



GOVERNMENT OF KERALA



ECONOMIC REVIEW

1981

STATE PLANNING

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STATE PLANNING BOARD
TRIVANDRUM

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Appendix—

GENERAL REVIEW

Trends in National Economy

The national economic scenario of the year that has gone by presented a fairly bright picture with distinct improvements in production in the crucial sectors of the economy. The national income during 1981-82 is estimated to have increased by 4.5 per cent over an increase of 7.5 per cent in the previous year. Thus in the first two years of the Sixth Plan period, the average annual growth rate in real national income has exceeded the target growth rate of 5.2 per cent per annum during the plan period. Agricultural production registered a growth rate of 3 per cent with food-grains production reaching a peak level of 134 million tonnes. The industrial sector recorded a growth rate of 8 per cent as compared with 4 per cent in 1980-81. There has been marked improvement in power generation, coal production and steel output. The increase in wholesale prices was around 10 per cent as compared with the increase of 16.7 per cent in 1980-81 and 21.4 per cent in 1979-80. Although the rate of inflation came down during the year, it still indicates the persistence of inflationary pressures in the economy. The situation in the balance of payments sector has not eased. Though the trade deficit in 1981-82 is likely to be smaller compared with the previous year, the foreign exchange reserves are slated to decline by as much as Rs. 1400 crores against the decline of Rs. 342 crores in 1980-81. There was a pick up in the value of exports which increased by about 12 per cent as compared with 4 per cent in the previous year. The growth in imports, particularly of the bulk items, has been much lower. On the whole, the economic trends during the year under review would seem to indicate that the economy has recovered to a more normal level of production. This is of crucial importance since the country is just entering the third year of the Sixth Plan. The achievement of the capacity creation targets stipulated in the plan would much depend on the momentum created in the coming year and the subsequent two years of the Plan.

1.2 The rate of gross domestic capital formation in the economy during 1980-81 is estimated at 24.2 per cent, while the savings rate during the year was a little lower, being 22.2 per cent. The gap between savings and capital formation was financed by inflow of foreign savings. As for 1981-82, the available evidence would indicate that the projected public investment outlays are likely to materialise, though the savings rate is expected to be lower than the rate of investment.

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1.3 The improvement in industrial production has been widespread, and a large number of key industries such as steel, crude oil, and petroleum products, cement, aluminium, nitrogenous fertiliser, newsprint, diesel engines, transport equipment, sugar, vanaspati, etc. are expected to achieve new peak levels of production during the year. There has been notable improvement in the performance of the public sector undertakings during the year. The performance of the small scale and cottage industries reflects both improved environment and a positive response to specific measures to promote production in the decentralised sector. Available indicators of private investment such as grant of licences, capital issues, sanctions and disbursements of loans by term lending institutions show that the pick up in investment has continued through the year. The number of mandays lost which came down from 19.5 million in April-September 1979 to 11.8 million during April-September 1980 has further declined to 8.0 million during the same period in 1981. The improvement in labour relations has been an important factor in higher industrial production during 1981-82. New measures to boost industrial production were initiated during the year as a follow up of the industrial policy statement of July 1980. Automatic increases in production, special incentives for promoting export oriented industries and some relaxation in location policy were allowed. The new textile policy emphasised expanded production in the decentralised sector and modernisation of the capacity in the mill sector.

1.4 The anti-inflationary strategy adopted by the government stressed both supply and demand management. Various measures were taken to raise production and supplies in the economy. Improvement in infrastructure performance was given high priority because of its importance for industrial production. The public distribution system was further strengthened and played an important role in providing essential commodities at reasonable prices throughout the country. Where necessary, essential commodities such as edible oils, wheat and sugar were imported to augment domestic supplies. Various steps were taken to remove artificial bottlenecks and scarcities by curbing the activities of anti-social elements. The agricultural pricing policy continued to ensure remunerative prices to farmers with a view to encouraging agricultural production.

1.5 Fiscal policy stressed resource mobilisation to meet the development needs of the economy and to

minimise budgetary deficits. Adjustment in administered industrial prices was intended to reflect increased costs, reduce losses in public sector undertakings, and minimise budgetary subsidies. Prices of crude and petroleum products were raised in order to reduce growth in their consumption and also to mobilise resources for development of the crucial oil sector. Incentives were given for promoting savings and investment in the economy.

1.6 Despite deceleration of inflationary pressures in the economy achieved during the last two years, prices of several commodities have continued to rule firm. The economy also remains susceptible to the impact of international factors. The achievement of relative price stability in the economy should therefore continue to be an important objective of public policy.

1.7 In the context of persistent inflationary pressures, monetary policy during the year sought to achieve objectives of restraining the expansion of money supply and credit on the one hand, and the mobilisation of bank deposits and the flow of credit to the priority and productive sectors of the economy on the other. A number of steps were taken during 1981-82 including restructuring of interest rates on bank lending and on new deposits, increase in the bank rate from nine to ten per cent, increase in the cash reserve ratio in a phased manner from six to eight per cent, increase in the statutory liquidity ratio from 34 to 35 per cent, and appropriate increases in the refinance and re-discounting rates. As a result of these measures, monetary expansion in 1981-82 has been kept within reasonable limits.

1.8 The external trade and balance of payments situation has been under severe strain since 1979-80. The deterioration in the balance of payments was caused by the sharp increase in the import bill due to substantial increases in the prices of oil and other major imports. The trade deficit increased to Rs. 5756 crores in 1980-81 as against Rs. 2563 crores in 1979-80. The balance of payments will continue to remain under pressure during 1981-82 even though the trade deficit for the year as a whole is likely to be somewhat lower than the 1980-81 level because of lower crude and petroleum imports. The pressure on balance of payments is reflected by the movement in foreign exchange reserves which have declined by Rs. 1292 crores during the current financial year, upto January 31, 1982 after taking credit for the receipt of Rs. 637 crores under the International Monetary Fund extended arrangement.

1.9 Total imports during 1981-82 are estimated at Rs. 13,200 crores, six per cent higher than those in 1980-81. Export growth after remaining sluggish in 1980-81 has shown distinct improvement in the

current year and is expected to be around fourteen per cent in value terms. The available data for the first seven months of the current financial year show that the recovery in exports is fairly general. However, despite the encouraging performance of exports during 1981-82 it will be necessary to strengthen the export effort still further. The import policy for 1981-82 allowed flexible and liberal access to import requirements for actual users consistent with the aim of strengthening and diversifying the production base of the economy. The policy recognised the important role that export houses can play in promoting and developing exports. In order to improve the financial infrastructure for underpinning exports, an export-import bank has been established.

1.10 Despite the overall improvement during 1981-82 the balance of payments is expected to remain under pressure in the coming years. While the efforts to bring about necessary adjustments would prove successful only over the medium term, steps have been taken to mobilise the necessary finance to bridge the gap in the intervening period. The government entered into an extended arrangement with the International Monetary Fund for SDR five billion to be made available during the three year period November 1981-November 1984 for balance of payments support. Increased recourse to commercial borrowings was also taken during 1980-81 and 1981-82 mainly for economically viable projects.

1.11 As higher productivity is the key to rapid improvement of the economy, 1982 has been declared as productivity year, and a new twenty point programme has been announced which focuses attention on the priority areas, with emphasis on improving the condition of the weaker sections of society for concerted action at all levels.

Trends in Kerala's Economy

1.12 Being an economically deficit State with a large import sector the trends in Kerala's economy have been highly sensitive to the developments taking place in the national economy. Thus, during the year under review, the nation-wide inflationary pressures made their adverse impact on the economic situation of Kerala also. The average consumer price index for agricultural and industrial workers during the year 1981 rose by about 13.9 per cent against 13.6 per cent during the previous year. The increase in the index in the different centres of the State ranged between 12.1 and 15.2 per cent. However, the average retail prices of different commodities showed wide variations. A point that needs emphasis in this context is that the efficacy of the State's public distribution system helped considerably in softening the impact of inflation on the State's economy.

1.13 In respect of wholesale prices of agricultural commodities, however, the trends were in the opposite direction. There was a price decline of 7.8 per cent as against an increase of 14 per cent during the previous year. This situation proved unhelpful to the farmers, particularly because of the increases in farm cultivation cost, cost of inputs and price increase of consumer items which together made serious erosions into the shrinking incomes of the farmers. This is reflected in the parity index (percentage ratio of prices received by farmers to prices paid out by them) which declined by 3 points from 93 in 1980 to 90 in 1981. Thus the year that has gone by was unfavourable to the farming community as the terms of trade moved against them.

Income and Employment

1.14 Latest available estimates of State income are for the year 1979-80. The State income in 1979-80 at current prices works out to Rs. 2874 crores as against Rs. 2693 crores in 1978-879, signifying a rate of increase of 6.7 per cent during the one-year period. The per capita income at current prices for 1979-80 is computed at Rs. 1141 against Rs. 1086 in the previous year reflecting a rate of growth of 5.1 per cent. A district-wise analysis of per capita income shows that Ernakulam (Rs. 1476) and Idukki (Rs. 1446) occupy the first two places among the districts while Malappuram (Rs. 832) continues to remain at the lowest position.

1.15 Employment Exchange data reveal that the ranks of the unemployed have been swelling from year to year. The number of job seekers has increased from 15.79 lakhs in the previous year to 19 lakhs during the year 1981. In fact Kerala accounts for over 11 per cent of the total unemployment and under employment in India. Unemployment equivalent in standard person years (one standard person year being work put in by a person in a full year of 273 working days) in Kerala in 1977-78 was 21.3 lakhs as compared to 191.7 lakhs in India as a whole. The rate of unemployment defined as ratio of unemployment to total labour force is as high as 21 per cent in Kerala, the highest among Indian States. The proportion of educated work seekers in Employment Exchanges has come down from 51.5 per cent in 1980 to Rs 48.5 per cent in 1981. The work seekers possessing qualifications less than S.S.L.C. have increased very significantly.

Agricultural Production

1.16 During the year under review there has been a marginal set back in the production index of all crops owing to a decline in production both in foodgrains and non-foodgrains sectors. The redeeming feature is that the new emphasis given to various programmes aimed at the development of pulses has boosted the production and productivity of this crop. Crop production in 1980-81 presents a different picture as compared to

the previous year. Rice production registered a fall of 2 per cent. The overall rice production in 1980-81 was 12.72 lakh tonnes as against 12.83 lakh tonnes in 1979-80. The highest decline in production is seen recorded under tea in the plantation sector followed by cardamom, sesamum, and pepper. However it is encouraging to note that crops like coconut, arecanut, cashewnut, banana and plantations, sugarcane, ginger, sweet potato, groundnut etc. which recorded a decline in production during 1979-80 have all registered increases in production during 1980-81.

1.17 One of the significant steps taken during 1980-81 was the introduction of the 'Kerala Agricultural Extension Project (KAEP), with assistance from World Bank in the districts of Trivandrum, Quilon and Alleppey. The main thrust of this programme is the effective transfer of technology to the farmers' fields through regular, systematic, scheduled visits and training of the farmers by the Village Extension Workers.

1.18 The intensification of programmes for coconut development initiated in 1979-80 contributed to the tremendous progress under this crop in 1980-81. There was a step up in the use of chemical fertilisers under the coconut package programme. Nearly 2.17 lakh un-economic coconut trees were cut and removed during the year.

1.19 The Kerala Agricultural Development Project (KADP), the first World Bank assisted project in the State, envisaging a total financial outlay of Rs. 62 crores, started functioning from 1977-78. The project pursued its main objective of improving productivity of some of the major crops in the State with emphasis on the improvement of the economic status of the small holders. The programme is implemented through 105 package units of 500 hectares each in the districts of Trivandrum, Malappuram, Kozhikode, Cannanore, Kottayam, Idukki and Wynad. Of the 105 units, 75 are for coconut plantation programme, 10 for coconut new planting programme and 20 for pepper rehabilitation programme. In the case of pepper rehabilitation programme, the achievement in 1980-81 exceeded the target fixed for the year. The achievement under coconut new planting programme is only 86 per cent. Despite continued efforts, the response of the farmers towards coconut rehabilitation programme is still poor. The achievement under the programme was only 37 per cent of the target in 1980-81. Being a time bound project the pace of implementation has to catch up with the schedule.

1.20 The Coconut Processing Complex at Mamom which commenced production in 1979 is the first venture of the Kerala State Coconut Development Corporation. During the year 1980-81 the unit crushed 23,586 quintals

of copra and produced 15,186 quintals of coconut oil and 7,520 quintals of oil cake.

1.21 The Agro-Industries Corporation showed better performance in 1980-81 compared to the previous year. Its gross profit amounted to Rs. 8 lakhs against Rs. 4 lakhs in 1979-80. There was appreciable increase in the direct sales of agricultural machinery and implements by the Corporation. Tractors, power tillers and implements worth Rs. 32 lakhs were sold in 1980-81 as against Rs. 15 lakhs in 1979-80. Income from hire purchase activities also increased during the year. The Corporation has recently started production on an experimental basis in its fruit processing complex at Punalur.

1.22 An important change in the activities of the Kerala State Farming Corporation in 1980-81 has been the attempt at diversification of cultivation with a view to making it a viable unit. In pursuance of this strategy the Corporation has entered into the plantations of cashew, cocoa, pepper and albizzia. It has also plans to implement a rubber plantation scheme under Western Ghat Development Programme.

1.23 The Plantation Corporation of Kerala is implementing two World Bank Projects, one under Kerala Agricultural Development Project (KADP) and another under Multi State Cashew Development Project. In 1980-81, 155 ha of land was planted with cashew under KADP Programme. The Corporation earned a profit of Rs. 32.81 lakhs during the year as against Rs. 32.90 lakhs in 1979-80.

Food Situation

1.24 The food situation in the State was less comfortable in 1981 compared to the previous year. The per capita availability of foodgrains declined from 312 grams per day in 1980 to 298 grams per day in 1981. Not only was the internal production of rice low but the imports of both rice and wheat into the State were also less during 1981. Though there was free flow of rice on private account, this could not ease the supply position in the slack season when the price of rice in the open market was high. But official distribution agencies including Civil Supplies Corporation effectively intervened in the distribution of foodgrains to hold the price line in check.

1.25 The network of public distribution system put up a commendable performance in 1981. Though the number of wholesale shops remained static at 265, that of retail shops increased from 10,875 to 11,471. There was appreciable increase in the quantum of kerosene and sugar distributed through these outlets during the year. The Kerala State Civil Supplies Corporation could also positively influence the market especially during seasons of the festivals like Onam and

Christmas when market prices show a general tendency to soar high. The annual turnover of the Corporation shot up by nearly 300 per cent from Rs.24 crores in 1979-80 Rs. 94 crores in 1980-81. Sugar and edible oils were the major commodities handled by the Corporation. Maveli Stores, the newly started retail outlets of the Corporation, have proved to be very popular.

Land Reforms

1.26 Kerala can be legitimately proud of its achievements in the sphere of land reforms. The measures include abolition of intermediary interests on land, conferment of the tenure and ownership rights on tenants and distribution of surplus land among the landless poor. Up to the end of November 1981, a total number of 36.76 lakh tenancy cases were filed for assignment of the rights of landlords and of these 36.66 lakh cases (99.7 per cent) were disposed of. The number of cases allowed was 24.78 lakhs (67.6 per cent of the total cases disposed). As far as 'kudikidappukar' are concerned, a total number of 4.40 lakh cases (99 per cent) were disposed of out of the 4.45 lakh cases filed, the number of cases allowed being 2.72 lakhs. As regards achievements of the ceiling provision of the KLR Act, out of 75,945 ceiling returns filed up to the end of December 1981, 72,758 (95.8 per cent) were disposed of. Till the end of December 1981 a total area of 52,737 acres of surplus land was distributed to beneficiaries numbering 84,692. These beneficiaries include 34,175 scheduled castes and 4,972 scheduled tribes who shared 18,981 acres and 4,087 acres of land respectively. The aggregate extent of 'puramboke' lands available for assignment till the end of October 1981 was 4.67 lakh acres. Of this as much as 4.18 lakh acres (89.5 per cent) were distributed to 4.91 lakh beneficiaries. Among these beneficiaries scheduled castes and scheduled tribes constituted 17.5 per cent.

Co-operation

1.27 The high level committee on co-operative credit constituted by the Government in 1979 has assessed that co-operative credit societies can meet 60 per cent of the total credit requirements of the agriculturists in the State. The total amount of loans advanced by the credit societies during 1979-80 was Rs. 169 crores as against Rs. 139 crores in 1978-79. The total amount advanced for agricultural purposes alone constituted Rs. 103 crores (61 per cent) of the total amount of loans advanced as at the end of June, 1980. It is also estimated that as much as 65 per cent of the loans under short and medium term credit advanced by the co-operatives has been for the weaker sections. The net profit of the Kerala State Co-operative Bank during the year 1981 was Rs. 62.28 lakhs as against Rs. 14.59 lakhs during the previous year.

Livestock Development

1.28 Milk production in the State increased from 8.65 lakh tonnes in 1979-80 to 9.07 lakh tonnes in 1980-81. The per capita daily availability of milk increased from 93 grams to 97 grams during this period. The Animal Husbandry and Dairy Development Departments continued to bestow attention on their programme of cross breeding through the Key Village Blocks and Intensive Cattle Development Projects. The total egg production in the State stood at 962 million in 1980-81. The cattle insurance scheme which gained momentum during the year benefited about 6350 persons. The Kerala Co-operative Milk Marketing Federation was set up by the State Government in 1981 for undertaking a comprehensive dairy development project on the pattern similar to that of Anand in Gujarat. This project comes under the National Dairy Development Programme of "Operation Flood II".

Fisheries

1.29 About 3.13 per cent of the State's total population is engaged in the fisheries sector. The aggregate fish production in the State has come down from 3.56 lakh tonnes in 1979-80 to 3.05 lakh tonnes in 1980-81, registering a decrease of nearly 16 per cent. There has been a declining trend in the marine fish landings in the State from 1973 onwards. The proportion of marine fish landings compared to the all India figure decreased from 38 per cent in 1971 to 23 per cent in 1981. But even in 1981, Kerala continued to be the most important fish producing State in the country. The State contributed 23 per cent of the total fish production in India and 41 per cent of the total export earnings from fish products during the year.

1.30 Kerala continues to be the principal State exporting marine products from India. In the overall exports of marine products from the country during 1980-81, Kerala handled a little over 38 per cent in terms of quantity and about 41 per cent in terms of value. The value of marine products exports from Kerala was only Rs. 95.34 crores in 1980-81 compared to the previous year's figure of Rs. 103.93 crores signifying a fall of 8.2 per cent over the year. The drop in the value of exports of marine products is attributed to poor fish landings as also the sharp fall in the prices in foreign markets. The Government of India is considering the feasibility of giving excise duty concessions on high speed diesel oil for deep-sea fishing vessels to promote exports of marine products.

1.31 In June 1981, the State Government set up the Kerala Inland Fisheries Development Corporation for the enhancement of inland fish production in the State through scientific culture of species.

1.32 Fisheries Village Societies, the most ambitious programme envisaged for the welfare of Kerala fishermen, are expected to come to full swing in the near future. So far 226 fishing villages have been identified for this programme and fisheries officers have been appointed in 164 villages for the conduct of elections to the governing bodies of the village co-operatives. The village societies are expected to benefit about 1.3 lakh fishermen in the State.

1.33 The activities of the Kerala Fishermen's Welfare Corporation include housing programme, relief measures, financial assistance, insurance etc. By availing an amount of Rs. 198.68 lakhs on loan from Housing and Urban Development Corporation, and an equal amount as grant from the State Government, the Corporation has completed the construction work relating to 10,000 houses for fishermen. Under the scheme of rehabilitation of 2000 fishermen families evicted from the Vizhinjam-Kovalam fishing harbour, construction of 165 houses is nearing completion. The Corporation has introduced a scheme for the installation of diesel bunks at important fishing centres along the Kerala coast. Two such bunks started functioning at Neendakara Fishing Harbour during 1980-81.

Forests

1.34 Forest constitute nearly 24 per cent of the total geographical area of the State. The contribution of forestry sector to State income during 1980-81 was Rs. 64.61 crores as against Rs. 58 crores in 1979-80.

1.35 The total area under forest plantations in Kerala at the end of March 1981 was 1.44 lakh hectares as against 1.40 lakh hectares at the end of March 1980. During the year, nearly 4000 hectares were brought under new plantations like teak wood, soft wood, eucalyptus, wattle, cashew etc. Schemes were also implemented under social forestry to create an awareness among people of the necessity for developing forest wealth in the State. An area of 71 hectares was planted under this programme in 1981. The total revenue earned by the forestry sector during 1980-81 was Rs. 42.89 crores against Rs. 40.49 crores in the previous year.

1.36 The Kerala Wood Industries Limited, Kozhikode, which envisages processing of wood for veneers, joinery items etc., has been registered in 1981 as a subsidiary company of the Kerala Forest Development Corporation. The on-going projects of the Corporation include pulpwood project, matchwood project and cardamon project. The Kerala Forest Research Institute is engaged in studies on timber and timber-based industries. Two sub centres of this Institute for conducting research on teak plantations and wild life are functioning at Nilambur and Thekkady respectively.

Irrigation and Power

1.37 Till the end of March 1981, the total area brought under irrigation in Kerala was 4.48 lakh hectares (gross) which constitutes only 18 per cent of the irrigation potential of the State. The State has made an investment of about Rs. 300 crores in this sector. In 1980-81 it was possible to extend irrigation facilities to 16,138 hectares (net) or 26,396 hectares (gross) at a total expenditure of about Rs. 48 crores. The total gross irrigated area built up till March 1981 through major and medium irrigation projects alone is 2.96 lakh (gross) hectares. In 1980-81 alone about 15,500 hectares (gross) have been added to the irrigated area in the State through the partial commissioning of projects like Pamba, Muvattupuzha, Chitturpuzha, Kanhirapuzha, Kuttiadi and Pazhassi.

1.38 The estimated potential of minor irrigation in the State is 10 lakh hectares (net) or 11 lakh hectares (gross). Till the end of March 1981 a cumulative area of 1.31 lakh hectares (net) or 1.54 lakh hectares (gross) has been brought under irrigation through minor irrigation schemes at a total cost of Rs. 45 crores. During 1980-81 an amount of Rs. 6.13 crores was spent on minor irrigation which enabled creation of additional irrigation potential of 9,294 hectares (net) or 10,888 hectares (gross).

1.39 The aggregate investment on the State's power system stood at Rs. 528 crores at the end of March 1981. Of this an amount of Rs. 268 crores (51 per cent) has been on generation schemes. Only from 1978-79 onwards added stress is laid on transmission and distribution schemes. The deficiencies in the transmission system are manifest in the inadequate transformer capacity and line capacity, frequent interruptions, poor voltage conditions, high voltage line losses etc. Though the power generation capacity in the State is quite high, the consumers have to wait for long periods for getting power connections. Power generation in 1980-81 was 5242 Mkw. as against 5119 Mkw. in the previous year. The per capita power consumption in the State in 1980-81 was 96 kwh. which is lower than the all India average. The number of pumpsets energised in Kerala rose from 72,598 as on 31-3-1980 to 86,838 as on 31-3-1981. If the State could earmark larger outlays on distribution and rural electrification schemes, applicants for new connections could be provided with connections without undue delay.

Industry

1.40 As a result of the package of incentives announced by the State Government and the concerted efforts of the industrial promotional agencies in the State like Kerala State Industrial Development Corporation, Kerala Financial Corporation and Small Industries Development and Employment Corporation, the

industrial scene of Kerala has started showing certain positive changes. Industrial production in the State during the first three quarters of 1979-80 registered an eight per cent increase compared to the corresponding period in the previous year. By the end of March 1981 the KSIDC, which is the major industrial promotional agency in the State, promoted/assisted 75 companies. At present the Corporation has 170 project ideas. Efforts are being made to identify more projects in the field of rubber industry, electronics, light engineering, chemicals and drugs industry. In 1980-81, two companies promoted by the KSIDC, viz. Kerala Chlorates and Chemicals Limited, Mavelikara and Balmer Lawrie and Company Limited, Aroor, and two existing companies assisted by it, viz. Travancore Electro Chemical Industries, Chingavanam and South India Wire Ropes, Edathala, started commercial production.

1.41 The package of incentives introduced by the State in 1979 has started to generate better response from the industrialists. The State Government has enhanced the State investment subsidy for Quilon district from 10 per cent to 15 per cent. An important problem facing the entrepreneur is the availability of suitable location for setting up the industry and the attendant infrastructure facilities. The State Government has decided in principle to set up an Infrastructure Development Corporation and has appointed a special officer to prepare a detailed report. The all India Industrial Policy Statement announced in 1980, suggested setting up of a few nucleus plants/down stream units in the industrially backward districts to promote the concept of economic federalism. A Task Force set up for proposing nucleus units in the backward districts of Alleppey and Malappuram has in its report identified 13 projects in Alleppey district with an estimated outlay of Rs. 55 crores and employment potential of 3275.

