33	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4 Do. Sociology	12	26	38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5 Do. Library Science	7	23	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6 Do. English	18	32	50	11	5	16	..	..	..	..	..	..	..	..	..	..	..	..	..
7 Do. German	91	18	109	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8 Do. Russian	72	29	101	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9 Do. Malayalam	16	13	29	11	10	21	..	..	..	..	..	..	..	..	..	..	..	..	..
10 Do. Tamil	7	14	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11 Do. Linguistics	14	21	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12 Do. Mathematics	11	22	33	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13 Do. Statistics	10	14	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14 Do. Physics	..	..	..	13	4	17	27	11	..	38	40	15	..	..	..	..	..	..	..

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
15	Department of Chemistry ..	..	..	..	10	9	19	..	..	..	10	9	19
16	Do. Biochemistry	8	6	14	..	..	..	..	..	..	8	6	14
17	Do. Botany	13	10	23	7	9	16	..	..	..	20	19	39
18	Do. Zoology	..	..	..	5	9	14	..	..	..	5	9	14
19	Do. Geology	11	..	11	..	..	..	..	..	..	11	..	11
20	Do. Education	16	14	30	8	7	15	..	..	..	24	21	45
21	Do. Hindi	..	..	..	16	14	30	10	18	28	26	32	58
22	Do. Arabics	..	..	..	13	..	13	..	..	..	13	..	13
23	Do. Commerce	..	..	..	..	..	..	..	..	..	..	..	..
	(i) M.Com	..	..	..	26	..	26	..	..	..	26	..	26
	(ii) M.B.A.	..	..	..	..	..	..	163	8	171	163	8	171
24	Do. History	..	..	..	7	21	28	..	..	..	7	21	28
25	Do. Marine Science	..	..	..	..	..	..	19	9	28	19	9	28
26	Do. Law	..	..	..	..	..	..	33	3	96	33	3	36
	Total	391	284	675	127	88	215	252	49	301	770	421	1191



## APPENDIX 9.30

**District-wise progress of works under Water Supply Schemes  
for the year 1974-75**

District	No. of schemes in operation at the end of 1973-74	No. of schemes completed during 1974-75	No. of schemes under construction at the end of 1974-75	No. of towns having protected water supply at the end of 1973-74	No. of towns having protected water supply at the end of 1974-75
	(1)	(2)	(3)	(4)	(5)
1 Trivandrum	1	1	2	1	2
2 Quilon	1	..	1	1	1
3 Alleppey	2	..	3	2	2
4 Kottayam	2	..	2	2	2
5 Idukki	..	..	..	..	..
6 Ernakulam	3	..	4	3	3
7 Trichur	2	2	1	2	4
8 Palghat	1	..	1	1	1
9 Malappuram	..	1	1	..	1
10 Kozhikode	1	..	2	1	1
11 Cannanore	2	..	1	2	2
<b>Total</b>	<b>15</b>	<b>4</b>	<b>18</b>	<b>15</b>	<b>19</b>

## APPENDIX 9.31

**Water Supply Schemes taken up with Life Insurance Corporation Funds**

District	Schemes in operation at the end of 1973-74		Schemes completed during 1974-75		Schemes under construction at the end of 1974-75		Expenditure during 1974-75 (Rs. in lakhs)	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 Trivandrum	1	7	1	6	2	15	98.00	24.04
2 Quilon	..	6	..	..	1	32	13.51	15.85
3 Alleppey	2	7	..	4	3	23	74.60	11.34
4 Kottayam	1	10	..	10	2	23	25.67	9.95
5 Idukki	..	..	..	..	..	..	..	..
6 Ernakulam	3	11	..	5	3	14	107.32	8.71
7 Trichur	1	10	2	3	1	14	16.28	5.80
8 Palghat	..	8	..	4	1	18	7.41	4.63
9 Malappuram	..	8	1	3	1	16	8.11	12.50
10 Kozhikode	1	4	..	2	2	17	78.13	6.10
11 Cannanore	2	15	..	6	1	26	26.45	10.45
<b>Total</b>	<b>11</b>	<b>86</b>	<b>4</b>	<b>45</b>	<b>17</b>	<b>198</b>	<b>455.48</b>	<b>107.37</b>