1.42 The Keltron group of companies has taken up several diversification programmes like instrumentation system, micro processor based system etc. The total turnover of the companies under the Corporation during 1980-81 was Rs. 1.70 crores as against Rs. 10.25 crores in 1979-80. The paid up share capital of the Corporation stood at Rs. 9 crores and the value of net fixed assets at Rs. 4.5 crores at the end of March 1981. The activities of the Kerala State Textile Corporation in 1980-81 were quite encouraging. The Corporation earned a net profit of Rs. 2.63 lakhs. The Kerala State Film Development Corporation is now concentrating on the completion of its studio complex and the theatre project. The studio complex is in the final stages of completion while the construction of theatres at Trivandrum, Calicut, Shertallai and Parur is in progress. During 1980-81 the Corporation produced ten short films including two news reels.

1.43 The Companies managed by Kerala State Industrial Enterprises had a much better showing in 1980-81. Five of the seven subsidiary companies under the Holding Company showed profits during the year and the loss of the other two companies was brought down. The total value of production of all the seven companies went up from Rs. 18.86 crores in 1979-80, to Rs. 26.04 crores in 1980-81, an increase of 38 per cent. The sales turn over also increased from Rs. 18.33 crores to 24.65 crores (35 per cent) during the period. The performance of Kerala Electrical and Allied Industries, Kerala Soaps and Oils Limited, Kerala Drugs and Pharmaceuticals Limited and Travancore Plywood Industries Limited during the year was encouraging. Of the Government owned Companies outside the control of the Holding Company, the performance of Kerala Minerals and Metals was quite satisfactory. The net profit earned by the Company increased to Rs. 22.06 lakhs from Rs. 17.95 lakhs in the previous year. Two Government owned companies which commenced commercial production in 1980-81 are the Steel Industrials Limited and Foam Matting (India) Limited.

1.44 Of the ten important Government majority concerns, three companies (Chalaky Refractories, Pallathra Bricks and Tiles and Travancore Sugars and Chemicals) suffered losses in 1980-81 while seven were running on profit. Notable achievements were recorded by the Travancore Cochin Chemicals (which enhanced its profits from Rs. 5 lakhs to Rs. 130 lakhs), Transformers and Electricals Kerala Limited and Travancore Titanium Products Limited.

1.45 Though investments of the order of Rs. 40 crores was made in the Central Sector Undertakings in Kerala in 1979-80, the total investment of Rs. 422.84 crores in Kerala upto the end of March 1980 was only 2.33 per cent of the all India investment of Rs. 18,161 crores. In fact Kerala's share has come down from 2.44 per cent in 1978-79 to 2.33 per cent in 1979-80. Only three of the Central Government Companies, viz. the Hindustan Insecticides, Hindustan Latex and the HMT, Kalamasserry incurred losses during 1980-81. All others were working profitably. The Vellore Newsprint Project is expected to start commercial production shortly. The unit has already started production on an experimental basis using imported pulp.

1.46 The package of assistance given to entrepreneurs in establishing industrial units and the functioning of the District Industries Centres had made a positive impact in starting new small scale industrial units in Kerala. As at the end of March 1981 there were 18,954 registered small scale units in the State and of these 2,980 were registered during 1980-81. The number of units registered in 1980-81 has been 15 per cent more than the number of units registered in the previous

year (2588). The additional employment created as a result of small scale units newly registered during 1980-81 is estimated at 26,000. Also 5760 artisans units were started during the year which helped 9000 persons to get self-employment.

1.47 The traditional industries of the State including handloom, coir and cashew continued to be hampered by the usual problems such as shortage of raw materials, poor market, low technology and severe under-employment. Non availability of raw husk in adequate quantities to provide full employment to the large work force in coir industry is the major problem in that sector. Stock piling of finished products as a result of fall in demand in the internal as well as external markets affected the working of coir co-operatives. Government have initiated a number of steps to save the coir industry, including procurement of husk to make available sufficient raw materials for the smooth functioning of coir co-operatives. Interest-free loan is also being given to the Kerala State Coir Marketing Federation and the Kerala State Coir Corporation for distress purchase of coir and coir products.

1.48 Shortage of raw nuts continued to be the major problem affecting cashew industry. The indigenous and imported nuts together could provide employment to the cashew workers for only about 2 months in the year. Steps are being taken to increase indigenous production of raw cashews, but this will be an extremely slow process. Problems like soaring prices of raw materials, accumulation of unsold stock, and competition from the organised mill sector continue to persist in handloom industry. The strategy adopted for revitalisation of the industry is organisation of viable handloom co-operatives. It is proposed to bring at least 60 per cent of the looms under the co-operative sector by the end of the Sixth Plan period. About 4000 looms have been newly brought under the co-operative fold in 1980-81. At the end of the year there were about 39,000 looms in the co-operative sector which constitute 41 per cent of the total number of looms in the State. The total production of handloom cloth during 1980-81 is estimated to be about 90 million metres worth Rs. 45 crores. Of this, the co-operative sector alone produced handloom cloth valued at Rs. 15.25 crores. The Kerala Garments Limited, a subsidiary unit of the Kerala State Handloom Development Corporation, produced 1.18 lakh pieces of garments valued at Rs. 8.45 lakhs during 1980-81.

Transport and Communications

1.49 The total length of roads in Kerala is about 94,000 Km. which works out to 37 Km. per 10,000 population. Of this, about 17,200 Km. are maintained by the State Public Works Department and 840 Km. are National Highways. Though the State has a comparatively well developed network of roads, the dust-free

surface of roads is only about 20 per cent as compared to about 40 per cent at the national level.

1.50 The motor vehicle density in Kerala is high compared to most other States in India. The State had 500 vehicles per 100 sq. km. of area and 766 vehicles per lakh of population in 1980-81. The number of vehicles newly registered in 1980-81 was 16,256 compared to 17,623 in 1979-80. The State collected over Rs. 20 crores through motor vehicle taxes during the year under review. The Kerala State Road Transport Corporation which possesses only a third of the total number of passenger vehicles in the State has to considerably expand and improve its activities in order to meet the growing demand of passenger traffic. The fleet strength of K.S.R.T.C. at the end of March 1981 was 3112. The Corporation employs about 28,500 persons.

1.51 Kerala's railway network of 803.5 Km. of broad gauge lines and 112.7 Km. of metre gauge lines works out to one of the lowest route length per capita among the states. The construction of Ernakulam, Alleppey broad gauge line was started in October 1980. This project estimated to cost Rs. 16.46 crores is expected to be completed by the middle of 1983. A Rs. 11 crores project to connect Alleppey with Kayamkulam on the Trivandrum Ernakulam sector has been prepared. A Rs. 16 crores project for the Guruvayoor-Kuttippuram railway line has also been prepared.

1.52 Air transport services in the State are operated from the two airports of Trivandrum and Cochin. During 1980-81 about 3.8 lakh passengers were handled on the flights from these airports compared to 3.6 lakhs in 1979-80.

1.53 Most of the ports in the State have fallen into disuse owing to inadequate infrastructure facilities. Only five of the fourteen minor ports in the State viz. Neendakara, Alleppey, Beypore, Calicut and Azhikkal, handled significant traffic during the recent past. In 1980-81, about 1.9 lakh tonnes of cargo were handled at the intermediate and minor ports of Kerala as against 2.6 lakh tonnes in 1979-80. The revenue earned during 1980-81 from the various ports was Rs. 16.45 lakhs compared to Rs. 16.78 lakhs during the previous year.

1.54 Though the number of ships which called at the Cochin Port declined by about 9 per cent during 1980-81, the general operating conditions at the port were satisfactory. The average turn round time and detention time decreased during the year indicating an improvement of operational efficiency. The total volume of traffic handled during the year was 52 lakh tonnes which is roughly 4 per cent less than the volume handled during the previous year.

1.55 Kerala is ahead of most other states in the sphere of communication facilities. The State had

465 telephone exchanges in April 1981 as against 442 in April 1980. The total equipped capacity in 1981 was 110700 lines. As on 1-4-1981, 4576 post offices were functioning in Kerala. During 1980-81 sixty-four new post offices were opened. The average area served by a post office is 8.47 sq. km. against the all India average of 24.46 sq. km. The population served by a post office in the State on an average is 5544.

Education

1.56 The literacy in Kerala has increased from 60.42 per cent in 1971 to 69.17 per cent in 1981. The per capita expenditure on education in the State increased from Rs. 72.65 in 1979-80 to Rs. 84.14 in 1980-81. The enrolment ratio in the age group 6-11 has almost attained 100 per cent. As at the end of 1980-81 there were 11576 schools comprising 1971 high schools, 2618 upper primary schools and 6887 lower primary schools. In view of the rising demand, Government have sanctioned the opening of 326 schools in the public sector consisting of 72 high schools, 137 upper primary schools and 117 lower primary schools during the year 1981-82. The total enrolment in schools rose marginally from 55.95 lakhs in 1980-81 to 56.67 lakhs in 1981-82.

1.57 Under higher education, 24 new colleges were started in 1981-82—seven under the Government sector and 17 under private management. As a consequence, the number of arts and science colleges recorded a rise from 133 in 1980-81 to 157 in 1981-82. The enrolment in arts and science colleges increased to 2.42 lakhs in 1980-81 from 2.12 lakhs in the previous year. The Pre-degree level students account for 61 per cent, the degree students 36 per cent and the post-graduate students 3 per cent. The major landmark under professional education is the starting of a new medical college at Trichur.

Health

1.58 There were 968 allopathic institutions in the State in 1980-81 having a bed strength of 32,447. The bed-population ratio in the State works out to 128. Some of the major recommendations of the High Power Committee on Health Services (Dr. Pai Committee) such as posting of paediatricians in Primary Health Centres and providing laboratory services therein, posting of R.M.Os. in taluk hospitals and conversion of the Trivandrum Medical College Hospital into a referral hospital were implemented in 1980-81. The State has achieved the objective of establishing at least one dispensary (ayurvedic, allopathic or homeopathic) in every panchayat in the State. The number of registered medical practitioners in the State increased from 27953 in 1979-80 to 28136 in 1980-81. The aggregate expenditure on health including the cost of family welfare schemes increased from Rs. 44.66 crores in 1979-80 to Rs. 50.21 crores in 1980-81. The per capita expenditure

on medical and public health in Kerala was Rs. 20.63 in 1978-79 compared to the all States' average of Rs. 14.14

Water Supply

1.59 The decade 1980-90 is considered as the international decade for Water Supply and Sanitation. Though Kerala's position is much ahead of several other States in the matter of provision of water supply, its achievement is mainly confined to urban schemes. Kerala could provide safe drinking water to 63 per cent of the urban and 29 per cent of the rural population. During 1980-81, 110 rural water supply schemes and four urban water supply schemes were completed. Thus by the end of the year, 995 rural water supply schemes, 33 urban water supply schemes and two urban sewerage schemes were in operation in the State. In addition 483 rural water supply schemes, 7 urban water supply schemes and 5 urban sewerage schemes were under various stages of execution. Loan assistance from the Life Insurance Corporation of India is a major source of finance for the water supply and sewerage programmes in the State. The L.I.C. assistance for the water supply schemes in 1980-81 was Rs. 274 lakhs. Efforts are also being made to secure loan assistance for the programme from the World Bank. The Netherlands Government has come forward to assist the State in piped water supply under bilateral terms.

Housing

1.60 A number of agencies like the Board of Revenue, Police Department, Public Works Department, Housing Board and Harijan Welfare Department are involved in the house construction programme in the State. The total number of houses constructed under the various housing schemes in the State was 47093 in 1980-81. The Housing Board, the major agency in the field of housing in the State, has taken up 51 public housing schemes involving the construction of 62,243 houses for different categories of people. These schemes are financed mainly by HUDCO loan assistance and the State Government provides seed finance by way of public borrowing. Of the 51 public housing schemes 9 were taken up in 1980-81 and an expenditure of over Rs. 5 crores was incurred on house construction and area development programmes.

Welfare of Scheduled Castes and Tribes

1.61 Though Kerala has been laying special emphasis on social service schemes since the inception of the plan era, the majority of the Scheduled Castes and Tribes in the State continue to live below the poverty line. Hence special schemes oriented to development of these socially and economically backward people are essential. Under the Special Component Plan for Scheduled Castes, an expenditure of about Rs. 15 crores was incurred in 1980-81. The approved outlay for the

annual plan of 1981-82 is around Rs. 20 crores. Instruction has been given to the Departments concerned to select beneficiaries of Integrated Rural Development Programme in such a way that at least 30 per cent of the beneficiaries belong to scheduled caste/tribe families. Upto the end of December 1981, 39147 persons belonging to scheduled castes/tribes were benefited by the programme of distribution of surplus land involving a total area of 23068 hectares.

Export Trade

1.62 The total value of foreign exports through Cochin Port registered a fall in 1980-81 compared to the previous year. As against an export of Rs. 554 crores in 1979-80, exports in 1980-81 was only Rs. 511 crores, the decrease over the year being 8 per cent. This also contributed to a marginal reduction in the State's share of export to India's total export earnings. The increased unit price for Kerala's export commodities in the importing countries, sluggish demand in the foreign markets, and competition from other nations are the major reasons cited for this downward trend in Kerala's exports. Reduction in exports in terms of both quantity and value is discernible in Kerala's traditional export commodities such as tea, coffee, cashew, ginger, sea foods and coir.

Decade in Retrospect

1.63 Some selected indicators relating to various sectors of the economy during the decade that has elapsed are given in Appendix 1.1. Even though it has to be admitted that the growth in the industries sector was not as much as one would have desired, there has been an increase of the order of 180 per cent in the number of working factories in the State; their number increased from 3040 in 1970 to 8491 in 1979. However, it is seen that there has not been a proportionate increase in the quantum of employment generated. The percentage increase in employment noticed during the period was only about 45 per cent. The State registered commendable progress in the matter of generation of electric power. The installed power generation capacity registered an increase of 85 per cent during the decade. The increase achieved in units generated was 147 per cent. During the decade the number of consumers increased from 5.43 lakhs in 1970-71 to 15.88 lakhs in 1980-81, registering an increase of 192 per cent. The per capita consumption of electricity also registered an increase of 34 per cent during the same period.

1.64 The area, production and productivity figures in respect of the important agricultural crops of the State are provided in the Appendix along with the percentage difference noticed during the previous decade. It is noted that the area under rice, coconut, tapioca, tea, pepper and arecanut has actually decreased during the period. The production of rice,

coconut, tapioca, cashewnut and arecanut was lower in 1980-81 compared to 1970-71. However, a redeeming feature of the agricultural situation is the increases in productivity that the State was able to achieve in the matter of most of the important crops like rice (7.01 per cent,) tapioca (7 per cent,) tea (31.91 per cent,) coffee (21.16 per cent,) rubber (45.56 per cent), cardamom (111.54 per cent), pepper (26.76 per cent) and arecanut (19.81 per cent).

1.65 The social service sector registered significant expansion during the last decade, especially in respect of public health programmes. Considerable additional institutional facilities were provided under all systems of medicine. Under modern medicine, the number of hospitals increased from 112 in 1970-71 to 144 in 1980-81. The corresponding number of beds during this period increased from 17,640 to 24,543 registering an increase of 39 per cent. The total number of institutions under modern medicine increased from 553 in 1970-71 to 968 in 1980-81, the increase being of the order of 75 per cent. The number of beds provided by these institutions registered an increase of 49 per cent during this period, the number increasing from 21,777 in 1970-71 to 32,447 in 1980-81. Beds per lakh of population increased from 102 in 1970-71 to 128 in 1980-81. Beds provided in T.B. Centres and clinics registered a remarkable increase during this period, from 302 in 1970-71 to 1608 in 1980-81.

1.66 The literacy rate according to 1981 census is 69.17 per cent. This reflects an increase of 14.48 per cent over the 1971 census figure of 60.42 per cent. The total number of schools increased from 10,822 in 1970-71 to 11,576 in 1980-81. The enrolment figures also registered an increase from 48 lakhs in 1970-71 to 55.95 lakhs in 1980-81, the percentage increase being nearly 17. The number of arts and science colleges during the period increased from 117 to 133. The corresponding enrolment in arts and science colleges more than doubled during the decade, the enrolment figures being 1.14 lakhs in 1970-71 and 2.42 lakhs in 1980-81. The number of I.T.Is. and polytechnics in the State increased from 36 to 151 and 14 to 20 respectively during the decade. The enrolment figure registered an increase of about 180 per cent in the case of I. T. Is. and 246 per cent in the case of polytechnics

1.67 The State income figures reveal that the share of secondary sector has increased by nearly 4 per cent (from 16.9 to 20.8) and that of the tertiary sector by 4.8 per cent (from 32.0 to 36.8). These sectoral shifts in income are indicative of the structural changes in the economy in favour of the secondary and tertiary sectors, a change that should augur well for future, especially in view of the acute unemployment problem in the State.

INCOME AND EMPLOYMENT

State Income

The State income of Kerala for the year 1979-80 is estimated at Rs. 2874 crores at current prices compared with Rs. 2693 crores for the previous year. This gives a rate of growth of 6.7 per cent in 1979-80 as against 11.1 per cent the previous year. At constant (1970-71) prices, the State income for 1979-80 stands at Rs. 1397 crores compared to Rs. 1398 crores in the previous year, recording a fall of 0.1 per cent. This implies that there has been a slight decline over the year in production of goods and services in physical terms and that an overall price increase of over 6.7 per cent was experienced. But Kerala's condition is far better compared to the national scene. National income rose by 7.7 per cent at current prices and declined by 5.4 per cent at constant (1970-71) prices during the same period.

Per Capita Income

2.2 Per capita State income at current prices in 1979-80 is estimated at Rs. 1141, recording an increase of 5.1 per cent over the previous year's figure of Rs. 1086. During the same period per capita national income at current prices increased by 5.3 per cent from 1250 to Rs. 1316. As a result the gap in per capita income between Kerala and India increased from Rs. 164 to Rs. 175. The estimates of the total and per capita income of Kerala and India are given in Table 2.1.

TABLE 2.1
State Income and National Income

Item	Kerala		India	
	1978-79	1979-80	1978-79	1979-80
(1)	(2)	(3)	(4)	(5)
Net Domestic/Net National Product				
At Current Prices (Rs. Crores)	2693	2874 (+6.7)	80992	87253 (+7.7)
At 1970-71 Prices (Rs. Crores)	1398	1397 (-0.1)	46906	43822 (-5.4)
<i>Per Capita Income</i>				
At Current Prices (Rs.)	1086	1141 (5.1)	1250	1316 (+5.3)
At 1970-71 Prices (Rs.)	564	555 (-1.6)	715	661 (-7.5)

Note: Figures in brackets give percentage rate of growth over previous year.

Source: 1. Directorate of Economics & Statistics, Kerala.
2. Central Statistical Organisation, New Delhi.

Sector-wise Rate of Growth of Income

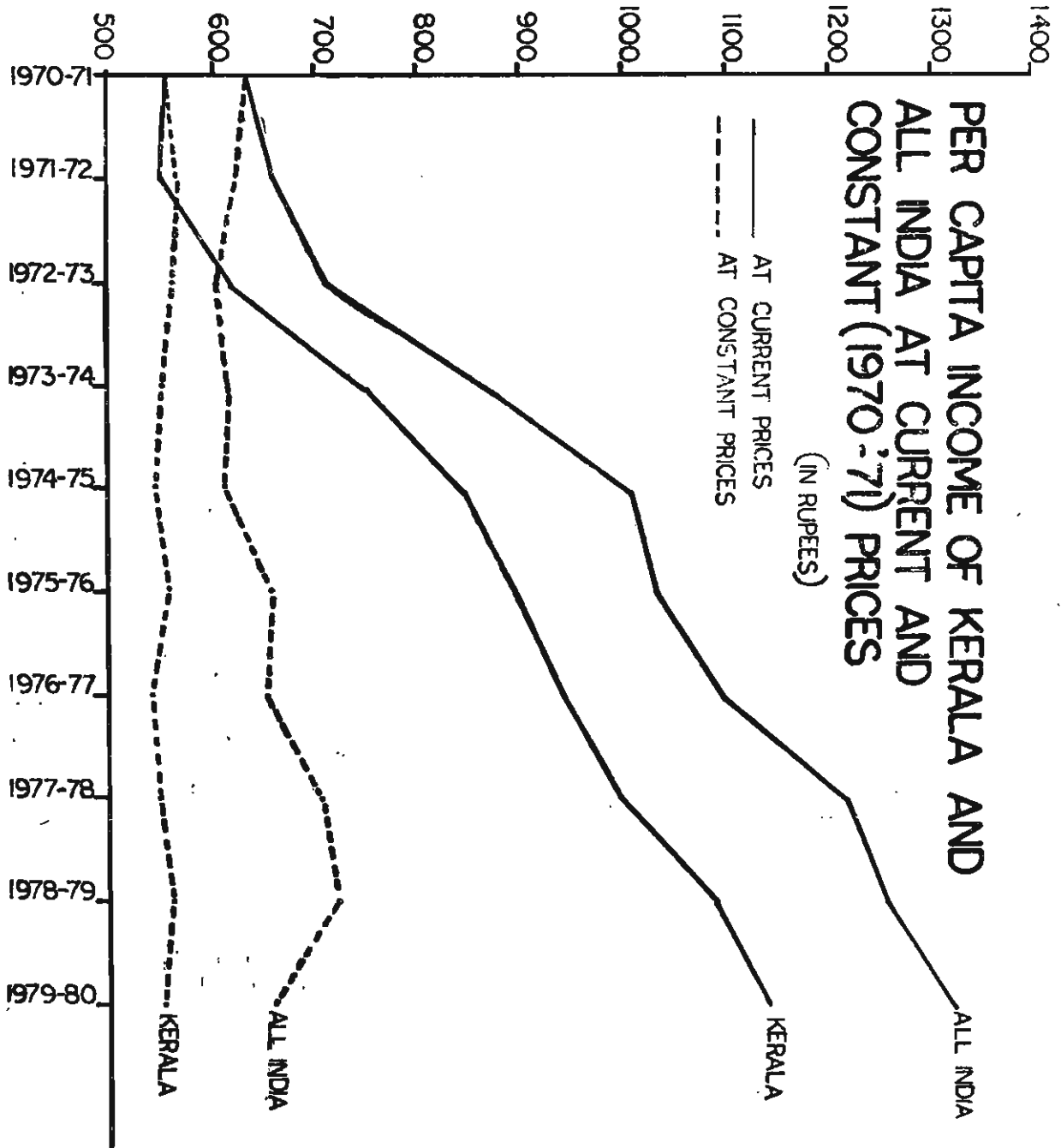
2.3 The sector-wise estimates of the State income and National Income for the years 1978-79 and 1979-80 and the percentage rate of growth in each sector in 1979-80 over the previous year are shown in Appendix 2.1. The Secondary sector in the State has the highest rate of growth of 12.9 per cent followed by 7.2 per cent in the primary sector and 2.7 per cent in the tertiary sector. Within tertiary sector 'Finance and Real Estate' had the maximum rate of growth of 11.6 per cent. At the national level the tertiary sector had the highest rate of growth (11.3 per cent) at current prices, followed by the secondary and primary sectors with 10.9 per cent and 2.0 per cent respectively.

2.4 At constant prices, the state income of Kerala and national income declined by 0.1 per cent and 5.5 per cent respectively in 1979-80. The decline in state income in real terms is mainly due to the decline of 4.5 per cent in the primary sector although the secondary and tertiary sectors registered increases of 2.5 per cent and 4.0 per cent respectively. The decline of 5.5 per cent in the national income can be attributed to the sharp decline of 12.8 per cent in the income from primary sector. Income from the secondary sector also decreased by 2.2 per cent, while the tertiary sector recorded an increase of 2.2 per cent. The total and per capita income of Kerala and India from 1970-71 onwards at current and constant prices are furnished in Appendix 2.2 to 2.5.

Trend in the Sectoral Share of Income

2.5 The sectoral shares of net domestic product of Kerala and India at constant and current prices during 1970-71 and 1979-80 are presented in Table 2.2. The share of the primary sector in state income at 1970-71 prices declined by 8.7 per cent (from 51.1 per cent in 1970-71 to 42.4 per cent in 1979-80) whereas the secondary and tertiary sectors increased their shares by 3.9 per cent and 4.8 per cent respectively. At current prices, while the share of primary sector declined by 6.3 per cent, the increase in secondary and tertiary sectors was 4.1 per cent and 2.2 per cent respectively. In the case of national income also a more or less similar trend is seen. At 1970-71 prices, the share of the primary sector in the national income had decreased by 9.3 per cent while the secondary and tertiary sectors had increased their shares by 2.7 per cent and 6.6 per cent respectively.

PER CAPITA INCOME OF KERALA AND ALL INDIA AT CURRENT AND CONSTANT (1970-71) PRICES (IN RUPEES)



SECTORAL CONTRIBUTION OF NET DOMESTIC PRODUCT OF KERALA AT CONSTANT (1970-71) - PRICES 1970-71 AND 1979-80



TABLE 2.2
Sectoral Contribution of Net Domestic Product—Kerala and India

(Per cent)

Sector	Kerala			India		
	1970-71 (Current Prices)	1979-80		1970-71 (Current Prices)	1979-80	
		At 1970-71 Prices	Current Prices		At 1970-71 Prices	Current Prices
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Primary	51.1	42.4	44.8	50.1	40.8	38.8
2. Secondary	16.9	20.8	21.0	19.7	22.4	24.4
3. Transport, Communication and Trade	14.0	13.5	14.7	15.8	18.8	20.1
4. Finance and Real Estate	3.8	7.2	5.3	4.9	6.1	5.8
5. Community and Personal Services	14.2	16.1	14.2	9.5	11.9	10.9
6. Tertiary Sector (3+4+5)	32.0	36.8	34.2	30.2	36.8	36.8
Total: Net Domestic Product	100.0	100.0	100.0	100.0	100.0	100.0

District Income

2.6 Appendix 2.6 and 2.7 give the estimates of net domestic product of the districts in Kerala from 1970-71 to 1979-80, at current and constant prices. Upto 1975-76, Quilon district had the highest share in the net domestic product of the State while Ernakulam district was ranked second. From 1976-77 to 1979-80, the position of the two districts had been interchanged, Ernakulam district having the highest share and Quilon district the second highest. The share of Quilon district has decreased from 12.5 per cent in 1970-71 to 11.2

per cent in 1979-80 at constant (1970-71) prices whereas the corresponding share of Ernakulam district has increased from 11.6 per cent to 13.6 per cent. Idukki district has the lowest share in the net domestic product of the State all these years.

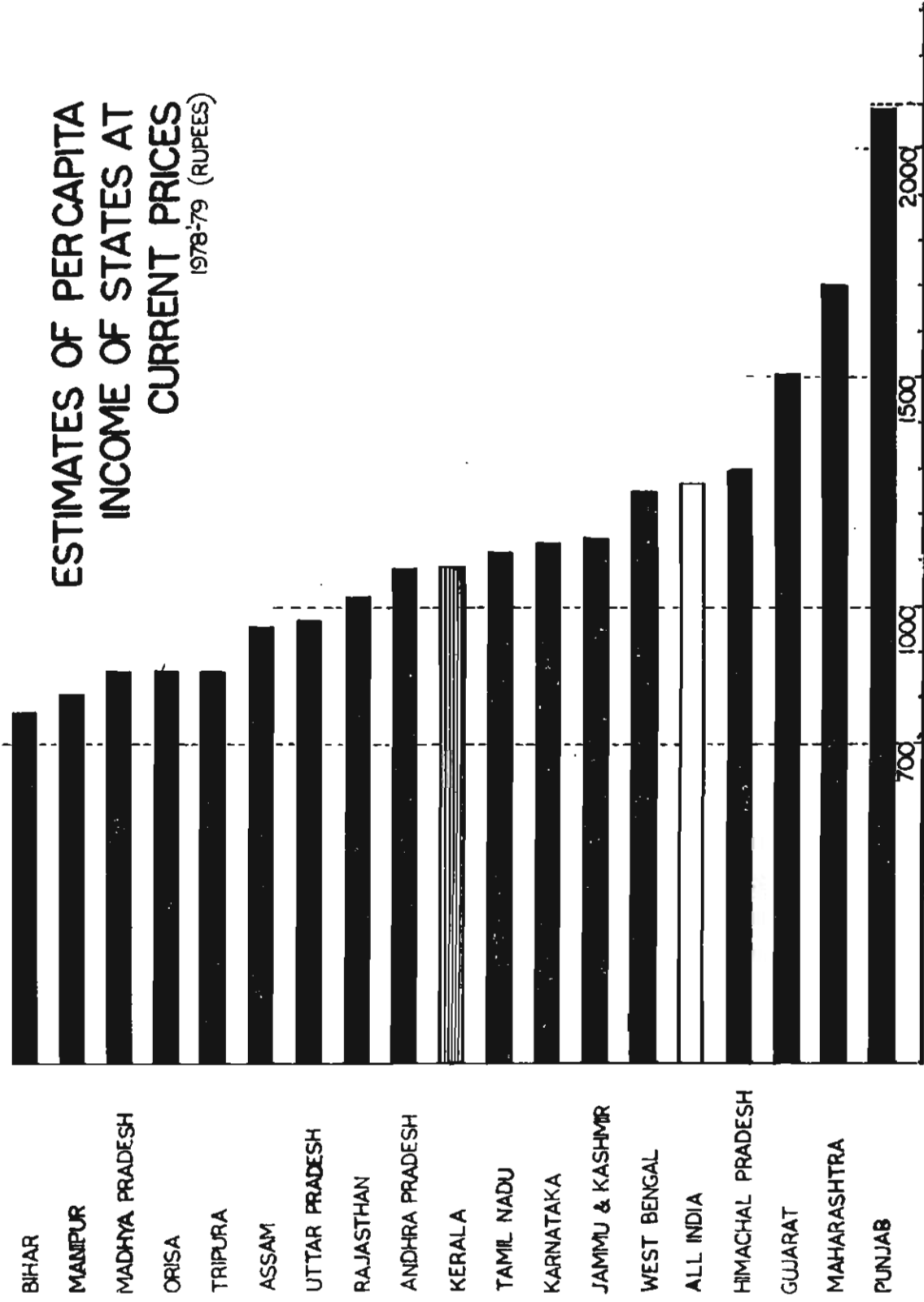
2.7 Table 2.3 shows the estimate of per capita income of the districts in the State in 1970-71 and 1979-80. In 1970-71, Ernakulam district had the highest per capita income followed by Kottayam and Quilon districts.

TABLE 2.3
Estimate of Per capita Income of Districts in 1970-71 and 1979-80

(Rs.)

District	1970-71		1979-80			
	Amount	Rank	At 1970-71 Prices		At Current Prices	
			Amount	Rank	Amount	Rank
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	549.2	7	560.3	5	1095.1	8
2. Quilon	618.4	3	559.9	6	1179.6	4
3. Alleppey	551.4	6	531.4	8	1036.7	9
4. Kottayam	623.8	2	629.3	2	1290.8	3
5. Idukki	588.3	4	602.4	3	1445.8	2
6. Ernakulam	639.8	1	741.3	1	1476.0	1
7. Trichur	523.6	9	497.4	10	988.8	10
8. Palghat	537.1	8	561.4	4	1130.2	6
9. Malappuram	421.5	11	406.6	11	832.0	11
10. Kozhikode	576.4	5	554.0	7	1167.3	5
11. Cannanore	512.3	10	505.1	9	1113.1	7
State	557.2		554.8		1141.2	

ESTIMATES OF PERCAPITA INCOME OF STATES AT CURRENT PRICES 1978-79 (RUPEES)



2.8 At current prices, Ernakulam, Idukki and Kottayam districts occupied the first three positions in the order. Malappuram district had the lowest per capita income both at current and constant prices, in all the years from 1970-71 to 1979-80. The per capita income of Trivandrum, Alleppey, Trichur, Palghat, Malappuram and Cannanore districts was less than the State average in 1970-71 and their position remained unaltered in 1979-80 also. The estimates of district-wise per capita income of Kerala at current and constant prices are furnished in Appendix 2.9 and 2.10. Appendix 2.11 and 2.12 show the ranking of districts based on per capita income at current and constant prices. It can be seen that the per capita income of the backward districts of Alleppey, Trichur and Malappuram expressed as percentage of the State average has come down during the period 1970-71 to 1979-80 showing the fact that backward districts retained their position during the seventies and the position of some of the districts worsened further.

Per Capita Income of States

2.9 The average per capita income at current prices of 19 major states in the country for two time periods, viz., the triennium ending 1971-72 and 1978-79 is presented in Appendix 2.13. Per capita income of each State expressed as percentage of the all India per capita income and their respective ranks are also given. Among the states, the rank of Kerala was 11 in the triennium ending 1971-72 and it improved to 10 in the triennium ending 1978-79. The states having per

capita income more than the all India average in the triennium ending 1971-72 maintained their position in the triennium ending 1978-79 also except Himachal Pradesh and Karnataka. Twelve states had per capita income less than the national per capita income in the first period and this number increased to 14 during the second period. Among these backward states, the position of 13 states worsened further since the percentage of their per capita income to all-India average came down between the two time periods.

Population

2.10 The population of Kerala, in 1981, according to the provisional population totals published by the Registrar General of India, was 254.03 lakhs consisting of 124.88 lakh males and 129.15 lakh females. The population of the State in 1971 was 213.47 lakhs. Thus, 40.56 lakh persons have been added to Kerala's population during the decade 1971-1981. The State has 3.71 per cent of the nation's population in 1981 as against 3.89 per cent in 1971. The population of the States in 1981, sex-ratio, growth rate and density of population are presented in Appendix 2.15.

District-wise Population

2.11 The district-wise distribution of Kerala's population, sex-ratio, growth rate and density of population in 1981 are given in Table 2.4. The newly formed Wynad district has the lowest population of 5.53 lakhs with 2.83 lakh males and 2.70 lakh females in 1981. The district had 4.14 lakh persons in 1971.

TABLE 2.4

District-wise Distribution of Population, Sex-ratio, Growth Rate and Density of Population, 1981.

District	Population 1981 (in lakhs)	Sex Ratio (Females per thousand Males)		Density of Population per sq. km.		Decadal Growth Rate of Population	
		1971	1981*	1971	1981*	1961-71	1971-81*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Trivandrum	25.91	1008	1032	1003	1182	+26.03	+17.85
2. Quilon	28.07	1001	1030	522	608	+23.93	+16.35
3. Alleppey	23.43	1028	1056	1129	1244	+17.73	+10.21
4. Kottayam	16.81	991	999	698	763	+17.13	+9.23
5. Idukki	9.71	937	964	151	192	+31.95	+26.85
6. Ernakulam	25.33	988	1000	899	1052	+27.38	+17.08
7. Trichur	24.37	1081	1102	702	804	+26.09	+14.48
8. Palghat	20.42	1056	1059	384	465	+23.06	+21.16
9. Malappuram	24.01	1041	1053	505	654	+33.80	+29.35
10. Kozhikode	22.43	1004	1022	787	969	+29.81	+23.12
11. Wynad	5.53	922	951	195	260	+50.35	+33.71
12. Cannanore	28.00	1022	1036	451	565	+32.29	+25.24
State	254.03	1016	1034	549	654	+26.29	+19.00

*Provisional

Source : Census of India, 1981, Provisional Population Totals, Series 10, Kerala, Paper 1 for 1981.

Sex Ratio

2.12 Among the Indian States, Kerala continued to have the highest sex ratio with 1034 females for thousand males in 1981 as against 1016 in 1971. There were only 935 females per thousand males in the country as a whole. Within the State, Trichur district maintained its position of having the highest sex ratio with 1102 females for thousand males (as against 1081 in 1971). The lowest sex ratio was in Wynad district with 922 and 951 females per thousand males respectively in 1971 and 1981.

Density of Population

2.13 The density of population in Kerala in 1981 was 654 persons per sq.km. as against 549 in 1971, being the highest among Indian States. In the country as a whole there were only 221 persons per sq.km. as against 177 in 1971. Alleppey district has the highest density of 1244 persons per sq.km. and Idukki the lowest with 192 persons.

Urban Percentage of Population

2.14 The urban population in the State has increased from 16.24 per cent in 1971 to 18.78 per cent in 1981 as against 20.22 per cent and 23.73 per cent respectively for India. Kerala had 3.24 per cent of the total urban population of India in 1971 and this percentage decreased to 3.05 in 1981, indicating a slower rate of urbanisation in the State. The urban content of the population of States in 1981 is given in Appendix 2.16.

Decennial Growth Rate

2.15 The growth rate of population in Kerala decreased from 26.29 per cent during the decade 1961-1971 to 19.00 per cent during 1971-1981. In India as a whole, there was only a marginal reduction in the decennial growth of population (from 24.80 per cent during 1961-1971 to 24.75 per cent during 1971-1981). Wynad district had the maximum fall in growth rate from 50.35 per cent in 1961-1971 to 33.71 per cent in 1971-1981. In Palghat district the fall in growth rate was the lowest from 23.06 per cent in 1961-1971 to 21.16 per cent in 1971-1981. During the decade 1971-1981 Kottayam district had the lowest growth rate of 9.23 per cent whereas Malappuram district had the highest growth rate of 29.35 per cent. The substantial reduction in the growth rate of Kerala's population shows that the State has been successfully implementing the family welfare programmes.

Birth and Death Rates

2.16 Table 2.5 gives the estimates of birth and death rates of Kerala thrown up by the Sample Registration Study.

4/655/MC.

TABLE 2.5

Birth and Death Rates of Kerala—1970 to 1980

Year	Births per Thousand Population	Deaths per Thousand Population	Growth Rate (%)
(1)	(2)	(3)	(4)
1970	31.6	9.2	2.24
1974	26.8	7.8	1.90
1977	25.8	7.3	1.85
1978	25.2	7.0	1.82
1979	26.8	7.2	1.96
1980*	25.5	6.4	1.91

Source : Sample Registration Bulletin, Registrar General of India
* Provisional (Rural), Directorate of Economics and Statistics, Trivandrum.

2.17 Though there was an increase in birth rate as well as death rate in 1979 over 1978, the position had improved in 1980. The birth rate decreased by 1.3 points and death rate by 0.8 point. The birth rate in Kerala in 1980 is 25 as against the all India birth rate of 33. The death rate has reached the lowest level of 6 deaths per thousand population compared to 14 deaths per thousand population in the country as a whole.

Expectation of Life at Birth

2.18 The expectation of life at birth is an overall indicator of the level of mortality of the population. It gives the number of years a child can, at the time of its birth, expect to live if current mortality trends were to continue. Life expectancy at birth in Kerala was 65.35 years in 1979 with 63.82 years for males and 66.91 years for females. Both males and females gained over 2.5 years in expectation of life at birth after 1976.

Infant Mortality Rate

2.19 Due to the widespread implementation of Mass Immunisation Programmes and the health consciousness of the people of the State, the infant mortality rate has come down considerably during the sixties and seventies. Table 2.6 gives the infant mortality rates of Kerala.

TABLE 2.6

Infant Mortality Rate of Kerala (Rural) - 1966 to 1980

Year	Infant Mortality Rate
(1)	(2)
1966	68.3
1970	52.6
1975	37.3
1976	56.3
1977	50.1
1978	42.6
1979	48.5
1980*	39.6

*Provisional

Source : Directorate of Economics and Statistics, Trivandrum.

2.20 Though an increase of 5.9 points in infant mortality rate was noticed in 1979, it has fallen by 8.9 points in 1980. The fall in infant mortality rate during the period 1970-80 was 13 points compared to 15.7 points during the period 1966-70.

Employment Situation

2.21 National Sample Survey data relating to the year 1977-78, shows that Kerala with less than four per cent of the population of India accounts for 11.09 per cent of the total unemployment and under employment. Unemployment equivalent in standard person years in Kerala was 21.3 lakhs compared with 191.7 lakhs in India as a whole. A standard person year is taken as the work put in by a person in a full year of 273 working days. It is also seen from the above survey that the rate of unemployment defined as the ratio of unemployed to the total labour force is 21.05 per cent in Kerala—the highest among the Indian States.

2.22 More recent data showing estimates of the total quantum of employment and unemployment in Kerala are not available. However, if the Live Register figures of the Employment Exchanges are any guide, the problem of unemployment in the State has aggravated considerably since 1977-78. At the end of December, 1978, there were 10.53 lakhs of persons on the Live Register of the Employment Exchanges in the State. This figure rose by fifty per cent in two years and at the end of 1980, total number of work seekers was 15.79 lakhs. There was a significant rise of over 3 lakhs in 1981 also, the Live Register as at the end of December

of the year being 19.04 lakhs. These recent trends should be viewed as an alarming indication of the rising unemployment in the State. Category-wise details from 1971 onwards are given in Table 2.7.

2.23 Over the years the Composition of work-seekers on the Live Register has undergone significant change. The proportion of work-seekers with educational qualification S.S.L.C. and above, who may be considered as educated work-seekers, has been steadily declining over the years. They formed 60.8 per cent of the work-seekers in 1970. Gradually their proportion declined to 51.5 per cent in 1980 and to 48.5 per cent by the end of December 1981. Correspondingly the percentage of work-seekers who are either illiterate or are having educational level below S.S.L.C. went up.

2.24 The number of work-seekers with professional and technical qualifications is given in Table 2.8. It is seen that there were 651 medical graduates on the Live Register compared with 871 the previous year. The number of engineering graduates on the Live Register also declined during the year. But the number of diploma holders in engineering and I.T.I. certificate holders have been steadily increasing. At the end of December 1981, there were 7,866 diploma holders in engineering and 37,039 I.T.I. certificate holders remaining on the Live Register. Similar is the case with agricultural graduates. However, the situation among graduates in Veterinary Science has improved during the last two years. As on 31-12-1981, there were only 14 veterinary graduates on the Live Register of the Employment Exchanges.

TABLE 2.7

Distribution of Work-Seekers in Kerala by Educational Levels

Period Ending	Total Work-Seekers	Below S.S.L.C.	Percentage to Total Work-Seekers	S.S.L.C.	Pre-Degree	Graduate.	Post Graduate	S.S.L.C. and above	Percentage to Total Work-Seekers
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
31-12-1970	293,754	115,504	39.25	151,279	7,469	17,703	1,994	178,450	60.75
31-12-1971	367,361	166,305	45.27	167,814	10,168	20,841	2,223	201,076	54.73
31-12-1972	453,914	194,848	42.93	218,880	16,457	20,396	3,333	259,066	57.07
31-12-1973	523,882	239,921	45.80	226,783	18,965	34,327	4,156	283,961	54.20
31-12-1974	587,935	274,620	46.80	252,423	20,075	36,947	3,870	313,315	53.20
31-12-1975	691,242	331,628	47.98	281,989	28,329	44,456	4,840	359,614	52.02
31-12-1976	753,579	344,461	45.71	315,552	38,176	49,749	5,641	409,118	54.29
31-12-1977	849,378	391,954	46.13	351,211	46,830	53,037	6,346	457,424	53.85
31-12-1978	1,052,652	494,935	47.02	434,192	56,641	57,816	9,068	557,717	52.98
31-12-1979	1,249,372	575,366	46.00	530,742	70,342	64,365	8,567	674,016	54.00
31-12-1980	1,579,164	765,141	48.50	658,652	79,310	67,841	8,220	814,023	51.50
31-12-1981	1,903,719	980,692	51.50	748,898	90,254	76,832	7,043	923,027	48.50

TABLE 2.8
Number of Professional and Technical Work-Seekers

Period Ending	Medical Graduates	Engineering Graduates	Diploma Holders in Engineering	I. T. I. Certificate Holders	Agricultural Graduates	Veterinary Graduates
(1)	(2)	(3)	(4)	(5)	(6)	(7)
31-12-1970	281	1,852	3,547	8,380	133	70
31-12-1971	405	2,068	3,450	9,894	128	116
31-12-1972	654	2,014	4,163	11,540	101	52
31-12-1973	902	2,135	3,836	10,003	80	40
31-12-1974	726	1,450	3,611	16,888	Nil	Nil
31-12-1975	809	1,850	3,990	20,163	32	117
31-12-1976	696	1,752	4,009	20,747	29	75
31-12-1977	490	1,784	3,585	21,376	78	32
31-12-1978	668	1,755	4,305	23,821	58	55
31-12-1979	691	1,395	5,507	26,345	59	63
31-12-1980	871	1,505	6,833	29,973	108	17
31-12-1981	651	1,217	7,866	37,039	103	14

Employment in the Organised Sector

2.25 Under the Employment Market Information (EMI) Programme, quarterly data on employment in the public and organised private sector is being collected. Figures available upto 30-6-1981 are given in Table 2.9.

TABLE 2.9
Employment in the Public and Private Sector in Kerala

Period Ending	Public Sector	Private Sector	Total
(1)	(2)	(3)	(4)
31-12-1970	2,93,318	4,09,562	7,02,880
31-12-1971	3,33,257	4,15,105	7,48,352
31-12-1972	3,43,837	4,23,008	7,66,845
31-12-1973	3,65,445	4,13,230	7,78,675
31-12-1974	3,75,943	4,14,477	7,90,420
31-12-1975	4,18,151	4,62,712	8,80,863
31-12-1976	4,38,183	4,83,610	9,21,793
31-12-1977	4,56,607	4,96,035	9,52,642
31-12-1978	4,71,394	5,10,206	9,81,600
31-12-1979	4,85,591	5,11,619	9,97,210
31-3-1980	4,96,659	5,26,459	10,23,118
30-6-1981*	5,00,636	5,33,356	10,33,992

*Provisional

2.26 Table 2.9 shows a marginal increase of about 1 per cent in the total employment in the public and organised private sectors. Separately for the public and private sectors also, the increases are nominal. However, it is seen that the share of public sector in total organised employment has been steadily increasing. While public sector employment as at the end of December 1970 formed only 41.7 per cent, by the end of June, 1981 it formed 48.4 per cent. Thus, public sector has been providing an increasing share of organised employment in the State.

2.27 During the year, 1980, there was a remarkable increase in the number of placings through the Employment Exchanges. As against 19265 placings in 1979, the Employment Exchanges could arrange to place 29594 persons in employment in 1980. However, in 1981, the number of placings declined almost to the 1979 level. Similar trends are observed in the case of monthly average number of employers using the employment exchanges also. The relevant data are shown in Table 2.10.

TABLE 2.10

Number of Placings Through the Employment Exchanges in Kerala

Year	Number of Placings	Monthly average Number of Employers using the Employment Exchanges.
(1)	(2)	(3)
1970	17,939	563
1971	16,537	563
1972	14,574	395
1973	13,238	463
1974	19,467	528
1975	23,878	546
1976	22,210	576
1977	16,272	501
1978	13,323	496
1979	19,265	711
1980	29,594	810
1981	19,973	766

Overseas Development and Employment Promotion Corporation Limited

2.28 The Overseas Development and Employment Promotion Consultants Limited, Trivandrum, was incorporated as a private limited company, fully owned by the Government of Kerala. This Corporation provides placement services on behalf of overseas employers. To undertake this task efficiently, the Corporation has organised a large Data Bank of skilled, semi-skilled and unskilled labour. The country-wise cumulative figures of deployment of personnel by this Corporation are shown in Table 2.11

TABLE 2.11

Country-wise Deployment of Personnel by ODEPC

Country	Number of Persons Deployed as on		
	31-12-1979	31-12-1980	31-12-1981
(1)	(2)	(3)	(4)
1. Libya	199	199	216
2. U. A. E.	169	169	169
3. Doha-Qatar	213	214	214
4. Singapore	50	50	50
5. Kuwait	276	276	355
6. Maldives	8	8	8
7. Mozambique	23	23	23
8. Bahrain	..	30	30
9. Nigeria	..	1	1
10. Saudi Arabia	..	..	125
11. Iraq	..	..	110
Total	938	970	1201

2.29 Table 2.11, shows that the Company's performance regarding the placement of personnel abroad was marginal in 1980. Only 32 persons of all categories together secured jobs in foreign countries with the assistance of this Corporation. However, there was substantial improvement in 1981, as the Company could manage to secure job opportunities for 231 persons. These persons are spread over various occupational categories such as doctors, engineers, nurses, technicians mechanics and operators of different types, construction workers, drivers, helpers etc. Upto the end of December, 1981, the Corporation has assisted 1201 persons to secure jobs abroad.

The Kerala Institute of Labour and Employment

2.30 The Kerala Institute of Labour and Employment is an autonomous body sponsored by the Government of Kerala and registered on 4th February, 1978 under the Travancore-Cochin Literary, Scientific and Charitable Societies Act, 1955. The important functions of the Institute are:

- (i) building up of basic infrastructure through the organisation of resources and facilities for the conduct of training programmes, library and research activities;
- (ii) Organisation and administration of specific training programmes, seminars, conferences, etc; and
- (iii) documentation of books and periodicals on industrial relations, employment, unemployment and related fields.

2.31 During the year, 1981 the Institute organised five training programmes for officers of the Departments of Labour and National Employment Services. Altogether, 67 officers of these Departments attended the training programmes. A detailed study of the implications and dynamics of the settlement arrived at between the head load workers and the traders of Trichur was started during the year. The Institute has also developed a library. Project reports for two research projects have been prepared and forwarded to Government for approval. It is also intended to extend the field of training to other Departments as well as industrial establishments.

PRICES AND COST OF LIVING

The National Scene*Wholesale Prices*

An effective check to inflation has been one of the foremost tasks sought to be tackled by Government. The decisions and actions of the Government in regard to production, imports, supply and public distribution continue to be governed by the essential need of moderating inflationary pressures in the country. The inflationary pressures evident in the last two years continued in 1981 also. The rate of inflation which was very high in 1980 and 1979 however recorded a marked fall during 1981.

3.2 The wholesale price index (1970-71=100) maintained a steady uptrend right from January 1981 to August 1981. In the subsequent four months there was an appreciable fall in the index. However between March and mid December 1981, the index showed only a moderate rise of 2.7 per cent against a significant increase of 10.1 per cent during the corresponding period of previous year. In 1981 the inflation rate declined to around 8 per cent as against 22 per cent in 1979 and 13.5 per cent in 1980.

3.3 The wholesale price index of all commodities during December 1981 was only 8.1 per cent higher than the level a year ago. During the previous 12 months period (1980) the index had increased by as much as 16.5 per cent. It is thus clear that there has been a deceleration in the rate of increase of prices during 1981. The price index of 'primary articles' recorded an increase of 9.6 per cent in December 1981 over its level a year ago. The rise in the price index of this major group was shared by two groups, 'food articles' and 'non-food articles'. While the prices of food articles recorded a larger price increase of 11.6 per cent, the 'non-food articles' index showed only an increase of 7 per cent. As far as agricultural commodities are concerned it is seen that the prices declined during September, October, November and December 1981. Reflecting a somewhat reduced pace of market arrivals of Kharif food-grains, particularly during the last week of December, the wholesale price showed an insignificant uptrend during the last week of December. Any how the average wholesale price index for the month is less than that for previous month. The food-grains production in the country during the year 1980 was 130 million tonnes, 20 per cent more than that in 1979. The estimated production in 1981 is 133 million tonnes, the highest ever production level attained by the

country. An improvement in the overall supply-demand position and the general price level is naturally to be expected.

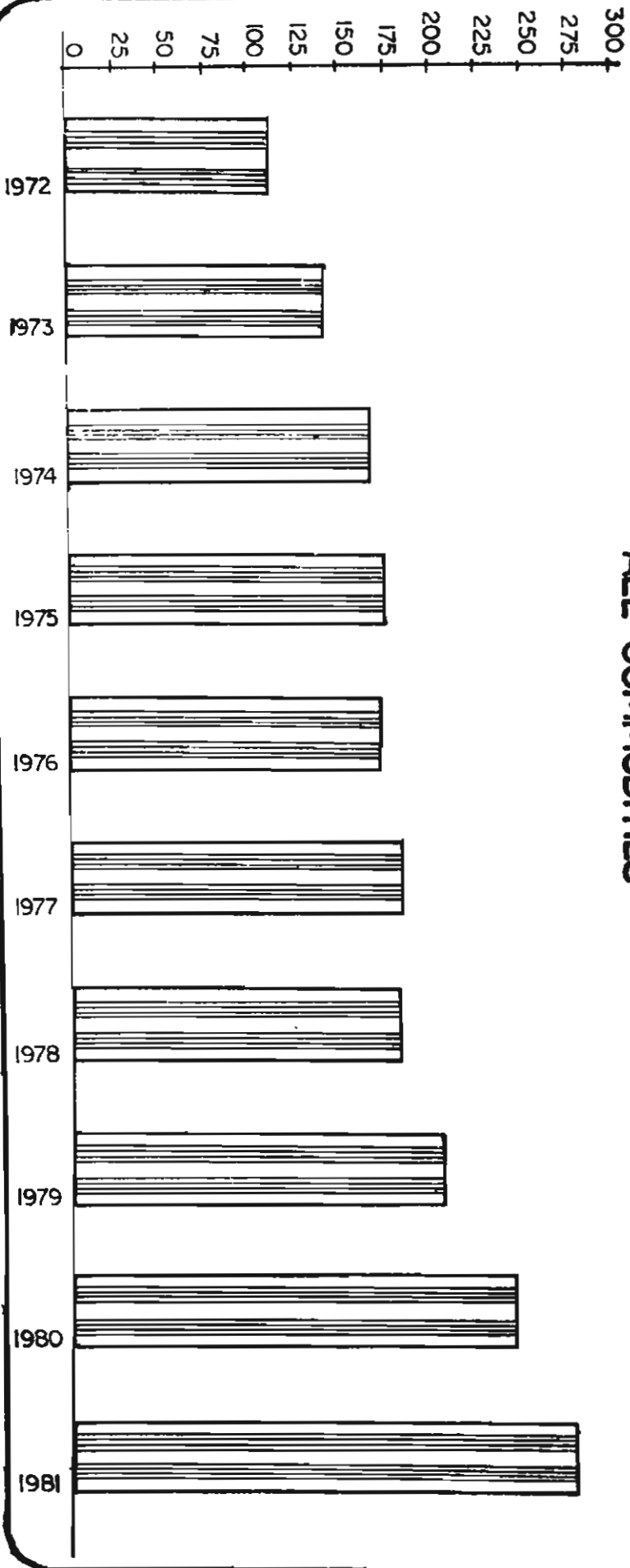
3.4 The wholesale price index of the group 'fuel, power, light and lubricants' showed a sharp increase of 22.4 per cent during the last one year period. The corresponding rise during the previous year was only 20.73. As far as the group 'minerals' concerned the wholesale price was steady from January 1980 to October 1980. It showed a fall of 2 per cent during November 1980. The crude oil production, both on-shore and off-shore, rose substantially from 9.39 million tonnes in 1980 to an estimated 14.56 million tonnes in 1981, a 55 per cent rise over the previous year. Following the commissioning of a new platform in the southern segment of the Bombay High Oil field, the daily rate of crude oil production crossed 2 lakh barrel mark on 21st December, 1981. Consequently, the crude oil production from Bombay High alone would be around 10 million tonnes in 1982-83. With rising indigenous crude oil production the imports of crude oil are expected to come down.

3.5 The prices of 'manufactured products' which accounts for 49.9 per cent of the total weight in the official index numbers of wholesale prices showed an insignificant uptrend during the first half of the year 1981 and a welcome decline during the second half of the year upto November 1981. However during December, the prices of sugar and edible oils registered an increase. Price of sugar in free market recorded a sharp rise of 20 per cent in December 1981. This is mainly because of the fact that free market release recorded a continuous sharp decline of 1.40 lakh tonnes during three consecutive months from 2.90 lakh tonnes in October 1981 to 2.00, 1.70 and 1.40 lakh tonnes respectively in January 1982. The sugar situation however showed remarkable improvement during the year under review. The festival season of the year passed off without generating much price rise in this regard. An increase of 25 per cent is estimated in the production of sugar during 1981-82 over the previous year. Production of vanaspati in October 1981 is estimated to be 25 per cent higher than that in October 1980. With assured supply or relatively cheaper imported edible oils, the vanaspati is poised for a record production during the period November 1981 to October 1982. After declining in October and November, the wholesale price of groundnut oil increased in December 1981. The price of groundnut oil

INDEX NUMBERS OF WHOLESALE PRICE ALL COMMODITIES

BASE - 1970-'71 = 100

SCALE - 1 CM. = 25



is expected to show sharp increase in coming months in 1982 due to the substantial fall in the market arrivals. Among other items the wholesale price of leather and leather products showed a downward trend throughout the year 1981, while that of rubber products, 'basic metals, alloys and metal products' and 'machinery and transport equipment' showed an uptrend. The index numbers of wholesale prices by groups and sub groups of various items together with weight for the months of the year 1981 and percentage variation over a year ago are shown in Appendix 3.1 Table 3.1 gives a comparative picture of average monthly index of all commodities for the last four years.

TABLE 3.1
Index Numbers of Wholesale Price
(1970-71=100)

Month	1978	1979	1980	1981
(1)	(2)	(3)	(4)	(5)
January	184.5	185.6	227.7	262.8
February	181.4	184.7	231.3	268.2
March	182.9	189.1	233.2	269.5
April	182.5	195.5	231.1	274.6
May	183.1	198.5	239.9	276.9
June	184.7	202.4	247.1	278.2
July	186.8	211.7	257.3	283.7
August	186.9	218.5	259.0	287.4
September	186.6	221.2	263.6	284.5
October	187.5	222.2	264.5	283.6
November	187.5	222.0	258.2	279.8
December	185.4	227.0	256.8	277.3

Consumer Prices

3.6 In November 1981 the all India consumer price index (base 1960=100) for working class reached 462 which is 12.41 per cent higher than its level a year ago. The consumer price index alone can be taken as the time indicator of inflation in our country. If we consider a longer period we find that the movements in the wholesale prices have some impact on the consumer prices also. This can be seen from the data for the last decade presented in Table 3.2.

TABLE 3.2
Movement in two indicators of Prices on Point-to-point Basis

Last Week	Wholesale prices (Base 1970-71=100)		Consumer Prices (Base 1960=100)	
	Index	%change	Index	%change
(1)	(2)	(3)	(4)	(5)
1970-71	100	..	184	..
1971-72	108.1	8.1	194	5.4
1972-73	121.1	12.8	216	11.3
1973-74	157.5	29.2	275	27.9
1974-75	174.6	10.9	321	16.7

	(1)	(2)	(3)	(4)	(5)
1975-76		162.6	-6.9	286	-10.9
1976-77		182.1	12.0	312	9.1
1977-78		182.8	0.4	321	2.9
1978-79		191.0	4.5	332	3.4
1979-80		231.9	21.4	375	12.4
1980-81		270.1	16.5	420	12.6
1981-82 (Estimate)		302.5	12.0	480	14.0
Average Annual Rate of Increase	..		10.6	..	9.1

3.7 It would be seen that over a long period of a decade the average annual rates of change in respect of both the indices are fairly close to each other (10.6 and 9.1). The wholesale price index covers largely the commodities which enter the wholesale trade of the country while the consumer price index covers items which are consumed by an average Indian working class family. So the coverage of the commodities in the two indicators is different. Beginning from January 1981, the consumer price index has been continuously increasing month after month. In October, the consumer price index for industrial workers moved up by 0.9 per cent. Between March and October 1981, the index recorded a sharp increase of 9.5 per cent against an increase of 8.9 per cent during the corresponding period of 1980. During the 12 months period from November 1980 to October 1981 the consumer price index increased by 12.47 per cent, while in the previous twelve months the corresponding figure was 11.2 per cent. The consumer price index for urban non-manual employees (base 1960 = 100) also moved up from 378 in January 1981 to 417 in August 1981, registering a rise of 10.3 per cent, almost equal to that of 10.8 per cent recorded during the corresponding period last year. The consumer price index number for agricultural labourers also showed a steady uptrend from 404 in January 1981 to 457 in September 1981. Table 3.3 shows the all India index number of consumer prices for Industrial workers (1960 = 100) from 1975-76.

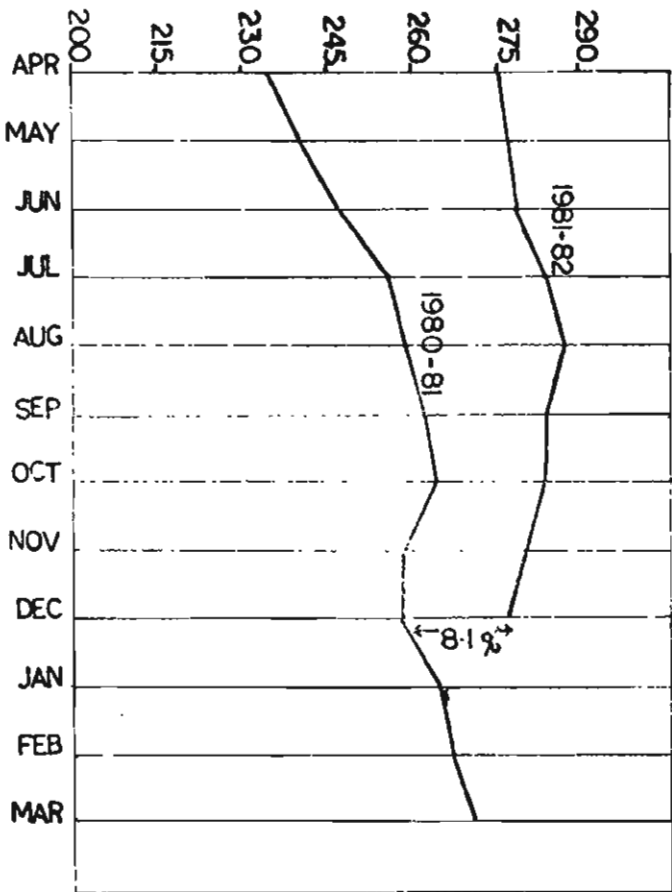
TABLE 3.3
All India Index Numbers of Consumer Prices—
Industrial Workers (1960=100)

Year	Index Number
(1)	(2)
1975-76	313
1976-77	301
1977-78	324
1978-79	331
1979-80	360
1980-81	401
October 1980	406
November 1980	411

WHOLESALE PRICES

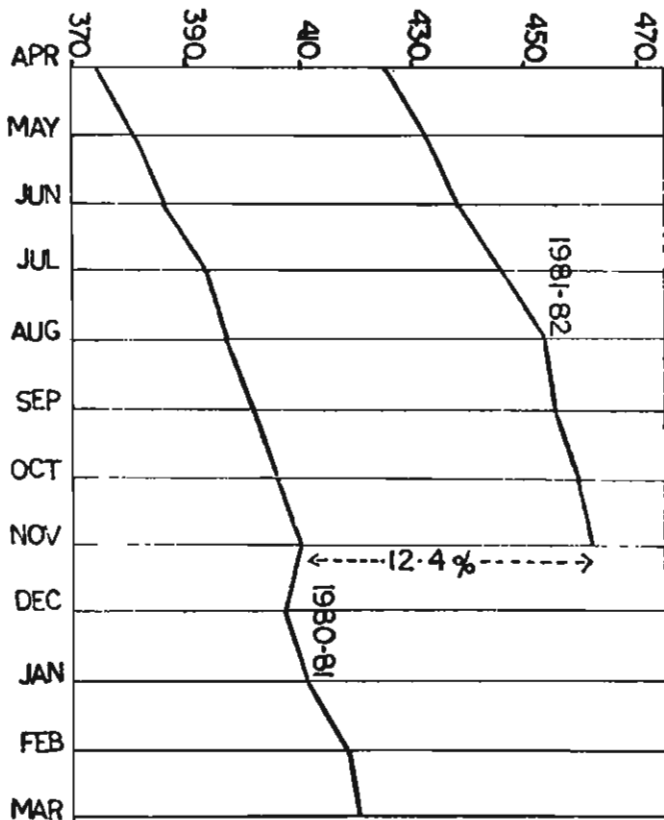
MONTHLY AVERAGES

SCALE - 1.5 CM. = 15



CONSUMER PRICES

SCALE - 2 CM. = 20



(1)	(2)
1981	
January	411
February	418
March	420
April	427
May	433
June	439
July	447
August	454
September	456
October	460
November	462

Price Situation in Kerala

3.8 The timely onset of monsoon in 1981 ensured improved crop production in Kerala during the year. This in turn had its favourable impact on the price situation. The wholesale price index of agricultural commodities as a whole in the State showed a 7.8 per cent fall during the period November 1980 to November

1981. In this group while notable price increase was recorded under 'fruits and vegetables' there was only a marginal increase in the case of plantation crops. The wholesale price index of rice was steady at 318.87 throughout the year 1981. Price of molasses showed an uptrend during the first five months of the year under review but then steadily declined and was at a minimum during November 1981. In other items of agricultural commodities like, 'condiments and spices', 'oil seeds', also registered considerable decline in the price level during the year. The trend in the movement of the index during the different months of 1981 is furnished in Appendix 3.5 and average wholesale price index for few years in Appendix 3.6. The average wholesale price index for agricultural commodities at the end of the year 1981 showed only a nominal rise of 4.3 per cent over its level at the beginning of the year. This can be seen from Table 3.4 which depicts also the wholesale price indices of these commodities for three previous years.

TABLE 3.4

Wholesale Price Index of Agricultural Commodities—Kerala (Base 1952-53=100) (Variation in Percentage)

Sl.No.	Group	1978	1979	1980	1981	1979 over 1978	1980 over 1979	1981 over 1980
(1)	(2)	(3)	(3)	(5)	(6)	(7)	(8)	(9)
1.	Foodgrains	319	319	319	319	Nil	Nil	Nil
2.	Molasses	289	384	629	606	+32.9	+63.8	-3.7
3.	Condiments and Spices	324	378	403	442	+16.7	+6.6	+9.7
4.	Fruits and Vegetables	564	518	589	728	-8.2	+13.7	+23.6
5.	Other Food Crops	360	364	388	417	+1.1	+10.6	+7.5
6.	Oil Seeds	677	648	822	819	-4.3	+26.8	-0.4
7.	Plantation Crops	308	306	331	358	-0.7	+8.2	+8.2
8.	Non-food crops	565	545	673	680	-3.5	+23.5	+1.0
	All Crops	435	430	492	513	-1.2	+14.4	+4.3

Retail Prices of Essential Commodities

3.9 The year 1981 witnessed general upward movement in the retail prices of almost all essential commodities of general consumption in the State. Although the wholesale price index of foodgrains was steady throughout the year, the retail prices of rice and other commodities showed an upward trend during the second half of the year. While the prices of a few

primary articles showed only negligible increase 'firewood' and manufactured items recorded substantial increase in prices. The monthly average retail prices of essential commodities in Kerala are shown in appendix 3.7. Table 3.5 provides the prices of some selected commodities during December 1980 and 1981 and the percentage variations over the one year period.

TABLE 3.5

Average Retail Prices of Essential Commodities—Kerala

Commodity	Unit	Price (Rs.) at the end of December		Percentage Variation 1981 over 1980
		1980	1981	
(1)	(2)	(3)	(4)	(5)
1. Rice	Kg.	2.58	3.08	+19.38
2. Greengram	"	5.42	4.88	-10.89
3. Blackgram	"	3.95	4.12	+4.30

WHOLESALE PRICE INDEX OF AGRICULTURAL COMMODITIES

KERALA (1970:79)

BASE 1952-53 = 100



(1)	(2)	(3)	(4)	(5)
4. Redgram	kg.	4.04	4.37	+8.17
5. Dhall	"	6.11	6.19	+1.31
6. Coconut oil	"	18.91	13.81	-26.97
7. Groundnut oil	"	13.13	14.83	+12.95
8. Refined oil	"	17.01	24.22	+42.58
9. Tapioca	"	0.66	0.77	+16.67
10. Banana-Green	"	2.62	2.67	+1.91
11. Milk (Cow's)	Litre	2.79	3.11	+11.47
12. Egg (Hen's)	Dozen	5.80	6.42	+10.69
13. Potato	kgs.	2.24	2.17	-3.13
14. Corriander	"	6.46	9.31	+44.12
15. Chillies	"	8.25	16.55	+100.61
16. Onion	"	1.25	2.81	+124.80
17. Sugar	"	7.30	5.96	-18.36
18. Coconut (Without Husk)	100 Nos.	159.50	125.25	-21.47
19. Firewood (Local Split)	Qtl.	36.20	40.90	+12.98
20. Washing Soap (Sunlight Bar)		2.91	2.31	-
21. Electric Bulb (Osram 40 W)	Each	9.97	4.43	+11.59
22. Aluminium Cooking Pot	kg.	31.09	39.75	+27.85
23. Baby Food (Amul)	"	26.43	32.71	+23.76

3.10 Considering the year as a whole (viz. December 1980 to December 1981) the retail prices of all commodities except sugar, coconut, coconut oil, potato and greengram showed increase. The highest rise was seen in the price of onion (124.80 per cent) closely followed by chillies (100.61 per cent). Among other items the prices of corriander (44.12 per cent) refined oil (42.58 per cent), aluminium cooking pot (27.85 per cent) and baby food (33.76 per cent) had increased substantially. The items which recorded a significant decline in prices are sugar, coconut oil, coconut and greengram. In the case of rice, the highest price (Rs. 3.59 per kg.) was recorded in May 1981. Thereafter the price gradually declined. It showed an increase of 19.38 per cent in December 1981 over the corresponding month of the previous year. Among pulses, except greengram which registered a decline of 10.89 per cent during the period under review, the prices of remaining items recorded increase. Even the price of greengram showed an upward trend up to July 1981 and only afterwards it had a sharp fall (especially in September 1981). The increase in the price of tapioca was 16.67 per cent while prices of egg and cow's milk were 10.69 per cent and 11.47 per cent respectively. In the case of firewood, there was a sharp rise of 12.98 per cent in the price. The price of this item has been steadily going up for the past few years. There was a price increase of 34 per cent during 1979 and 11 per cent during 1980 for this commodity. Slight downward tendency in firewood price was discernible in December 1981. The price of sugar also showed a substantial decline in December 1981. But it was at a peak level of Rs. 8.27 per kilogram in April 1980. Coconut and coconut oil, for which Kerala can claim major share of the production

showed a notable decrease in the prices at the end of the year under review. The price of coconut was at a maximum at the beginning of the year but showed a steady downward tendency thereafter.

Consumer Price Index

3.11 During the year 1981 the consumer price index numbers of Kerala registered an upward trend. But the variations discernible during the year were more or less similar to those during the previous year. The year 1981 was characterised by an increase in agricultural production resulting mainly from favourable monsoon, and improved supply of some of the essential commodities through the depots of the Civil Supplies Corporation. Eventhough the consumer price index of agricultural and industrial workers worked out for the various centres showed an uptrend throughout the year, if we consider the half yearly variations, the increase during the second half of the year 1981 was less than that during the first half. This shows that the rate of inflation recorded a notable fall during the second half of the year. The average of monthly cost of living index numbers of various centres in the State during January 1981 was 217 while that during June 1981 and December 1981 were 230 and 235 respectively. The increase in the index between July and December in the different centres ranged between 1 to 6 points only. The allround increase in the retail prices of essential commodities during 1981 got reflected in the consumer price indices. A comparison of the indices at the 15 centres in Kerala shows that the variation in the cost of living index during the year 1981 was highest at Mundakayam and lowest at Punalur (Table 3.6).

INDEX NUMBER OF PRICES RECEIVED AND PAID BY FARMERS - KERALA

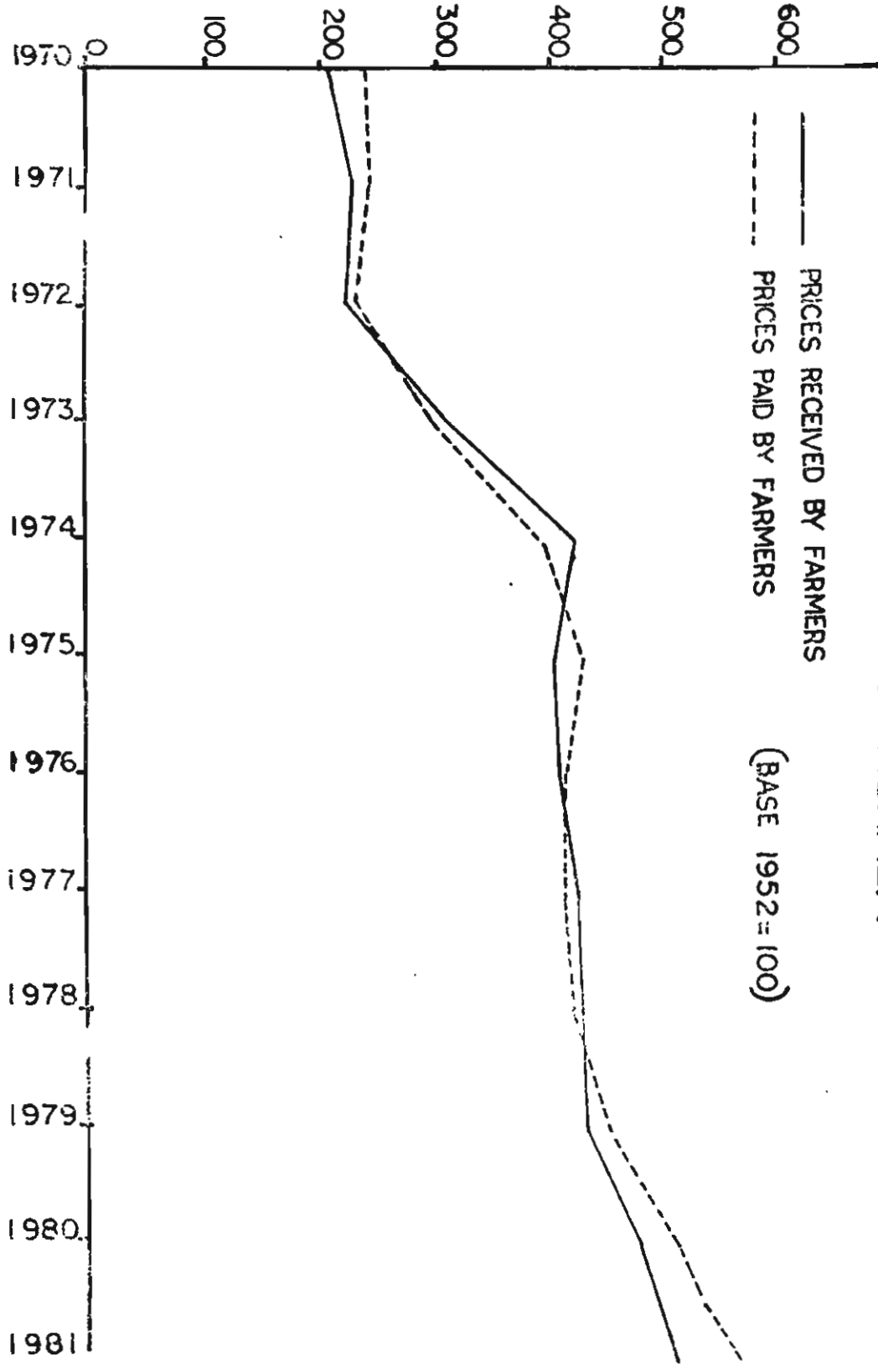


TABLE 3.6
Average Consumer Price Index (Cost of Living Index) Numbers of Agricultural and Industrial Workers—
Kerala 1981

(Base 1970=100)

Centres	Average Annual Index			Percentage variation	
	1979	1980	1981	1980 over 1979	1981 over 1980
(1)	(2)	(3)	(4)	(5)	(6)
1. Trivandrum	179	203	229	+13.41	+12.81
2. Quilon	179	204	235	+13.97	+15.19
3. Punalur	173	198	222	+14.45	+12.12
4. Alleppey	173	198	228	+14.45	+15.19
5. Kottayam	175	201	229	+14.86	+13.96
6. Mundakayam	170	192	224	+12.94	+16.67
7. Munnar	186	207	234	+11.29	+13.23
8. Ernakulam	171	195	223	+14.04	+14.36
9. Chalakudy	178	200	230	+12.36	+15.00
10. Trichur	179	205	234	+14.53	+14.14
11. Palghat	175	198	225	+13.14	+13.84
12. Malappuram	178	201	228	+12.92	+13.43
13. Kozhikode	181	203	229	+12.15	+12.81
14. Meppady	183	205	233	+12.02	+13.66
15. Cannanore	175	197	225	+12.57	+14.21
State	177	201	229	+13.56	+13.93

3.12 The variation in the indices during the 12 months of the year under review was in the range of 13 to 22 points while the corresponding range during the previous year was 20 to 26 points.

Parity Index

3.13 The index number of parity between the prices received and paid by the farmer indicates the economic gain or loss of the farmer in the context of the price fluctuations in the market. The parity index of 90 during 1981 indicated a very unfavourable situation to the Kerala farmer. While the index of prices received by the farmer went up by only 23 points in the year 1981 over the previous year the index of prices paid by farmer increased by 47 points. As in the previous year, 1981 year also witnessed an increase in both the domestic expenditure and farm cultivation cost. The abnormal increase in the cultivation cost during the year had a general adverse impact on the farming sector. Index number of prices received and prices paid by the farmers (base 1952-53=100) since 1971 are shown in Table 3.7.

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TABLE 3.7
Index Numbers of Prices received and Prices paid
by the Farmers (Base 1952-53=100)

Year	Prices received by farmers	Farm cultivation cost	Domestic expenditure	Prices paid by farmers	Parity on (2) to (5)
(1)	(2)	(3)	(4)	(5)	(6)
1971	227	278	218	246	92
1972	222	296	232	262	85
1973	308	336	280	307	100
1974	423	414	368	390	109
1975	404	454	401	427	95
1976	406	469	356	409	99
1977	421	488	347	411	102
1978	429	498	357	422	102
1979	436	535	380	451	97
1980	480	603	439	514	93
1981	503	661	476	561	90

Food Situation

3.14 The food situation was less comfortable in 1981 compared to the previous year. The per capita availability of foodgrains declined from 312 grams per day in 1980 to 298 grams per day in 1981. (See Table 3.8). Not only was the internal production of rice low but the imports of both rice and wheat into the State were also less during 1981. The internal availability of rice for consumption was estimated at 11.45 lakh tonnes during 1981 against 11.70 tonnes in the pre-

vious year. The import of rice on State account was 15.75 lakh tonnes against 16.20 lakh tonnes during this period. (See Appendix 3.9). Though there was a free flow of rice on private account this was not sufficient to ease the supply position in the slack season and consequently the price of rice in the open market was relatively high. However, the official distribution agencies including the Civil Supplies Corporation effectively intervened in the distribution of foodgrains and held the price line from getting out of control.

TABLE 3.8.
Per Capita Availability of Food in Kerala

Particulars	(Grams/day)						
	1975	1976	1977	1978	1979	1980	1981 (Provisional)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Rice from Internal Production in the State	140	137	128	130	126	126	123
2. Rice from Imports	60	103	171	180	58	175	170
3. Total Rice in the State (1+2)	200	240	299	310	184	301	293
4. Wheat from Import	60	45	24	13	4	11	5
5. Total Foodgrains (3+4)	260	285	323	323	188	312	298
6. Rice Equivalent of Tapioca within the State	222	208	196	156	149	149	150
7. Total (5+6)	482	493	519	479	337	461	448

TABLE 3.9
Imports of Foodgrains on State Account*
(in tonnes)

Month	1980		1981	
	Rice	Wheat	Rice	Wheat
(1)	(2)	(3)	(4)	(5)
January	135000	10000	135000	4000
February	135000	10000	135000	4000
March	135000	10000	135000	4000
April	135000	10000	135000	4000
May	135000	10000	135000	4000
June	135000	10000	135000	4000

3.15 The network of the public distribution system presented a commendable performance during 1981. The monthly average offtake of rice from ration dealers rose from 64126 tonnes in 1980 to 88701 tonnes in 1981 (See Table 3.10). The number of ration cards and permits possessed by families and institutions also rose during this period. Though the number of wholesale shops remained static at 265, that of retail shops increased from 10875 to 11471 (See Table 3.11). Appreciable increase was there in the quantity of sugar and kerosene distributed though there was noticeable decline in the quantity of coarse cloth allotted for distribution.

(1)	(2)	(3)	(4)	(5)
July	135000	10000	135000	4000
August	135000	10000	135000	4000
September	135000	10000	135000	4000
October	135000	4000	135000	4000
November	135000	4000	135000	4000
December	135000	4000	90000	4000
Total	1620000	102000	1575000	48000

*Allotment from Central pool only. Allotment of wheat does not include wheat to roller flour mills in Kerala.

Source : Directorate of Civil Supplies.

TABLE 3.10
Distribution of Rice and Wheat through the Public Distribution System†

Month	Rice distributed		Wheat distributed	
	(in tonnes)		(in tonnes)	
(1)	1980	1981	1980	1981
(1)	(2)	(3)	(4)	(5)
January	55655	69652	3426	3086
February	50857	74120	3009	3390
March	49121	87936	2892	3809
April	53594	88703	2604	2859

(1)	(2)	(3)	(4)	(5)
May	55909	89854	3015	4111
June	59610	86383	4060	4299
July	70131	92423	6332	4049
August	88228	90797	5496	3666
September	72866	98039	4713	2980
October	68256	91396	4566	3869
November	71918	94323	3476	3858
December	73365	100784 (p)	4090	3863(p)
Total	769510	1064410	47679	43839
Monthly average	64126	88701	3973	3653

†Quantity actually drawn by ration-card holders.
(p) Provisional.

Source : Directorate of Civil Supplies.

TABLE 3.11
Public Distribution of Essential Commodities in Kerala

Particulars	Unit	1980	1981
(1)	(2)	(3)	(4)
1. No. of Ration card and Permits (as on 1st April)			
(a) Ration Cards for Families	No.	4060178	4101965
(b) Ration Permits for institutions	No.	5572	5697
2. No. of F.C.I. Sub Depots	do.	22	22
3. No. of Wholesale shops			
(a) Cooperatives	do.	42	45
(b) Others	do.	223	220
(c) Total Wholesale shops	do.	265	265
4. No. of retail shops			
(a) Cooperatives	do.	1839	1713
(b) Others	do.	9036	9758
(c) Total	do.	10875	11471
5. Quantity of coarse Cloth (Allotted)	Std. Bales	14324.5	7401.5
6. Sugar*	M.T.	123327.4	126712.2
7. Kerosene**	M.T.	127663	135233

*Quantity actually released from mills only.

**Quantity actually issued from oil companies only.

Source : Directorate of Civil Supplies.

Procurement of Paddy

3.16 Paddy procurement in the State recorded a decline of 31 per cent in 1980-81 (July to June). The low pace of procurement is attributable to the exemption of paddy lands of 10 acres and below from

the purview of levy from April 1980. During the first five months of Calendar Year 1981 there was no procurement while in the month of June alone it was 305.6 tonnes. (See Table 3.12).

TABLE 3.12
Procurement of Paddy

Month	Quantity in Tonnes	
	1979-80	1980-81
(1)	(2)	(3)
July	18.5	51.2
August	35.7	73.2
September	3.8	20.8
October	29.8	..
November	72.4	20.5
December	69.2	20.3
January	60.3	..
February	26.7	..
March	101.5	..
April	180.6	..
May	53.9	..
June	63.7	305.6
Total	716.1	491.6

Source : Directorate of Civil Supplies

Kerala State Civil Supplies Corporation

3.17 The Kerala State Civil Supplies Corporation established with the purpose of distribution of essential commodities of good quality at reasonable price to the public, has become a decisive force in the market. Despite, its low share in the total trading activities in the State, the Corporation could positively influence the market especially during period of leading trading activity associated with festivals like Onam and Christmas, when the market price generally soar high. In 1980-81 when the price of sugar was at its peak, the Corporation intervened and released sugar to consumers at Rs. 6.25 per kg. and thus held the price from shooting up. Similarly, in April 1981, at the time of strike by lorry owners, the Corporation arranged the supply of vegetables and other essential commodities in the State.

3.18 The annual turnover of the Civil Supplies Corporation shot up by 292 per cent from Rs. 24.04 crores in 1979-80 to Rs. 94.13 crores in 1980-81. Sugar and edible oils constituted the major commodities distributed by the Corporation. The business in edible oils, sugar and rice increase several fold over the year. (See Table 3.13)

TABLE 3.13

Essential Commodities Distributed by Kerala State Civil Supplies Corporation

Item	1979-80 (4/79 to 3/80)		1980-81 (4/80 to 3/81)	
	Quantity (Tonnes)	Value (Rs. lakhs)	Quantity (Tonnes)	Value (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)
1. Wheat	19.00	0.37	..	..
2. Wheat Products:				
Produced	..	..	..	..
Purchased	3915.0	73.75	5985.5	112.74
3. Rice				
Outside State	810.0	14.07	6432.8	122.02
Within State	2216.0	69.38	16087.00	351.92
4. Pulses	904.2	318.13	274.0	6.71
5. Coconut Oil	..	..	..	..
6. (a) Palm Oil	443.7	49.65	2164.0	182.47
(b) Palmoleic Oil	182.4		14405.0	1003.05
7. Chillies	58.7	5.58	97.6	6.00
8. Corriander	28.5	0.70	116.1	5.11
9. Provisions and Other Items	..	84.00	..	136.60
10. Tapioca	..	..	..	..
11. Vegetables	..	11.00	..	34.00
12. Toilet Soap	..	5.94	..	..
13. Washing Soap	..	7.69	..	..
14. Sugar	35912.2	975.00	1256381.0	3907.00
15. Tea	118.3	15.73	5758.3	58.90
16. Baby Milk Food	..	0.09	..	..
17. Paper for Note Books	..	..	..	..
18. Uniform Cloth to Students	..	..	..	..
19. (a) Motor Spirit	2519 kl	113.00	2677 kl	143.00
(b) Highspeed Diesel	1442 kl.	26.00	735 kl.	18.00
(c) Lubricant	69 kl.	5.00	65 kl.	6.00
Total		1775.08		6093.52

Source: Kerala State Civil Supplies Corporation.

3.19 The Civil Supplies Corporation started many new ventures and entered new fields of activity during the year under review. Maveli Stores, the newly started retail outlets of the Corporation, have proved extremely popular. Essential commodities are supplied to the consumer through the Maveli Stores at reasonable prices. The experiment of Onam Market was repeated this year also with wider coverage of area and items of essential goods. Onam bazars were set up in all panchayats with the assistance of co-operative societies. For the first time, the Corporation entered the sale of textiles. During the Onam season it procured clothes from the Mills of NTC and sold them directly and through co-operatives. The Corporation could sell out nearly 80 to 85 percent of the stocks procured. On an

experimental basis, attempts were also made to bring together different public sector agencies and co-operatives from inside and outside the State in Onam fairs as well as in Christmas fairs with the object of supplying quality products of these agencies to consumers at reasonable prices.

3.20 With a view to streamline the supply of kerosene the Corporation has taken up its distribution at three centres, two in Calicut and one in Idukki. Recently the Corporation has opened an outlet for cooking gas in Calicut. The business of Indian made foreign liquor recently started by the Corporation is, however, reported to be showing less encouraging results.

CHAPTER 4

AGRICULTURE

Crop Production

The farm-oriented policies of the State such as raising the income limit for agricultural income tax, exempting foodgrains from the purview of income tax, raising the plantation area exemptable under plantation tax and exempting certain farm commodities from the purview of sales tax could not start showing effective results on the production front on account of the various constraints such as rising cost of vital inputs, excesses of monsoon and high incidence of pests during 1980-81. The marginal set back in the production index of all

crops is the outcome of the decline in production in both the foodgrains and the non-foodgrains sector. The fall in the production of foodgrains however has been more severe and causative of the little slump in the crop-production sector (See Table 4.1). In spite of the modest expansion in area the production of cereals fell short of the previous year's level due to the excess rainfall especially during the period June to September. The new emphasis given to various programmes aimed at the development of pulses, however, boosted the productivity and production of pulses.

TABLE 4.1
Index Number of Area Production and Productivity of Principal Crops in Kerala
(Base Year-Average of the triennium ending 1969-70)

Crops	Area			Production			Productivity		
	Average of 3 years 1975-76 to 1977-78	1979-80	1980-81*	Average of 3 years 1975-76 to 1977-78	1979-80	1980-81*	Average of 3 years 1975-76 to 1977-78	1979-80	1980-81*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
All Crops (A+B)	102.86	97.92	98.56	106.26	102.77	102.15	103.30	104.95	103.64
A Foodgrains (1+2)	99.42	92.10	92.77	107.18	108.18	105.93	107.80	117.46	114.19
1. Cereals	100.04	92.25	93.40	107.35	107.71	105.43	107.30	116.76	112.88
2. Pulses	86.75	81.99	82.10	95.58	142.24	142.50	110.17	173.48	173.57
B Non-Foodgrains (3 to 7)	104.65	101.12	101.61	105.99	101.17	101.04	101.28	100.05	99.44
3. Oil Seeds	102.37	98.64	99.15	86.71	79.60	79.71	84.70	80.70	80.39
4. Plantation Crops	123.31	131.08	132.95	163.23	184.09	182.74	132.37	140.44	137.45
5. Condiments and Spices	96.96	96.07	96.06	123.57	147.86	146.00	127.44	153.91	151.99
6. Fruits and Vegetables	107.35	97.13	97.21	108.25	88.17	88.60	100.83	90.78	91.14
7. Miscellaneous Crops	46.66	49.84	50.20	93.69	97.65	98.48	200.79	195.93	196.18

*Based on Provisional Estimates.

Cereals: Rice, Jowar, Ragi and other Cereals and Millets

Oil Seeds: Groundnut, Sesamum and Coconut. Plantation Crops: Tea, Coffee and Rubber.

Condiments and Spices: Pepper, Ginger, Chillies, Turmeric, Arecanut and Cardamom.

Fruits and Vegetables: Banana and Plantains, Mangoes, Citrus Fruits, Cashew, Tapioca and Sweet Potato.

Miscellaneous Crops: Lemongrass, Sugar, Cotton and Tobacco.

4.2 On the non-foodgrains sector both the production index and the productivity index moved downward though the area index registered marginal improvement. After several years of consecutive spurt, production index of plantation crops showed a decline of 1.35 points during 1980-81. It was the considerable decline both in production and productivity of tea

that contributed to the downturn in the production index of plantation crops. Marginal improvements were noticed in the area, production and productivity indices of oil seeds though these indices are far below the respective indices in the mid period of the Fifth Five Year Plan.

4.3 The production index of condiments and spices came down in 1980-81 following the decline in productivity index and area index. The indices of area, production and productivity of fruits and vegetables and miscellaneous crops registered marginal improvement. Thus during the year under review there were minor shortfalls in most of the sectors and modest progress in others. The major reason for the shortfall was the hazards of excess monsoon which destroyed a good portion of the standing crops. Compared to last year the performance of the crop sector in 1980-81 could not be considered praiseworthy.

Farm Commodity Prices

4.4 Except that of coconut and pepper, the average farm prices of most of the commodities were not wholly discouraging to the farming community during 1981. The declining trend in the price of coconut started in the first half of the year was intensified during the later months. The price of paddy registered more than 29 per cent increase during the year under review compared to the average farm price in the

previous year (See Table 4.2). The upward price trend of foodgrains at the national level on account of the rise in prices of vital inputs like fertilizers, diesel and pesticides had its reflection on the price of foodgrains in the State. In 1981, the average farm price of tapioca fell by a margin of Rs. 1.26 per quintal compared to the price level in the previous year. The farm price of pepper declined by 3.90 per cent in line with the trends in international market. Still the price of Indian pepper is highest in the international market in accordance with the decision of the International Pepper Community. Among the principal farm commodities the largest increase in price was noted in the case of ginger. The price of this commodity rose from Rs. 391.60 per quintal in 1980 to Rs. 729 per quintal in 1981. This price rise might be due to the increased internal market for the commodity. The farm price of cashew recorded 36 per cent rise in view of the hike in procurement price effected in April 1981. (See Appendix 4.1). The average farm price of sugarcane also was high with the fixation of a higher price for it at the fag end of the previous year. There were also modest improvements in the price of arecanut and banana during 1981.

TABLE 4.2

Average Farm Prices of Principal Commodities

Commodity	Unit	1980	1981*	Change over the previous year	
				Actual	Per cent
				(5)	(6)
(1)	(2)	(3)	(4)	(5)	(6)
1. Paddy	Standard para	10.12	13.07	+2.95	+29.15
2. Tapioca	Quintal	42.40	41.14	-1.26	-2.97
3. Coconut (with husk)	100 Nos.	133.33	127.03	-6.30	-4.73
4. Pepper	Quintal	1251.77	1202.93	-48.84	-3.90
5. Ginger	"	391.60	729.01	+337.41	+86.16
6. Cashewnut	"	552.95	753.81	+200.86	+36.33
7. Sugarcane	Tonnee	137.07	187.73	+50.66	+36.96
8. Arecanut	100 Nos.	6.66	8.42	+1.76	+26.43
9. Banana	100 Nos.	37.80	41.00	+3.20	+8.47

* Figures for 1981 are provisional.

Source: Directorate of Economics and Statistics.

Farm Input Prices

4.5 Farm input prices in general increased during the year 1980-81 compared to 1979-80. In the case of fertilizers both nitrogenous and potassic fertilizers registered substantial price increases, while the cost of phosphatic fertilizers did not change. Even though

the price of paddy seeds increased by 33.33 per cent at the beginning of the year, it was soon brought down to the level in previous year. Excepting soil ameliorants, pulse seeds, and clove seedlings, the prices of other inputs either remained static or showed only marginal increases. (See Table 4.3).

TABLE 4.3
Average Prices of Important Agricultural Inputs

Inputs	Unit	1979-80	1980-81	Change over the period (in per cent)	
(1)	(2)	(3)	(4)	(5)	
1. Fertilizer					
(a) Nitrogen	Urea	Rs./Kg.	1.45	2.00	+37.93
	Ammonium Sulphate	Rs./Kg.	0.90	1.65	+83.33
(b) Phosphorus	Super-phosphate	Rs./Kg.	0.89	0.89	Nil
(c) Potash	Muriate of Potash	Rs./Kg.	0.81	1.09	+34.57
2. Seeds and other Planting Materials					
(a) Paddy Seed		Rs./Quintal	150	200 (from 1-4-1980)	+33.33
				150 (from 16-5-1980)	Nil
(b) Pulses Seed Cowpea		Rs./Quintal	282	353	+25.18
(c) Green Manure Seeds					
(i) Sunhemp		Rs./Quintal	285	285	Nil
(ii) Daincha		Rs./Quintal	185	190	+2.70
(iii) Kolinji		Rs./Quintal	165	168	+1.82
(d) Coconut Seedlings					
(i) West Coast Tall		Rs./Seedling	3.00	3.50	+16.6
(ii) T x D		"	5.80	6.00	+3.4
(iii) D x T		"	5.80	6.00	+3.4
(iv) Laccadive Ordinary		"	3.00	3.50	+16.6
(e) Arecanut Seedlings			No Departmental Sale		
(f) Rooted Pepper Cuttings					
(i) Panniyoor I		Rs./cutting	0.25	0.25	Nil
(ii) Other Varieties		"	0.15	0.15	Nil
(g) Cashew Layers		Rs./Layer	0.40	N.A.	
(h) Cashew Seedlings		Rs./seedling	0.40	N.A.	
(i) Cocoa Seedlings		"	0.40	0.40	Nil
(j) Nutmeg Seedling		"	1.00	1.00	Nil
(k) Clove Seedlings		Rs./seedling	1.00	2.00	+100
3. Other Items					
(a) Soil Ameliorants					
(i) Calcium Carbonate	Bulk	Rs./tonne	20	30	+50
	Bagged	Rs./tonne	55	110	+100
(ii) Dolomite		Rs./tonne	277	N.A.	
(iii) Full Burnt Lime		Rs./tonne	N.A.	N.A.	
(b) Farm Yard Manure		Rs./tonne	N.A.	100	
(c) Wood Ash		Rs./tonne	N.A.	300	

Source: Directorate of Agriculture.

Climate

4.6 The total rain fall in the State during 1980 was 2983.3 mm. which is more or less equal to the normal annual rainfall for the State. However, its distribution over the months was not very much in favour of agriculture (See Table 4.4). The rainfall in the month of April was far in excess of the normal (more than double) while that in the following month of May was less than half the normal. An excess of rains in the

sowing season and a sub-normal moisture supply during the early growth phase of the first crop of paddy (Virippu) exerted severe stresses on the Virippu crop. This was worsened by floods caused by the South West Monsoon rains in the months of June, July and August. Again the rainfall pattern took an adverse shift from the normal from September 1980 to April 1981. The moisture stress reached its maximum during the early months of 1981.

TABLE 4.4
Average Monthly Rainfall in Kerala
(in m.m.)

Month	Average Monthly Rainfall		
	Normal	1980	1981 (Provisional)
(1)	(2)	(3)	(4)
January	18.5	..	11.3
February	19.3	21.9	9.6
March	46.4	0.6	22.9
April	115.6	260.5	88.6
May	245.0	102.0	
June	672.8	750.0	
July	686.4	773.4	
August	422.6	441.1	
September	242.0	150.8	
October	306.9	268.5	
November	190.9	175.4	
December	51.2	39.1	
Total	3017.6	2983.3	

Source : Directorate of Economics and Statistics.

4.7 The heavy rains of the South-West Monsoon took a big toll by way of crop damages due to floods during 1980-81 accentuated by cyclones, land slides, and sea-erosion. The estimates of the Department of Agriculture revealed that an area of 8,166 ha. under rice crop was fully damaged while 31,011 ha. of rice suffered partial damage. Breaches of bunds and silting up of paddy fields affected 2,409 ha. Out of an affected area of 5,978 ha. under banana, the crop in 562 ha. was fully damaged while the rest suffered partial damage. Tapioca crop was damaged fully in 763 ha. and partially in 160 ha. Vegetables over an area of 83 hectares were damaged. The perennial crops uprooted due to the floods and other natural calamities included

7,276 numbers of bearing coconut and 3763 numbers of bearing arecanut trees. The loss in terms of production due to the crop damages in 1980-81 is estimated by the Department of Agriculture as 35,407 tonnes of rice, 40.28 lakh bunches of banana, 10,116 tonnes of tapioca, 1,660 tonnes of vegetables, 2.55 lakh coconuts and 1.5 million arecanuts. In financial terms the loss is of the order of Rs. 9.90 crores.

4.8 Relief measures given out to the affected farmers and agricultural labourers by Government through the Department of Agriculture included free supply of seeds and planting materials, subsidies on agricultural inputs, subsidies for repair of bunds, desilting, de-watering etc., and payment of compensation for various kinds of damages according to the severity of losses. Apart from a total amount of Rs. 50.51 lakhs distributed as Central Assistance towards the relief measures the State Government have additionally distributed 93.948 tonnes of High Yielding Variety paddy seeds (worth Rs. 2.61 lakhs) free of cost to farmers.

Land Use Pattern

4.9 The provisional data on land use for 1980-81 do not show noticeable change in the land use pattern in the State. There is a decline of 4,926 hectares in the area of land put to non-agricultural uses. The net area sown increased by a margin of 0.22 per cent and the area sown more than once increased by 0.23 per cent. (See Table 4.5). The total cropped area in the State expanded by 6,364 hectares. The intensity of cropping is comparatively high in the districts of Palghat, Trivandrum and Alleppey and remained at 1.30 at State level as in the previous years (See Appendix 4.3)

TABLE 4.5
Land Use Pattern in Kerala

Classification of Land	(Area in hectares)				
	1979-80		1980-81*		Change over Previous Year
	Actual	Per cent	Actual	Per cent	
(1)	(2)	(3)	(4)	(5)	(6)
1. Total Geographic Area	3885497	100.00	3885497	100.00	..
2. Forest	1081509	27.84	1081509	27.84	..
3. Land put to Non-Agricultural Uses	263497	6.78	258571	6.66	-4926
4. Barren and Uncultivable Land	78187	2.01	78187	2.01	..
5. Permanent Pastures and Grazing Land	5630	0.14	5630	0.14	..
6. Land under Miscellaneous Tree Crops	65502	1.69	65776	1.69	..
7. Cultivable Waste Land	125015	3.22	125015	3.22	+274
8. Fallow (Other than current Fallow)	27684	0.71	27609	0.71	..
9. Current Fallow	43384	1.12	43287	1.11	-97
10. Net Area Sown	2195089	56.49	2199913	56.62	+4824
11. Area Sown More than once	658966	16.96	660506	17.00	+1540
12. Total Cropped Area	2854055	73.45	2860419	73.62	+6364

* Figures are provisional.

Source: Directorate of Economics and Statistics.

Area Under Crops

4.10 The area under most of the crops registered marginal increase during the year 1980-81. (See Table 4.6). Contrary to the previous years' experience the largest increase (8433 ha) took place in the case of rice. Coconut maintained the increasing trend by adding 3559 ha. more in 1980-81 to the total area under this crop. Area under cashewnut increased by 2286 ha. Other crops which registered increases in area are rubber (439 ha.) Tapioca (420 ha.) groundnut (377 ha.), Cotton

(105 ha.) arecanut (66 ha.), banana and plantains (54 ha.) Pulses (47 ha) sugarcane (34 ha.) and tea (28 ha.) Excepting rice notable increases in area are in the case of the perennial crops like coconut and cashewnut. The rising trend in the crop area noticed under these crops might be due to the impact of the World Bank assisted projects which are being implemented in the State. Unlike in the previous year, the decline in area under some of the crops noticed in 1980-81 does not give cause for concern.

TABLE 4.6
Area Under Principal Crops in Kerala

Crop	1979-80	1980-81	(In hectares)	
			Change over the Previous Year	
			Actual	Per cent
(1)	(2)	(3)	(4)	(5)
1. Rice	793266	801699	+8433	+1.06
2. Ragi	1394	1394	..	..
3. Pulses	34885	34932	+47	+0.13
4. Sugarcane	7790	7824	+34	+0.43
5. Pepper	105817	105767	-50	-0.04
6. Ginger	14128	14118	-10	-0.07
7. Turmeric	4004	3988	-16	-0.39
8. Cardamom**	56376	56376	..	..
9. Cocoa	20238	20238	..	..
10. Arecanut	60858	60924	+66	+0.10
11. Coconut	662657	666216	+3559	+0.53
12. Cashewnut	139917	142203	+2286	+1.63
13. Banana and Plantains	49558	49612	+54	+0.10
14. Tapioca	243763	244183	+420	+0.17
15. Sweet Potato	4964	4935	-29	-0.58
16. Groundnut	12671	13048	+377	+2.97
17. Sesamum	17607	17257	-350	-1.98
18. Cotton	5247	5352	+105	+2.00
19. Tea**	36097+	36125+	+28	+0.08
20. Coffee	57949	57949	..	..
21. Rubber**	215474	219866	+439	+2.04

Note.—Figures for 1980-81 are provisional.

** Commodity Board Estimates
+ Figures relate to 1979 and 1980 respectively.

Source: Directorate of Economics and Statistics.

Crop Production

4.11 Crop production in 1980-81 presents a picture different compared to the previous year. Unlike in the previous year, rice production in the State registered

a fall of 2 per cent. The highest percentage decline in production (9.74 per cent) is seen recorded under tea in the plantation sector, followed by Cardamom (16.06 per cent), sesamum (1.94 per cent) and pepper

(1.06 per cent). Marginal decline in production has been noted in the case of turmeric. However it is encouraging to note that crops like coconut, arecanut, cashewnut, banana and plantains, sugarcane, ginger, sweet potato, groundnut etc. which recorded a decline in production

during 1979-80 have all registered increase in production during 1980-81. In the plantation sector rubber production increased by 2.86 per cent. Tapioca, pulses, cotton etc. have maintained the increasing trend in their production. (See Table 4.7)

TABLE 4.7
Production of Principal Crops in Kerala

Crop	Unit	1979-80	1980-81	Change over Previous year	
				Actual	Per cent
(1)	(2)	(3)	(4)	(5)	(6)
1. Rice	Tonne	1299695	1271962	-27733	-2.13
2. Ragi	"	1082	1082	..	..
3. Pulses	"	23443	23486	+43	+0.18
4. Sugarcane	"	45769	46156	-387	-0.85
5. Pepper	"	28903	28597	-306	-1.06
6. Ginger	"	35825	35852	+27	+0.08
7. Turmeric	"	7660	7650	-10	-0.13
8. Cardamom**	"	3300	3100	-200	-6.06
9. Arecanut	Million Nuts	10829	10834	+5	+0.05
10. Coconut	"	3032	3036	+4	+0.13
11. Cashewnut	Tonne	82763	83108	+345	+0.42
12. Banana & Plantains	"	309914	311772	+1858	+0.60
13. Tapioca	"	4088916	4109697	+20781	+0.51
14. Sweet Potato	"	31992	32089	+97	+0.30
15. Groundnut	"	11202	11418	+216	+1.93
16. Sesamum	"	4582	4493	-89	-1.94
17. Cotton	Bales of 170 kg.	8303	8635	+332	+4.00
18. Tea**	Tonne	58225@	52551@	-5674	-9.74
19. Coffee	"	30176	30176	..	..
20. Rubber**	"	136619	140522	+3903	+2.86

Note.—Figures for 1980-81 are provisional.

** Commodity Board Estimates

@ Figures relate to 1979 and 1980 respectively.

Source: Directorate of Economics and Statistics.

Productivity of Crops

4.12 Among the seasonal/annual crops rice and groundnut registered decline in productivity by 3.11 per cent and 1.02 per cent respectively during 1980-81, while ginger, turmeric, tapioca, sweet potato, cotton, banana and other plantains registered improvement in productivity of varying levels compared to the previous

year. Among the perennial crops, even though total production of coconut, arecanut, and cashewnut went up in 1980-81, the productivity of these crops continued to decline. The largest percentage decline in productivity was seen registered by tea (9.8 per cent) followed by cardamom (5.17 per cent), cashewnut (1.18 per cent) and pepper (1.10 per cent). (See Table 4.8)

TABLE 4.8
Productivity of Principal Crops in Kerala

Crops	Unit	1979-80	1980-81*	Change over Previous Year	
				Actual	Per cent
(1)	(2)	(3)	(4)	(5)	(6)
1. Rice	Kg./ha.	1638	1587	-51	-3.11
2. Ragi	"	776	776	..	..
3. Pulses	"	672	672	..	..
4. Sugarcane (Gur)	"	5875	5899	+24	+0.41
5. Pepper	"	273	270	-3	-1.10
6. Ginger	"	2536	2539	+3	+0.12
7. Turmeric	"	1913	1918	+5	+0.26
8. Cardamom	"	58	55	-3	-5.17
9. Arecanut	Nos./ha.	177938	177828	-110	-0.06
10. Coconut	"	4576	4557	-19	-0.41
11. Cashewnut	Kg./ha.	591	584	-7	-1.18
12. Banana and Plantains	"	6259	6284	+31	+0.50
13. Tapioca	"	16774	16830	+56	+0.33
14. Sweet Potato	"	6445	6502	+57	+0.88
15. Groundnut	"	884	875	-9	-1.02
16. Sesamum	"	260	260	..	..
17. Cotton	"	269	274	+5	+1.86
18. Tea	"	1613	1455	-158	-9.80
19. Coffee	"	521	521	..	..
20. Rubber	"	634	639	+5	+0.79

* Based on Provisional Estimates.

Rice Production

4.13 The production of rice in the State has registered a decline by 2 per cent during 1980-81, despite the fact that area under the crop has gone up by 1.06 per cent. The year 1980-81 in general has not been quite favourable to rice production in the State. The Virippu (autumn) crop for example experienced a fall in production by 13957 tonnes mainly due to damages caused by the South West Monsoon floods. Productivity in the Virippu season also has declined by 2.70 per cent. In the case of Mundakan (winter) crop the production went up by 4.19 per cent, evidently due to an increase in area under this crop during the year but productivity remained static. The partial damage to Virippu crop in the previous season might

have influenced the expansion of area under the ensuing Mundakan crop. Production of rice during the third crop Punja season (summer) registered the largest fall amounting to 35,815 tonnes of rice (17.43 per cent) mostly due to a steep fall in productivity (11.58 per cent) as well as decline in area (6.61 per cent). The severe moisture stress and spell of drought that prevailed during the summer apparently might have contributed to the simultaneous fall in area, production and productivity of this crop in 1980-81. However, the overall rice production viz., 12.72 lakh tonnes of rice in 1980-81, has to be viewed in the context of a severe loss of 35,407 tonnes of rice due to natural calamities and a fall in the total off-take of fertilizers in the State during the year.

TABLE 4.9
Area, Production and Yield of Rice in Kerala

Season	Area in Hectare		Change in Area over the Previous Year (Per cent)	Production in tonnes		Change in Production over the previous year (per cent)	Yield in Kg/ha.		Change in the Previous Year (per cent)
	1979-80	1980-81*		1979-80	1980-81*		1979-80	1980-81*	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Virippu	348373	349243	+0.25	567703	553746	-2.46	1630	1586	-2.70
(Autumn)	(43.92)	(43.56)		(43.68)	(43.54)				
Mundakan	339608	354132	+4.28	526461	548500	+4.19	1550	1549	-0.06
(Winter)	(42.81)	(44.17)		(40.51)	(43.21)				
Punja	105285	98324	-6.61	205531	169716	-17.43	1952	1726	-11.58
(Summer)	(13.27)	(12.27)		(15.81)	(13.34)				
Total	793266 (100)	801699 (100)	+1.06	1299695 (100)	1271962 (100)	-2.13	1638	1587	-3.11

* Provisional estimates

Note: Figures in brackets indicate percentage to total.

Source: Directorate of Economics and Statistics.

High Yielding Varieties of Rice

4.14 The performance of the high yielding varieties of rice in Kerala during 1980-81 was not encouraging. The total area coverage under HYV during the year according to the data of the Directorate of Economics and Statistics was only 2.79 lakh hectares as against 2.82 lakh hectares in 1979-80 (See Table 4.10). The area coverage under HYV in 1980-81 declined by 4.4 per cent during Virippu season and by 7.28 per cent in Punja season while the Mundakan season registered an increase by 9.25 per cent. Probably the adverse weather conditions (viz. floods during the Virippu season and severe moisture stress during the summer season) might have dissuaded farmers from taking to high yielding varieties during the year. On the production side, compared to the previous year, the HYV production of rice registered a decrease of 8.55 per cent. An inter-seasonal analysis of the production of HYV reveals that Virippu and Punja crops registered decline in production by 13.08 per cent and 13.65 per cent respectively during 1980-81. The increase in production of HYV during the Mundakan season is not anyway proportional to the area increase under HYV noticed during this season. The productivity of HYV of rice in general was low for all the seasons, compared to the previous year. The overall share of HYV to total area and production of rice in the State also has shown a small set back during the year.

TABLE 4.10

High Yielding Varieties of Rice in Kerala*

Season	1979-80	1980-81	Proportion of HYV to Total Rice (Per cent)	
			1979-80	1980-81
(1)	(2)	(3)	(4)	(5)
Area in Hectare				
Virippu	142537	136236	40.92	39.01
Mundakan	84565	92391	24.90	26.09
Punja	55112	51098	52.85	51.97
Total	282214	279725	35.58	34.89
Production in Tonnes				
Virippu	324534	282070	57.17	50.94
Mundakan	168939	175238	32.09	31.95
Punja	118059	101941	57.44	60.07
Total	611532	559249	47.05	43.97
Average Yield in kg./ha.				
Virippu	2277	2071		
Mundakan	1998	1897		
Punja	2142	1995		
Total	2167	1999		

* Based on provisional estimates.

Source: Directorate of Economics and Statistics

Development Programme

4.15 One of the significant steps taken during 1980-81 was the introduction of the Kerala Agricultural Extension Project (KAEP) with assistance from World Bank in the districts of Trivandrum Quilon and Alleppey. The main thrust of this programme is the effective transfer of technology to the farmers' fields through regular, systematic, scheduled visits and training of the farmers by the Village Extension Workers. As a prelude to this, 325 agricultural demonstrators of the Department of Agriculture were deputed for pre-service training of 6 months duration to three Institutions of the Kerala Agricultural University during 1980-81.

4.16 The intensive efforts for coconut development initiated during 1979-80 contributed to the tremendous progress during 1980-81. The massive programme for spraying against coconut leaf diseases which was implemented with the help of the local bodies could achieve a coverage of 81 lakh trees as against 19 lakh trees only in the previous year recording an increase of 336 per cent. Despite the fact that there was price increase for fertilizers the consumption of fertilisers under the coconut package programme in the State during 1980-81 went up significantly. The N. P. K. off-take registered an increase of 21 per cent, 10 per cent and 58 per cent respectively, the ratio approximately tending towards 8:4:16. Eventhough the loan off-take through co-operatives under the coconut package programme suffered a set-back, the filter points established, filter points connected with pumpsets, and the number of wells dug registered significant progress, thereby strengthening the irrigation infrastructure. Under the new scheme for Comprehensive Coconut Development, 2.168 lakh diseased and uneconomic trees were cut and removed against 4.201 lakh trees identified for removal in selected areas. A total amount of Rs. 162.60 lakhs was paid by way of compensation to the farmers in this regard.

4.17 The development activities initiated during 1979-80 for extending intensive economic support for the uplift of scheduled castes/scheduled tribes were pursued vigorously during 1980-81. Apart from distributing 3 lakh coconut seedlings, 2.4 lakh cocoa seedlings, 15 thousand clove seedlings, 14.8 thousand kgm. ginger seeds, 13 thousand nutmeg seedlings, 3.35 lakh pepper cuttings, 29 thousand banana suckers, 29 thousand coffee seedlings, 11.65 thousand kg. of pulses seeds, 13 thousand cashew seedlings and one thousand mango grafts free of cost, fertilizers worth Rs. 17.74 lakhs and chemicals worth Rs. 1.74 lakhs were also supplied free of cost to SC/ST. farmers during the year 1980-81. Agricultural equipments and implements supplied free of cost to these sections of farmers included 190 knapsac sprayers, 10.7 thousand

sickles, 2 thousand felling knives, 1,157 pickaxes and 6 thousand bill hooks. The programmes specifically directed towards this sector have benefited a total number of 80,600 scheduled caste/scheduled tribe families residing in 1823 colonies in 1980-81. The total assistance that flowed to this sector during the year came to Rs. 55 lakhs.

4.18 The weaker sections of the farming community consisting of the marginal farmers, Kudikidappukari, and assignees of surplus lands under the Land Reforms Act whose annual income does not exceed Rs. 2,400 were also taken care of through a special scheme aimed at their welfare. Through this Scheme, planting materials, fertilizers and plant protection chemicals were supplied to them at 50 per cent subsidy. This programme could extend a total assistance of Rs. 9.32 lakhs benefiting 22,576 families during the year.

4.19 Under the seed procurement and distribution programme which is one of the supporting programmes for high yielding variety coverage under paddy, an area of 338 hectares alone could be brought under registered growers as against a target of 1011 ha., during 1980-81. A quantity of 10.63 tonnes of seeds were procured. However, the total quantity of HYV seed of paddy distributed to farmers through departmental and other sources registered an increase of 12 per cent compared to previous year. The area coverage under HYV during the year according to the departmental estimates is 3.96 lakh ha.

4.20 The total fertilizer consumption in the State declined by 7.65 per cent during 1980-81, the declining trend being maximum for N followed by P and K in that order. It is significant to note that the price of urea (nitrogenous fertilizer) went up by 38 per cent while that of muriate of potash (potassic fertilizer) increased by 35 per cent during this period.

4.21 Under plant protection activities, the area coverage showed marginal increase, while the area under seed treatment and quantity of seeds treated during the year declined by 23 per cent. The lesser off-take of fungicides and larger off-take of insecticides during the year suggest that there was only a lower incidence of plant diseases while the insect pest attack on crops was considerably high in 1980-81. The significantly higher off-take of weedicides is an indication of more farmers taking to control of weeds by application of chemicals. Rodent control activities seems to have slowed down during the year. Distribution of plant protection equipment to farmers at subsidised cost (subsidy 25 per cent) continued during the year and a total number of 3,897 Knapsac sprayers, 2,696 rocker sprayers, and 92 power sprayers were distributed against a target of 4,750, 2,710 and 110 respectively in 1980-81.

4.22 The supply of quality planting materials in general shows that rooted pepper cuttings topped the list by registering an off-take of 26.58 lakh numbers in 1980-81 as against 14.54 lakh numbers in 1979-80; the increase being 85 per cent over the previous year. However further analysis shows that the off-take of the variety Panniyur-I has declined marginally while the tremendous increase in total off-take is accounted for by a trebling of the off-take of other varieties of rooted pepper cuttings. Coconut seedlings have maintained the increasing trend in off-take by registering an increase of 27 per cent over the previous year, the increased off-take being shared by all varieties. Distribution of seedlings of other perennial crops like cashew, cocoa, nutmeg and cloves has witnessed a sharp decline in 1980-81.

TABLE 4.11
Selected Indicators of Agricultural Development

Programme	Unit	1979-80	1980-81
(1)	(2)	(3)	(4)
1. Fertilizer Consumption			
(a) Nitrogen	Tonnes	46340	41697
(b) Phosphorous	"	25402	23402
(c) Potash	"	33873	32432
Total		105615	97531
2. Plant Protection			
(a) Seeds Treated	Tonnes	6888	5288
(b) Area Under Seed Treatment	Lakh ha.	0.861	0.662
(c) Fungicides (Liquid + Solid in terms of Technical Grade)	Tonnes	391.57	304.17
(d) Insecticides (Liquid + Solid in terms of Technical Grade)	"	450.50	615.76
(e) Weedicides (in terms of Technical Grade)	"	28.20	153.62
(f) Rodenticides (in terms of Technical Grade)	"	22.00	18.52
(g) Area under Plant Protection Coverage	Lakh ha.	9.455	10.981
(h) Rodent Control Operation	"	1.580	0.630
(i) Biological Control of Nephantis Serinopa-Parasites Liberated	Lakh Nos.	217.244	262.59
(j) Trees Sprayed for Control of Coconut leaf Diseases	"	18.526	80.774
3. High Yielding Seeds			
(a) HYV Seeds of Paddy Distributed from State Seed Farms and Other Government Agencies	Tonnes	1230.56	1376.42

Source: Department of Agriculture

	(1)	(2)	(3)	(4)
(b) Coverage of HYV Including Natural Spread	Lakh ha.		3.62	3.96*
4. Quality Planting Materials Distributed				
(a) Coconut Seedlings	Lakh Nos.		13.716	17.395
(i) West Coast Tall	"		7.676	9.265
(ii) T x D Hybrid	"		4.040	4.931
(iii) D x T Hybrid	"		0.145	1.180
(iv) Laccadive Ordinary	"		1.843	1.957
(v) Other Varieties	"		0.012	0.062
(b) Rooted Pepper Cuttings	"		14.543	26.580
(i) Panniyoor I	"		9.040	8.320
(ii) Other Varieties	"		5.503	18.260
(c) Cashew Layers	"		0.25	N. A.
(d) Cashew Seedlings	"		18.357	12.549
(e) Cocoa Seedlings	"		14.763	5.855
(f) Nutmeg Seedlings	"		0.308	0.241
(g) Clove Seedlings	"		0.953	0.694
5. Farmers' Training Programme				
(a) Farmers Trained in Specialised Courses	Nos.		95	98
(b) Special Group Discussions held	"		14	18
(c) Training Groups Organised	"		491	478
6. I. P. D. Programmes				
(a) I. P. D. Units	"		529	529**
(b) Area Covered	Lakh ha.		2.48	2.61
7. Coconut Package Programme				
(a) Coconut Package Units (C. P. U.)	Nos.		187	187
(b) Area covered under C.P. U. '000 ha.			93.5	93.5
(c) Demonstrations Organised	Nos.		1870	2000
(d) Fertilisers Distributed				
(i) Nitrogen	Tonnes		9962	12041
(ii) Phosphorus	"		5870	6471
(iii) Potash	"		15088	23821
(e) Medium Term Loans Distributed (through Co-operative Societies)				
(f) Filter Points Established	Nos.		105	242
(g) Filter Points Connected with Pump Sets	"		105	242
(h) Wells Dug	"		8646	8912
(i) Area Benefited by Wells Dug	ha.		19140	23167
8. Rejuvenation of Diseased and Unproductive Coconut Plantations				
(i) Area Covered	"		46568	20373
(ii) Seedlings Distributed	Nos.		156461	27833±

** 151-IPD Units were abolished and merged to K.A.E.P. on 20-1-1981.

* Assessed by Department of Agriculture.

	(1)	(2)	(3)	(4)
9. <i>Survey and Surveillance Programme</i>				
(a) Units Established/Working	Nos.		150	150
(b) Area Protected	Lakh ha.		4.125	7.850
10. <i>Short Term Loans—Amount Distributed</i>		Rs. lakhs	236.25	210.33
11. <i>Cashew Plantation Scheme</i>				
(a) Area Covered	Ha.		7821	873
(b) Amount Disbursed as Subsidy	Rs. ' 000		2722	897
12. <i>Free Supply of Pumpsets to Panchayats</i>		Nos.	23	19
13. <i>Tapioca Package Programme—Demonstration Plots Laid Out</i>				
(a) Pure Crops	"		446	4
(b) Inter Crops	"		833	N.A.
14. <i>Pulses Development</i>				
Pulses Seeds Distributed	Tonnes		138.5	159.16
15. <i>Other Items</i>				
(a) Soil Samples Analysed	Lakh Nos.		1.148	1.240
(b) Distribution of Soil Ameliorants				
(i) Calcium Carbonate	Tonnes		6925	5169
(ii) Full Burnt Lime	"		NA	NA
(iii) Dolomite	"		1435	NA
(iv) Area Covered	Ha.		7803	6461
(c) Green Manure Seeds Distributed	Tonnes		244	161

Source: Directorate of Agriculture

Kerala Agricultural Development Project

4.23 The Kerala Agricultural Development Project (KADP) the first World Bank assisted project in the State, envisaging a total financial outlay of Rs. 62 crore s over a period of seven years from 1977-78, pursued its main objective of improvement of the productivity of major crops with emphasis on the improvement of the economic status of the small holders. The programmes implemented through 105 package units of 500 ha. each in the districts of Trivandrum, Malappuram, Kozhikode, Cannanore, Kottayam, Idukki and Wynad included rehabilitation of coconut gardens, new planting of coconuts rehabilitation of pepper gardens, development of irrigation in coconut areas, intercropping in rehabilitated coconut areas (irrigated) with cocoa and fodder, and development of dairying in fodder intercropped areas. Under the Small Holder Farm Development Programme the response from farmers was comparatively better in the case of pepper rehabilitation programme where the achievement during 1980-81 exceeded the target fixed for the year. Maintaining the previous year's trend coconut new planting

programme closely followed the pepper rehabilitation programme in farmer-participation rate. Though the achievement under coconut new planting programme in physical terms is only 86 per cent of the target set for the year 1980-81, compared to the previous year, the performance has shown improvement. Despite continued efforts, the response of farmers towards the coconut rehabilitation programme is still poor. The achievement under this programme during 1980-81 was only 37 per cent of the target set. However, compared to the previous year's performance the achievement in physical terms have more than doubled. Viewed from another angle, a disquieting feature is that the progressive total achievement under these three major programmes of KADP is far behind the scheduled cumulative target (achievement being 65 per cent, 50 per cent and 21 per cent in the case of pepper rehabilitation, coconut new planting and coconut rehabilitation respectively). One of the constraints pointed out is the lack of placement and continuity of field staff. For instance the vacant posts in March 1981 amounted to 32 (31 per cent) posts of Junior Agricultural Officers and 41 (20 per cent) posts of Agricultural Demonstrators. Being a time-bound, World Bank assisted project, the pace of implementation has to catch up with the schedule.

4.24 In 1980-81 inventorying of farmers' resources was completed for 11,573 ha. and farm plans were prepared for 9892 ha. as against 27,516 ha. and 16,414 ha. respectively in the previous year. In the case of loan sanctioned and loan disbursed, the area coverage as well as the amount involved have almost doubled compared to the previous year, though the achievements are short of the targets fixed for the year. Cocoa inter cropping in 507 ha., fodder intercropping in 190 ha., construction of 2214 wells/tanks, installation of 143 oil engine pumpsets, 946 electric pumps and energisation of 503 electric pumps, distribution of 231 cows, and planting of 96 ha., under seed garden complex were some of the other activities under the Special Agricultural Development Unit (SADU) during the year.

Kerala State Coconut Development Corporation

4.25 The Kerala State Coconut Development Corporation was set up in 1975 with the object of developing the coconut industry in the State. The Corporation is presently engaged in the processing and marketing of coconut and its derivatives. The first venture of the Corporation, the coconut processing complex at Mamom near Attingal, commenced production in December 1979. The plant is yet to be operated on a full three shift basis on account of various technical and operational problems. During the year under review, the processing complex crushed

23,586 quintals of copra and produced 15,186 quintals of coconut oil and 7,520 quintals of oil cake. A good part of the oil produced is sold outside the State. However, in the city and town areas the 'Keragem' oil is gaining acceptability. It is claimed that the Corporation was able to play a not too unimportant role in bringing about a degree of stability in the prices of both copra and coconut oil in the State.

4.26 The net turnover of the Corporation during 1980-81 was Rs. 258.13 lakhs and the total income Rs. 261.46 lakhs. It is pacifying to note that the Corporation could bring down the level of deficit from Rs. 11 lakhs in 1979-80 to Rs. 6.49 lakhs in 1980-81 despite the considerable fluctuations in the price of copra and coconut oil.

Kerala Agro-Industries Corporation

4.27 The Agro-Industries Corporation presented quite a satisfactory performance during the financial year 1980-81. The unaudited annual accounts of the

Corporation shows a gross profit of Rs. 8 lakhs against Rs. 4.03 lakhs for the previous year, 1979-80. There have been appreciable increase in the direct sales of agricultural machinery and implements by the Corporation. Tractors, power-tillers, and implements worth Rs. 32.44 lakhs were sold in 1980-81 compared to Rs. 15.12 lakhs in 1979-80. Income from hire purchase activities also doubled during the year compared to that of the previous year. (See Table 4.12). However, the business of spare parts was on at a low key with declining trend both in procurement and sale of spares. The receipts from hiring activities suffered marginal set back on account of the fall in the total working hours of custom service. The receipt from workshops and service stations also showed marginal decline. It is pacifying though hardly re-assuring to note that the Corporation could get Rs. 0.76 lakh during 1980-81 towards repayment of loans issued by it. The Corporation could also initiate production on experimental basis from its fruit processing complex at Punalur in January 1982.

TABLE 4.12
Activities of the Kerala Agro-Industries Corporation

Item	1979-80		1980-81	
	Number	Value (Rs. lakhs)	Number	Value (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)
1. Direct Sale of Agricultural Machinery and Implements within the State				
(a) Tractor and Implement	5		28	
(b) Power Tiller and Implement	39		117	
Total		15.12		32.44
2. Hire Purchase				
(a) Tractor and Implement	28		29	
(b) Power Tiller and Implement	117		81	
Total		60.97		115.00
3. Procurement of Spare Parts		10.42		8.78
4. Sale of Spare parts		14.46		9.97
5. Custom Services				
(a) Bull Dozers—Work done	2318 hrs.		2404 hrs.	
(b) Tractors—Work done	10654 hrs.		6493 hrs.	
(c) Power Tillers—Work done	872 hrs.		245 hrs.	
(d) Receipts from Hiring		8.40		8.03
6. Receipt from Workshops/Service Stations		2.35		1.55
7. Repayment of Loans Issued		..		0.76
8. Profit Before Provision for Reserve and Taxes		4.03		8.00*

*Pertains to Unaudited Annual Accounts.

Source: Kerala Agro Industries Corporation.

Kerala State Warehousing Corporation

4.28 The farming community of Kerala shared 1.6 per cent of the total utilised warehousing capacity of the State Warehousing Corporation in 1980-81 as against 1.4 per cent in 1979-80. The rest of the storage capacity is utilised by the non-farming sector. The

storage capacity utilised by the non-farming sector including the Government departments and the Civil Supplies Corporation constituted 4.6 lakh tonnes in 1980-81 while in the previous year it was only 3.1 lakh tonnes. (See Table 4.13). Fertiliser and cement continue to be the main items occupying the storage space of the Corporation.

TABLE 4.13
Commodity-wise Deposit Received by Kerala State Warehousing Corporation

Commodity	(in tonnes)					
	1979-80			1980-81		
	Deposit Received from			Deposit Received from		
	Farmers	Others	Total	Farmers	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Food Grains	848	3746	4594 (1.45)	3237	36256	39493 (8.45)
2. Other Foodgrains	..	159	159 (0.05)	..	2618	2618 (0.56)
3. Grams and Pulses	..	3904	3904 (1.23)	..	2473	2473 (0.53)
4. Pepper	767	..	767 (0.24)	532	..	532 (0.11)
5. Copra	270	..	270 (0.09)	319	..	319 (0.07)
6. Groundnut	58	..	58 (0.02)	189	..	189 (0.04)
7. Oil Cakes	..	544	544 (0.17)	..	513	513 (0.11)
8. Arecanut	585	..	585 (0.18)	700	65	765 (0.16)
9. Cashew	3	..	3	..	..	..
10. Fertilizers	..	119529	119529 (37.65)	..	142841	1,42,841 (30.54)
11. 'Care' Articles	..	43150	43150 (13.59)	..	30403	30403 (6.50)
12. Cement	..	107139	107139 (33.75)	..	142318	1,42,318 (30.43)
13. Sugar	..	20372	20372 (6.42)	..	79929	79,929 (17.09)
14. Coffee	29	800	829 (0.26)	74	900	974 (0.21)
15. Rubber	60	..	60 (0.01)	94	..	94 (0.02)
16. Cardamom	6	..	6	2	..	2
17. Miscellaneous	1928	13565	15493 (4.88)	2345	21860	24,205 (5.18)
Total	4554 (1.43)	3,12,908 (98.57)	3,17,462 (100)	7492 (1.60)	4,60,176 (98.40)	4,67,668 (100)

Figures in brackets indicate percentage to total.

Source: Kerala State Warehousing Corporation.

4/655/1MC.

4.29 The State Warehousing Corporation has at present 64 warehouses including those at all Taluk headquarters, 12 of which are exclusively used for storage of Civil Supplies Corporation's stock. The Corporation expects to own a storage capacity of 66,238 tonnes by the end of 1981-82. During the year under report, the Corporation could receive not only a larger quantity of goods but also a higher number of diversified items as deposit. There was a hike of 47.3 per cent in the quantum of commodities deposited and a rise of 16.2 per cent in the number of deposits received (See Table 4.14). The Corporation could attract 63 items of commodities for storage. However,

compared to the previous year, there was a fall of bank advances by nearly 25 per cent in 1980-81. Altogether the performance of the Kerala State Warehousing Corporation, during the year under review, was satisfactory with an increase of Rs. 6 lakhs in storage charges and Rs. 8.27 lakhs in profit. The Corporation believes that it can make its venture more successful and profitable in future, if the Government departments and public sector undertakings extend their co-operation in making fuller use of the storage and warehousing capacity available with the Corporation.

TABLE 4.14
Activities of the Kerala State Warehousing Corporation.

Item	Unit	1979-80	1980-81	Actual Change	Percentage Change
(1)	(2)	(3)	(4)	(5)	(6)
1. Deposits Received	Nos.	14,978	17,408	+2,430	+16.2
2. Deposits Received (Quantity)	M.T.	3,17,442	4,67,666	+150,224	+47.3
3. Bank Advances	Rs.	1,19,05,113	89,40,505	-29,64,608	-24.9
4. Storage Charges Collected	Rs. lakhs	51	57	+6	+11.8
5. Profit.	"	3.79	11.52	+7.73	+203.95

Source: Kerala State Warehousing Corporation.

State Farming Corporation of Kerala

4.30 An important change in the activities of the Corporation during 1980-81 is the diversification of cultivation with the objective of making it a viable unit. Pursuing this strategy, the Corporation has planted cashew, cocoa, pepper and albizzia over 46 ha., 75.82 ha., 33.82 ha., and 49.80 ha. respectively during the year at a total cost of Rs. 1.91 lakhs. Civil works like construction of godowns, staff quarters, two bridges and one culvert were also undertaken at a total cost of Rs. 3.45 lakhs. The Corporation intends to implement a rubber plantation scheme in an area of 1610 ha. over a period of 4 years with aid under the Western Ghat Development Programme from Central Government channelised through State Government. Preliminary works in this regard has been initiated. The revenue receipts of the Corporation during the year 1980-81 amounted to only Rs. 8.62 lakhs against Rs. 12.97 lakhs in 1979-80, owing mainly to a fall in receipts from sugarcane and tapioca cultivation. This year also the Corporation has run into losses.

The Plantation Corporation of Kerala

4.31 The Plantation Corporation of Kerala is a leading public sector undertaking in plantation industry,

cultivating mainly rubber and cashew. The Corporation has a total area of 13014 ha. of which rubber plantations constitute 5.7 per cent, the major part of the rest of area being planted with cashew. The Corporation is implementing two World Bank Projects, one under Kerala Agricultural Development Project (KADP) and another under Multi-State Cashew Development Project. During 1980-81, 155 ha. of land was planted with cashew under the KAD Programme. The rubber plantations yielded 4804 tonnes of rubber in 1980-81 against 4750 tonnes in the previous year. The Corporation also owns factories in which raw rubber is processed into centrifuged latex, sheet rubber, crumb rubber and skim rubber. During 1980-81 the Corporation earned a profit of Rs. 32.81 lakhs against Rs. 32.90 lakhs in 1979-80.

Oil Palm India Ltd.

4.32 The Oil Palm India Ltd., a subsidiary of the Plantation Corporation of Kerala Ltd., established in 1977 has a paid up capital of Rs. 2.19 crores as on 31-3-1981. The shares of the Company are contributed to by the Plantation Corporation of Kerala and the Government of India in the ratio of 51:49.

4.33 During 1980-81 the organisation planted 300 ha., of land with oil palm bringing the total area planted to 1752 ha. but falling short of the target of 2000 ha., envisaged in the Project Report. The quantity of crude palm oil produced during 1980-81 was 158 tonnes compared to 81 tonnes in the previous year. The revenue receipts in 1980-81 was Rs. 10.65 lakhs from the sale of 130.89 tonnes while in the previous year it was only Rs. 6.71 lakhs obtained from the sale of 107.87 tonnes. Besides oil, the Company has been selling the nut fibre mixture which is left as residue after extraction of oil. The operation of the Company during 1980-81 has resulted in a loss of Rs. 29.07 lakhs against Rs. 18.03 lakhs in 1979-80.

4.34 It is reported that because of initial casuality, marginal nature of land and adverse climate, the yield per hectare is low. However, measures like timely weeding, platform cutting, cover crop raising, mulching and pruning undertaken by the Company are expected to improve the yield. This along with the modernisation of processing facilities is anticipated to improve the working results of the Company in future.

Soil Conservation

4.35 During the year 1980-81 an area of 2518 ha., was brought under effective soil conservation against an area of 3031 ha., in 1979-80 recording a fall of about 17 per cent in the coverage under soil conservation measures compared to previous year. The conserved area in 1980-81 includes 549 ha. belonging to Harijans and Girijans for whom the works were carried out at 100 per cent subsidies and 632 ha., of the Kerala portion of Kundah River Valley catchment under a Centrally Sponsored Scheme with 50 per cent Central assistance.

Soil Survey

4.36 In 1980-81 the soil survey organisation concentrated its activities on detailed soil survey of command areas and agriculturally potential areas. Of the total coverage of 78,538 ha., command areas and problem areas accounted 27,500 ha, and Government lands and forest lands 35,788 ha. Compared to the previous year the total coverage under detailed soil survey has shown an increase on account of substantial increase in the coverage under Government lands and forest lands. The survey coverage of command area and problem areas declined during the year. Under the reconnaissance soil survey the achievement in 1980-81 is 227,032 ha. as against 6,000 ha., only in the previous year. The training programmes for extension workers and farmers in the use and application of soil survey reports for adopting suitable cropping pattern, and identification of Bench Mark soils in the State in collaboration with Kerala Agricultural

University were the important activities continued during the year. The Land Use Demonstration scheme initiated as a part of follow up action has gathered momentum during the year by covering 98 ha. against 35 ha. during the previous year.

Land Use Board

4.37 One of the important items of work done by the State Land Use Board during the year under review is the preparation of a draft land use plan for Idukki district. It has also conducted a reconnaissance soil conservation survey in Trivandrum district covering an area of 1.06 lakh hectares and priority areas for soil conservation treatments have been identified, classified and mapped in the taluks of Nedumangad, Neyyattinkara, and Chirayinkil. Besides continuing the monthly news letter "LAND USE" the following studies were also conducted by the Board and reports were prepared during the year.

- (i) Land use for brick making in Trivandrum district.
- (ii) Land and Water use efficiency in the commands of Peechi, Chalakudy, Pothundy and Periyar Valley Irrigation Projects.
- (iii) Effect of urbanisation on agricultural lands.
- (iv) Study of clay mining areas in Trichur district.
- (v) Out door recreational facilities in urban areas in Kerala.

4.38 Other activities of the Board include the establishment of a Data Bank to store all information and maps relating to land resource and land use and the initiation of the preliminary work for preparation of a land use plan for the northern districts (Cannanore and Kozhikode) using remote sensing techniques.

Kerala Land Development Corporation

4.39 The Kerala Land Development Corporation, a fully owned Government Company, was established in 1972 for taking up land development schemes in the State. Of the two land development projects, viz., Kuttanad Development and Kole Land Development, under taken by the Corporation, the first phase of the former was completed in 1977 with an outlay of Rs. 375 lakhs. The second phase of the project is targetted for completion in June 1983. An area of 14,750 ha. has been reported as made suitable for double cropping by this project. Table 4.15 illustrates the details of works completed during 1979-80 and 1980-81.

4.40 The Trichur Kole Land Project scheduled for completion by the end of 1984 has incurred an expenditure of Rs. 199 lakhs for earth works till the end of March 1981. The land acquisition work commenced in 1978, has acquired a total of 35.12 ha. of land so far.

4.41 The stay against revenue recovery proceedings against Kuttanad cultivators is still in force. Hence receipt of the Corporation towards the repayment of loans from beneficiary cultivators was practically nil

during 1980-81. The Corporation has so far received a total of Rs. 84 lakhs as revenue subsidy from Government. The cumulative deficit of the Corporation at the end of 1980-81 is Rs. 183.80 lakhs.

TABLE 4.15
Performance of the Kerala Land Development Corporation

Particulars	Unit	1979-80	1980-81	Cumulative as on 31-3-1981
(1)	(2)	(3)	(4)	(5)
A. Kuttanad Development Project:				
(i) Schemes Completed	No.	17	24	106
(ii) Area Covered	ha.	1212	3295	7660
(iii) Length of Bunds	km.	56.615	130.027	341.824
(iv) Cost	Rs. lakhs	44.06	147.94	325.61
B. Trichur Kole Project:				
(i) Land Requisitioned for Acquirement	ha.	338.919	20.604	639.239
(ii) Land Acquired	ha.	10.347	21.906	35.115
C. Financial Position:				
(i) Paid up Capital	Rs. lakhs	59.00	65.00	330.00
(ii) Loans Recoverable—Cumulative	„	43.07	54.09	54.09
(iii) Revenue Subsidy received	„	6.00	20.00	84.00
(iv) Total Cumulative Deficit	„	77.37	183.80	183.80

Source: Kerala Land Development Corporation.

Agricultural Marketing

4.42 Quality improvement of the agricultural products through proper grading is one of the major activities of the Marketing Wing of the Department of Agriculture. The four State Agmark Laboratories (Trivandrum, Quilon, Alleppey and Irinjalakuda) and the two approved private laboratories (Cochin and Trichur) together graded 30,225 quintals of commodities (coconut oil, honey, gingelly oil and ground spices) valued at Rs. 463 lakhs during the year 1980-81.

Wynad Development

4.43 The Sugandagiri Cardamom Project, which forms part of the Western Ghat Development Programme envisages the rehabilitation and settlement of 750 tribal families by forming a Joint Farming Co-operative Society for the purpose of cultivating 1500 ha. of vested forest land at Achooranam Village in Wynad district. Started in 1976, an expenditure of Rs. 260 lakhs has been incurred under the scheme so far, settling 670 tribal families in the project area and providing 140 permanent residential buildings for accommodation. Construction of residential buildings will be continued for the settlement of the rest of the tribal families who have been provided only temporary houses.

Of the proposed 1500 ha. of land, 964 ha. have been planted with cardamom, 27 ha. with coffee and 10 ha. with fuel trees. The cardamom plantation yielded 668 kg. of dried cardamom in 1980-81 and the estimated yield for the next year is about 10 tonnes. Since the cardamom harvested in Sugandagiri is of high quality, measures are being taken to export the same to Arab countries through the Kerala State Marketing Federation.

4.44 The Pookot Lake Dairy Project, the second important venture in Wynad district under the Western Ghat Development Programme, started in May 1979 aims at the settlement of 110 tribal families by utilising 420 ha. of vested forest land for dairy farming and crop cultivation. Out of 420 ha. of project area, approved by the Planning Commission, 63 per cent will be utilised for dairy farming and 21 per cent for cultivation of coffee, cardamom, cocoa etc., the rest of the area being covered by forest, lakes etc. The dairy farm yields an average of 270 litres of milk daily and the production is expected to reach 350 litres soon. Pasture development, hay making, silage making, fodder cultivation, etc., are reported to be making considerable progress. The total amount spent on dairy farming so far is Rs. 6.5 lakhs. Out of the 110 houses to be constructed for the settlement of

tribal people, about 41 have been completed and 16 are nearing completion. Seventy-six tribal families have been settled so far in the Project area.

4.45 The third and the most recent programme enunciated under the Western Ghat Development Programme in Wynad is the Intensive Silvi Pasture Development-cum-Livestock Production which started functioning since February 1981. The project, aimed at the well being of the tribal people, envisages cattle and dairy development programmes, establishment of milk chilling plants and imparting of training to tribal people. During 1981 a sum of Rs. 4.77 lakhs has been spent for various programmes under the project.

Kerala Agricultural University

4.46 Starting of a new diploma course in Agriculture and Rural Engineering in the Institute of Agricultural Technology at Tavanur, two Post-Graduate Diploma courses in Plant Protection and Soil Science in the College of Agriculture, Vellayani and a Post-Graduate Diploma Course in Land and Water Resources Development and Management in the College of Horticulture, Vellanikara, marked the new educational avenues provided by the Kerala Agricultural University during 1980-81. Silver Jubilee Celebrations were held at the College of Agriculture and College of Veterinary and Animal Sciences in December 1980. The farmer's seminars, exhibitions, alumni meets, and publications brought out on this occasion made the year memorable in both the campuses.

4.47 Thirty-one training programmes of different durations and on different themes organised by KAU, during the year for the benefit of technical personnel of the Department of Agriculture covered areas like rice production technology, microbial techniques, plant protection, pest and disease surveillance, pulses and oil seeds development, fertilizer analysis etc.

4.48 As a support to the Kerala Agricultural Extension Project (KAEP) being implemented by the Department of Agriculture, a six months training course for the Agricultural Demonstrators and monthly workshops for Subject Matter Specialists were started during the year. Six teams of resource personnel were constituted for this purpose. In the field of Veterinary and Animal Sciences, the training programmes covered areas like diagnostic techniques of animal diseases, diagnosis and treatment of infertility in cattle etc. The fieldmen and para veterinary staff from Lakshadweep were also trained in agricultural science, and poultry management respectively during the year. Other beneficiaries of the training programmes conducted by KAU included the Rural Development Officers of the State Bank of India, the Branch Managers of the Catholic Syrian Bank, rural women youth, N.C.C. Cadets, and farmers. A workshop

on package of practices for different crops was also conducted during the year for updating the various package recommendations by incorporating the latest innovations in the field of agricultural technology. Conduct of 33 district level seminars under the Farm Advisory Services, correspondence course on "Profitable Poultry Farming" and "Coconut Cultivation", adoption of 12 villages for overall development, laying out 25 demonstration plots under the National Demonstration Scheme for demonstrating the paddy, pulses cropping pattern, tapioca, groundnut cropping pattern and mixed farming systems, continuance of the Lab-to-Land programme giving extra inputs upto Rs. 465 per family for 750 participant families were some of the other activities of the KAU under the extension side.

4.49 On the research side, apart from the release of the rice varieties MO-5, Vyttila-2, and "Lakshmi" approved by the State Seed Committee in the previous year, KAU has released a multipoded hybrid sesamum variety, Kayamkulam 2, under the name "Thilothama" in 1980-81. Two cultures developed at the Rice Research Station, Pattambi (Culture 1945 and Culture 1954) were identified as resistant to sheath blight. Results of experiments showed that the medium tall rice culture 1907 is suitable for dry sowing in the uplands and that Culture 25100 identified earlier as promising for saline areas is suitable for non-saline areas also during Mundakan season, and that this culture shows resistance to BPH and sheath blight. At the Rice Research Station, Moncompu, a BPH tolerant culture of rice was evolved from a cross between Triveni and Culture 1539.

4.50 Multilocational trials conducted revealed that VK-5 and Chyapasupa are promising turmeric types for Kerala. The tomato line CL-32-D-01-19GS obtained from Asian Vegetable Research and Development Centre Taiwan showed fair amount of tolerance to bacterial wilt. The mid-late variety of sugarcane C0-62175 was identified as a high yielder. Another finding of interest during the year is that incorporation of azola in rice fields could save upto 25 per cent of inorganic nitrogen requirement of rice. Standardisation of small scale fermentation method (mini-box and mini-basket methods) for cocoa, designing of a garden tractor, successful field testing of a prototype pumping system (consisting of a self propelled platform and two 5 HP pumpsets) for the mechanical control of aquatic weeds, beneficial effects of injecting reproductive hormones for bringing infertile and sterile cows and heifers into lactation, proving the feasibility of incorporating coir pith upto 25 per cent in calf rations, standardising the techniques of fish farming as a follow crop in paddy fields and simultaneous farming of fish and prawns with paddy etc., were some of the research highlights of the Kerala Agricultural University during the year.

TABLE 4.16
Student Statistics of KAU for the Year 1979-80 and 1980-81

Programme	1979-80	1980-81
(1)	(2)	(3)
<i>Graduate Programmes:</i>		
Admission to B.Sc. (Ag.)	147	128
Admission to B.Sc. (Hort)	42	40
Admission to B. V. Sc. & A. H.	70	78
Admission to B. F. Sc.	36	30
Successful Completion of B. Sc. (Ag.)	95	87
Successful Completion of B. Sc. (Hort.)	28	28
Successful Completion of B.V.Sc. & A. H.	47	52
<i>Post Graduate Programmes:</i>		
Admission to M.Sc. (Ag.)	66	63
Admission to M.Sc. (Hort.)	8	14
Admission to M. V. Sc.	36	18
Admission to Ph.D. (Ag. Faculty)	10	11
Admission to Ph.D (Vety. Faculty)	2	..
Successful Completion of M.Sc. (Ag.)	23	27
Successful Completion of M.Sc. (Hort.)	6	7
Successful Completion of M. V. Sc.	12	11
Successful Completion of Ph. D. (Ag.)	4	4
Successful Completion of Ph. D. (Vety.)	2	1
<i>Other Special Courses</i>		
Admission to Diploma in Ag. Sc	51	80
Successful Completion of Ag. Sc	42	..
Admission to Agrl. Mech. course	..	..
Successful Completion of Agrl. Mech. Course	17	..
Admission to PG Diplomas	17	35
Successful Completion of PG Diplomas	10	14

Source: Kerala Agricultural University

Central Tuber Crops Research Institute

4.51 The main thrust of research in CTCRI in 1980-81 continued to be on cassava (tapioca). Three hybrids with yield levels of the already released varieties and superior culinary qualities are in an advanced stage of evaluation. Evaluation studies on short duration inter-crops with Cassava have shown that bunch variety of groundnut and French bean variety "contenter", are economical. Application of lime at the rate of 2,000 kg. per ha. and sulphur at the rate of 50 kg. per ha., were found to be optimum doses for higher yields in Cassava. It was also found that rehabilitation of genetic stocks infested with mosaic is successful through tissue culture. While assessing the comparative gains of rearing eri silk worms on cassava leaves it was concluded that at the present rate of Rs. 5 per kg. of green cocoon it is not an attractive enterprise. Moreover there was reduction in the tuber yield of cassava due to removal of leaf. Large scale production of Ethanol, 400 to 420 bulk litres of alcohol recovery from one tonne of cassava flour, was a significant achievement the Centre could make during the year. Identification of cassava varieties tolerant to salinity upto 2,000 p.m., designing a hand

operated cassava chipping machine, identification of a mosaic disease in colocasia which may have serious economic consequences in the cultivation of this crop, the first time reporting of the occurrence of polyembryony in elephant foot yam etc., are the other research highlights of the Central Tuber Crops Research Station during the year.

Central Plantation Crops Research Institute

4.52 Coconut root (wilt) disease continued to be the priority research project of the Central Plantation Crops Research Institute (CPCRI) during the year 1980-81. The institute advanced a three pronged strategy for the control of this malady, based on the research findings obtained so far, these are:

(i) containing the disease within specific geographic limits and making efforts to stop further spread of the disease to the north and south (east and west having natural barriers like the Western ghats and Arabian Sea);

(ii) progressively eradicating the most diseased palms and replacing them with healthy seedlings, and simultaneously following a special package of practices developed for root (wilt) affected areas; and

(iii) continuing more vigorously the investigations for identifying the cause of the disease and developing suitable control measures for the disease.

4.53 Research programmes on other crops like arecanut, cashew, cocoa, oil palm and spices also were continued during the year. The comprehensive research programme on vegetative propagation of cashew initiated in 1972 has been concluded bringing out the following results.

(i) veneer grafting carried out on seedlings raised in containers gave 40-55 per cent success during rainy seasons;

(ii) side grafting of unthrifty young trees carried out in the orchards during the same period gave 70-75 per cent success;

(iii) patch budding on six months old seedlings raised in containers gave 30-40 per cent success during the dry seasons and its success was doubled when it was practiced *in situ* on one year old shoots;

(iv) the layering gave a maximum success of 80-85 per cent when carried out during the period of February to May. To obtain good success in field establishment it was found necessary to cure the rooted layers soon after their separation from the mother trees;

(v) epicotyl grafting, which has now been accepted as a standard practice in mango propagation has been successfully adopted in cashew. It gave 60 per cent success by both whip and cleft grafting methods when carried out during the rainy season using 7-10 days

old seedlings. It is necessary to cover the scion with a small polythene bag to ensure that the scion does not dry during the intervening period. These results show the tremendous possibilities and prospects for practising vegetative propagation in cashew.

4.54 With the objective of identifying resistant or immune types, utilising cross-protection techniques, developing disease forecasting systems and developing serological techniques to detect the presence of pathogen before the disease show up visually the Institute has initiated investigations on a number of important diseases like wilt disease of pepper, rhizome rot of ginger, yellow leaf disease of arecanut, katte disease of cardamom and anabe and mahali diseases of arecanut. Chemical methods for control of several important pests were also developed during the year.

4.55 The development of coconut dehusking machine, arecanut dehusking machine and a solar drier by the technology section of the Institute form other significant contributions to the plantation crops sector by CPCRI during the year.

Farm Information Bureau

4.56 Farm Information Bureau (FIB) continued its information communication support to the various schemes and programmes launched by the departments of Agriculture, Animal Husbandry, Dairy Development, Co-operation, and other State Government agencies engaged in the task of assisting farmers. During the year 1980-81, the Farm Information Bureau has produced and distributed 1.76 lakh copies of the farm fortnightly "Kerala Karshakan" and 72,000 copies of the wall newspaper "Keralam Munnottu" as against 1.74 lakh copies and 43,000 copies respectively in the previous year. While the Kerala Karshakan covers a large group of progressive farmers and extension staff, the wall newspapers cover a wide range of communication points like the rural libraries with farm book corners official extension agencies, FACT depots, functional literacy centres, tribal schools, and extensions points of Gandhi Smaraka Nidhi etc. Other publications of the Bureau during the year included 2.1 lakh copies of information leaflets covering 35 items, 20,000 copies of posters covering 4 items and 6,700 copies of "Farm

Guide 1981". The weekly Farm Feature Service of the FIB reaching the farming community through 16 popular newspapers released during the year 278 features covering agricultural news, articles, and other useful information to the farmers. Besides FIB has supplied 475 photographs/blocks to the newspapers, and released 200 display advertisements during 1980-81. By bringing 200 more rural libraries, during the year, the Farm Book Corner Programme of the FIB reached new heights hitting a progressive total of 2,000 rural libraries (out of 4500 in the State) under the folds of this programme. One of the outstanding achievements during the year is the production of three instructional films on (i) pests and diseases of coconut, (ii) scientific breeding for economic milk production and (iii) calf rearing.

4.57 Participation in seven major exhibitions at District Headquarters, and 14 rural exhibitions, conduct of 16 Kisan melas, 19 seminars to train farmers and library workers, supply of 44 steel racks at 50 per cent cost to selected libraries, three Super 8 mm projectors at 1/3 cost to three libraries with outstanding record of participation in the programmes were some of the other activities of FIB during the year.

Plantations

Tea

4.58 The downward trend in tea production that had set in 1980 is continuing. The declining trend is noticed in total area, total production and productivity of this crop in the State. Even though the decrease in area was quite negligible the decline in productivity and production are substantial (11 per cent). The picture presented by tea industry on all India level however is quite different. From 1979 to 1980 there was a rise in production and productivity by 4 per cent and 3 per cent respectively. The total area under the crop also increased marginally. From 1980 to 1981 the estimates for all India show that there has been a decline in production and productivity by 2.6 per cent and 1.4 per cent respectively. It is significant to note that Kerala's tea yield has declined to 1297 kg/ha. in 1981 while the national average yield in the same year stood at 1498 kg/ha. The area production and productivity of tea in Kerala and all India are given in Table 4.17

TABLE 4.17
Area, Production and Productivity of Tea—Kerala and All India

Year	Kerala			India		
	Area (ha.)	Production (Tonnes)	Yield (Kg./ha.)	Area (ha.)	Production (Tonnes)	Yield (Kg./ha.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1978	36151	51287	1419	369184	563846	1527
1979*	36097	58225	1613	373740	551980	1477
1980*	36125	52551	1455	378447	575118	1520
1981	36097	46800	1297	373740	560000	1498

* Provisional

Source: 1978 1979 and 1980 Estimates of Tea Board and 1981 Estimates of UPASI.

4.59 An analysis of the average sale price of tea shows that at the national level it was keeping an upward trend since 1978, while in Kerala after a small decline in 1979 it has picked up. However, Kerala tea

has been commanding only a lower price compared to the national average price. The average sale price of tea is presented in Table 4.18.

TABLE 4.18
Average Sale Price of Tea

Year	(Rs. per Kg.)	
	Kerala (at Cochin Auctions)	India (All India Auctions)
(1)	(2)	(3)
1977	15.44	15.70
1978	11.44	12.95
1979	11.12	13.01
1980+	12.29	13.60
1981*	13.14	N.A.

+ Provisional

* January/October 1981.

Source: 1977, 1978, 1979 and 1980 Tea Board and 1981 UPASI.

Coffee

4.60 No change in total area under coffee is noticed in recent years. However, it is significant to note that the steep increase in production and productivity recorded in 1979-80 both at State and national level has been reversed in 1980-81. The all India production of Coffee for 1980-81 is estimated at 130,500 tonnes, as

against 1,50,000 tonnes, in 1979-80 registering a decline by 13 per cent. Kerala too has shown the same trend during this period, but to a lesser extent by registering a decline of only 10 per cent. The fall in production is a reflection of the fall in productivity of this crop since the total area remained the same (See Table 4.19)

TABLE 4.19
Area, Production and Productivity of Coffee—Kerala and India

Year	Kerala			India		
	Area (ha.)	Production (Tonnes)	Yield (Kg./ha.)	Area (ha.)	Production (Tonnes)	Yield (Kg./ha.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1977-78	51708	25267	489	192248	125141	651
1978-79	56154	22940	409	196228	110500	563
1979-80	56154	30030	535	196228	150000	764
1980-81	56154	26975	480	196228	130500	665

Source: UPASI.

TABLE 4.20
Auction Sale Prices of Coffee

Grade	Internal Sales (Inclusive of Excise Duty)			Export Sales (Exclusive of All Taxes and Duties)		
	1978-79	1979-80	1980-81	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Plantation A	518.25	517.50	544.40	1100.00	1203.50	1068.25
Arabica Cherry-A.B.	440.80	437.00	468.00	859.00	1077.50	1073.00
Robusta Cherry—A.B.	394.00	451.25	429.75	855.25	934.50	932.00

Source: UPASI.

Rubber

4.61 Production of natural rubber recorded increase during 1980-81. From 1,36,619 tonnes in 1979-80 it went up to 1,40,522 tonnes in 1980-81 in Kerala registering an increase of 3 per cent. The corresponding] figures for all India was, 1,48,470

tonnes and 1,53,100 tonnes respectively endorsing the same trend of increase. Productivity too has registered the same trend of increase at State and national levels. Area, production and productivity figures for the last 3 years for Kerala and all India are presented in Table 4.21.

TABLE 4.21

Area, Production and Productivity of Rubber—Kerala and India

Year	Kerala			India		
	Area (ha.)	Production (Tonnes)	Yield (Kg./ha.)	Area (ha.)	Production (Tonnes)	Yield (Kg/ha.)
(1)	(2)	(3)	(4)	(4)	(6)	(7)
1978-79	214415	123677	698	235910	135297	710
1979-80	215474	136619	764	237014	148470	770
1980-81	219866	140522	784	241503	153100	790

Note: Area refers to registered area.

Source: Rubber Board.

TABLE 4.22

Average Market Price of Indigenous Natural Rubber at Kottayam

Year	Price per Quintal (Rs.)
(1)	(2)
1977-78	632.11
1978-79	953.43
1979-80	1016.51
1980-81	1212.20
1981 April to December	1410.00

Source: Rubber Board.

4.62 Kerala accounts for 91 per cent of the total area and 92 per cent of the total production of natural rubber in India. The import of natural rubber has come down compared to the previous year. The consumption of natural rubber in the Country has risen by 5 per cent between the years 1979-80 and 1980-81 while the rise was only 0.4 per cent between the years 1978-79 and 1979-80. All India figures relating to production, consumption, export and import of rubber are given in Appendix 4.7. The Kerala and all India figures regarding the trend in planted area under rubber for the last four years are presented in Appendix 4.8.

4.63 The upward trend in the price of natural rubber in the market has triggered large-scale expansion of rubber cultivation in different parts of the country. However, the indigenous production of natural rubber has not been able to meet the demand in full. Therefore the Rubber Board has introduced a

new subsidy-cum-credit scheme known as 'Rubber Plantation Development Scheme' during the year 1980-81 with a total target of 60,00 hectares over the Sixth Plan period. This scheme provides assistance for new planting/replanting a cash subsidy of Rs. 5000 per ha to small holders and Rs. 3000 per ha, for large growers and additional assistance by way of reimbursement of cost of planting materials used, half cost of prescribed doze of fertilizers applied during immaturity period, and subsidy upto Rs. 150 per ha. for soil conservation work for small holders (upto 6 ha). In addition long term credit from ARDC upto Rs. 15,000 per ha. with an interest subsidy of 3 per cent per annum is also extended, besides free advisory and extension support from the Rubber Board.

Cardamom.

4.64 No substantial change in the area under cardamom is noticed in recent years. Out of a total estimated area of 93,947 hectares under cardamom in India, Kerala accounts for 56,376 hectares (60 per cent), Karnataka 28,223 hectares (30 per cent) and Tamilnadu 9,348 hectars (10 per cent).

4.65 The production of Cardamom in Kerala came down to 3,100 tonnes during 1980-81 as against 3,300 tonnes in the previous year. The fall in production is not a singular feature of Kerala alone. The All India production of cardamom also has declined from 4,500 tonnes in 1979-80 to 4,400 tonnes in 1980-81. The decline in production is a reflection of the decline in productivity of this

crop during the year mostly in Kerala and Tamilnadu. However, Kerala still accounted for 70 per cent of the

production in the country. The area, production and productivity of this crop are given in Table 4.23

TABLE 4.23

Area, Production and Productivity of Cardamom—Kerala and India

Year	Kerala			India		
	Area (ha.)	Production (tonnes)	Productivity (Kg./ha.)	Area (ha.)	Production (Tonnes)	Productivity (Kg./ha.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1978-79	55180	2900	70	92751	4000	58
1979-80	56376	3300	78	93947	4500	64
1980-81	56376	3100	73	93947	4400	62

Note: Productivity based on estimated yielding area.

Source: Cardamom Board.

4.66 Only 53 per cent of the annual cardamom output in the country was exported during 1980-81 against 59 per cent during 1979-80 showing higher level of domestic consumption. Kerala's contribution to the country's export of this produce in 1980-81 worked out to 86 per cent. A statement showing the annual export of cardamom from India and the share of Kerala for the last four years is given in Appendix 4.9. Despite the fact that 86 per cent of the total export of this produce from the country comes from Kerala, the share of export of this produce through Kerala's port (Cochin) is only 20 per cent, the rest being exported mainly through Bombay port. It is reported to be due to inadequate facilities at Cochin port.

4.67 The average price realised at various auction centres, in Kerala (Vandanmettu, Santhanpara Udumbanchola, Kallar, Cochin, Parathode) during 1980-81 was Rs. 108.51 per kg as against Rs. 98.9 per kg. at all India level. The corresponding prices during 1979-80 were Rs. 141.98 and Rs. 134.88 per kg. respectively. A similar downward trend in prices was noticed in the export sales also. Average auction price and export price for the last four years for Kerala and India are presented in Table 4.24

TABLE 4.24

Average Auction Price and Export Price of Cardamom Kerala and India

Year	Kerala		India	
	Auction Price (Rs./Kg.)	Export Price (Rs./Kg.)	Auction Price (Rs./Kg.)	Export Price (Rs./Kg.)
(1)	(2)	(3)	(4)	(5)
1977-78	142.55	177.50	134.41	175.28
1978-79	178.71	204.30	166.42	202.92
1979-80	141.98	185.78	134.88	184.23
1980-81*	108.51	150.32	98.91	147.61

*Figures are provisional

Note: Export price is for the financial year April-March and Auction price is for the crop year September-August.

Source: Cardamom Board

4.68 The distribution of registered cardamom estates by size of holdings during 1980-81 is presented in Appendix 4.10. It is seen that 67 per cent of the total number of units in Kerala has a size of less than 2 hectares and 32 per cent is in the size group of 2 to 20 hectares. Only 1 per cent of the units operate with a size of holding above 20 hectares. The corresponding figures at all India level are 68 per cent, 30 per cent and 2 per cent respectively.

4.69 According to an estimate of the Cardamom Board, the Cardamom plantation industry in Kerala provides employment to approximately 35 thousand permanent labourers and to an equal number of temporary and seasonal labourers.

Land Reforms

4.70 The land reform measures were formulated and implemented with greater expedition in our State than in most other States of India. The measures include abolition of intermediary interests on land, conferment of security of tenure and ownership rights on tenants and taking over and distribution of surplus land among the landless poor.

4.71 Regarding progress of implementation of the Kerala Land Reforms Act, the provisions relating to tenancy and Kudikikappu rights have almost been implemented in full. Upto the end of November 1981, 36.76 lakh tenancy cases were filed for assignment of the rights of landlords and intermediaries to cultivating tenants of which 36.66 lakh cases (99.7 per cent) were disposed of. The number of cases allowed stood at 24.78 lakhs i.e., 67.6 per cent of the total number disposed. The rest were either rejected or under otherwise disposed of. The number of certificates of purchase issued during 1981 was 24.55 lakhs, i.e. almost 99 per cent of the allowed cases. The total number of tenancy cases filed by the end of 1980 (upto 30th November) were 36.40 lakhs, of which 36.28 lakhs were disposed of.

4.72 Till November 1981, 4.45 lakh Kudikidappukars filed applications for the purchase of their hutments^s and the land appurtenant thereto. Out of this 4.40 lakh cases (99 per cent) were disposed of, comprising 2.72 lakh cases allowed, 1.49 lakh cases rejected and 0.19 lakh cases coming under other disposals. Upto the end of November 1980 the total cases filed were 4.38 lakhs of which 4.34 lakhs, were disposed of i.e. 99 per cent. From the total allowed cases (2.74 lakhs), 2.58 lakh (94 per cent) Kudikidappukars had been issued certificates of purchase till the end of November 1981. Statistics of receipts and disposals of the Tenancy and Kudikidappu cases are given in Appendix 4.12.

4.73 In the case of the ceiling provision of the Kerala Land Reforms Act, 75945 ceiling returns were filed upto the end of December 1981. Out of this 72758 (95.8 per cent) were disposed of ordering surrender of 1.61 lakh acres of land. Of this 0.42 lakh acres of land were exempted on orders of High Court reducing the net extent ordered for surrender to 1.20 lakh acres. The area taken over constitutes 83910 acres i.e. 52.05 per cent of the area ordered for surrender. Upto the end of 1980 the total number of returns filed was 65541, of which 62467 cases were disposed of. An extent of 1.52 lakh acres of land were ordered for surrender and 79492 acres were taken over upto 31-12-1980.

4.74 During 1981 the surplus land distributed was 52737 acres and the total number of beneficiaries, 84692 as against 50150 acres of land distributed and 79142 beneficiaries till the end of December 1980. The beneficiaries of surplus land distributed upto 1981 include 34175 scheduled castes and 4972 scheduled tribes who shared 18981 acres and 4087 acres of land respectively. These together comprise 43.7 per cent of the total surplus land distributed. The rest of the land distributed has gone to other communities and institutions. From the remaining area taken over pending distribution, 2775 acres were subjected to court stay against assignment, 6515 acres could not be distributed owing to disputes and other reasons and an area of 15779 acres was reserved for public purposes. Thus the area available for distribution but not distributed was only 2392 acres.

Assignment of Puramboke Lands

4.75 The aggregate extent of puramboke lands available for assignment till the end of October 1981 was estimated at 4.67 lakh acres. Out of this, as much as 4.18 lakh acres (89.5 per cent) were distributed to 490792 beneficiaries by the end of October 1981 compared to 4.13 lakh acres distributed to 478652 beneficiaries till November 1980, from 4.40 lakh acres of land available for assignment. Among the

beneficiaries of puramboke land distributed upto the end of October 1981 the scheduled caste and scheduled tribe families numbered 86,001 (17.5 per cent) who received an extent of 62,918 acres of land. The balance of puramboke land available for distribution is 49,111 acres at the end of October 1981.

4.76 Besides the Kerala Land Reforms Act, two other important enactments viz. the Kannan Devan Hills (Resumption of Lands) Act, 1971 and the Kerala Private Forests (Vesting and Assignment) Act, 1971 have also vested in Government extensive areas of land for distribution among the landless agriculturists including scheduled castes and scheduled tribes.

4.77 The Resurvey of land and preparation of Records of Rights assume special significance in the implementation of land reforms, as the new land owners have no written records of their possessions. Upto the end of December 1981 resurvey has been completed on 16004 sq. km. of land.

4.78 As a part of the land reform measures suitable land development programmes are drawn up to help beneficiaries of the distribution of surplus land. Financial assistance is provided to make full utilisation of the lands assigned to them. Besides, programmes are implemented to make available credit facilities, technical support and infrastructure facilities to the beneficiaries to undertake development activities.

4.79 A housing scheme is also implemented for giving financial assistance to the ex-Kudikidappukar for construction of new houses and maintenance of old ones. A considerable part of the beneficiaries of the scheme is comprised of scheduled castes and scheduled tribes.

Livestock Development

4.80 The development of livestock has a vital role in the growth of the rural economy of the State. Not only does it provide employment to the rural poor, but also helps to augment the supply of protective foods such as milk, meat and egg. The various intensive development programme implemented in the fields of cattle breeding, fodder production, milk marketing and veterinary services and animal health care have increased the production of livestock to a considerable extent. The milk production in the State has gone up from 8.65 lakh tonnes in 1979-80 to 9.07 lakh tonnes in 1980-81 ensuring a per capita daily availability of 97 grams of milk as against 93 grams in the previous year.

4.81 In order to improve the quality of the existing livestock of the State, the Animal Husbandry Department and Dairy Development Department have been implementing programmes of cross-breeding.

In 1980-81, the Animal Husbandry Department carried out 6.08 lakh artificial inseminations, through the I.C.D. Projects. During the year, 600 anti-sterility camps, 4140 discussion classes and 103 cattle shows were conducted. Compared to the previous years, a slight decrease has been noticed in the number of artificial inseminations conducted by the Dairy Development Department. Cattle development programmes such as Jersey breeding-cum-cross bred farms, establishment of Intensive Cattle Development Projects and the scheme for distribution of cross bred heifers to economically weaker sections etc. accounted for 20.15 per cent of the plan expenditure during the year.

4.82 With a view to developing poultry 3.39 lakh chicks were distributed by the Animal Husbandry Department during 1980-81. About 20.92 lakh eggs were produced in the departmental poultry farms during the year. There is a slight decrease in the production of eggs in the departmental poultry farms compared to the previous year. The estimate of total egg production in the State stood at 962 millions in 1980-81.

4.83 Cross-bred cattle stock requires improved veterinary facilities. The infrastructure for this in 1980-81 comprised 25 veterinary clinics, 399 veterinary hospitals, 135 veterinary dispensaries and 501 other departmental institutions. Nearly 30 lakh cases of diseased animals were treated in various veterinary institutions in the State during 1980-81. In addition to this, 44 lakh vaccinations/innoculations were given to livestock and poultry to check and control diseases.

4.84 The cattle insurance scheme to encourage the farmers to take up cattle rearing and make it an attractive avocation, is gaining momentum in the State. Under the scheme cattle farmers belonging to the scheduled castes and scheduled tribes are given the entire premium amount for the first year as subsidy. In the subsequent years, they need pay only one half of the amount. For other weaker sections, the subsidy for the first year will be 50 per cent and in the subsequent years, 25 per cent. During the year 1981, the cattle of 1,431 scheduled caste and scheduled tribe persons and of 5,933 people belonging to other weaker sections have been insured.

4.85 For the calf development programme being implemented in Quilon, Alleppey, Kottayam, Kozhikode and Cannanore districts an amount of Rs. 3.2 lakhs was spent in 1980-81. The Biological Institute at Palode produced 45 lakh doses of vaccine during the year. One of the problems faced by the farmers is the rinderpest disease. To counter the disease the Department administered vaccine to 82,000 cross-bred cows. During 1980-81 Poly-clinics were established at Manantody, Iswaramangalam, Munnar, Haripad and Pathanamthitta. Also farm aid units were set up at Nenmara, Adimali and Achankoil.

4.86 To serve as an incentive for the school children to take up poultry farming, poultry clubs have been started in 30 schools in Ernakulam, Palghat and Trivandrum. Preliminary steps have been taken to start co-operative societies for promotion of poultry and duck farming in Ernakulam, Kottayam, Alleppey and Cannanore districts.

4.87 The major activities undertaken by the KLD and MM Board consist of procurement, processing and marketing of milk, manufacture and sale of cattle feed and production of inputs like frozen semen and fodder seeds for livestock development. The milk marketing activity and manufacture and sale of cattle feed are carried out by the Board as a commercial programme. The Board is responsible for supplying frozen semen for the cattle breeding programmes in the State. Liquid nitrogen for preserving the frozen semen is also prepared by the Board. During 1980-81, the Board produced 9 lakh doses of frozen semen for being supplied to 1300 cattle breeding centres operated by the Departments of Animal Husbandry and Dairy Development. Distribution of frozen semen to these centres is carried out free of cost by the Board.

4.88 Cultivation of high yielding varieties of nutritive fodder crops is vitally important for raising milk production in the State. Hence Dairy Development Department is popularising cultivation of high yielding varieties of fodder grass through farmers. Subsidy is being given to farmers in the form of fertilizers for the fodder plots at the rate of Rs. 350 per acre for the establishment of new fodder plots and at the rate of Rs. 100 per acre for fodder plots set up during the previous years. During 1980-81 fodder plots covering an area of 578.44 ha. of land have been brought under fodder cultivation. Subsidy in the form of fertilizer has been issued to 3863 cultivators in fresh plots and to 4535 farmers having 2nd and 3rd year plots. About 10 tonnes of fodder seeds were produced and distributed to farmers through the registered seed producers during 1980-81.

4.89 To assist the procurement of milk from the rural areas, 5 dairy plants and 14 chilling plants were operated by the Board with an average handling capacity of 55,000 litres of milk per day. The quantity of milk procured in 1980-81 was 16 lakh litres as against 15.6 lakh litres of milk procured in 1979-80. The average procurement price of milk per litre rose from Rs. 1.75 to Rs. 2 and the average sale price of dairy milk per litre from Rs. 2.33 to Rs. 2.75 during the year. Milk marketing has been carried on a co-operative basis. The number of primary milk supply societies has increased to 928 from 840. In order to develop and strengthen the co-operative milk marketing societies, financial assistance is being given to these primary milk co-operatives.

4.90 The Kerala Co-operative Milk Marketing Federation, set up by the State Government in 1981 will undertake a comprehensive dairy development project, which is expected to benefit about 1.5 lakh milk producers, promising them additional income. A distinct feature of the project which comes under the National Dairy Development Programme of 'Operation Flood II' is the creation of a strong and viable co-operative structure for the production, processing and marketing of milk in the State. This set up will be similar in pattern to that of Anand in Gujarat. Five dairy plants, a cheese plant and a cattle feed plant would comprise the infrastructure for the project. Six milk collection cum-chilling plants are also to be set up. The pre-project activities have already been taken up. Two spearhead teams consisting of persons trained by the National Dairy Development Corporation have since been positioned in Trivandrum and Ernakulam to start the organisation of the Anand pattern village milk co-operative societies. The sites for the dairy plants have been selected, and acquisition proceedings initiated. Simultaneously, the designs and plans of the dairy plant and cattle feed factory and the schedule of equipment and machinery are all being worked out.

Fisheries

4.91 Kerala has a total coast line of 590 Km. The State's share of the aggregate marine fish production of the country is estimated at 23 per cent. The fishermen population represents 3.13 per cent of the State's total population of 1981. The estimated fish production in Kerala during 1980-81 was 3.05 lakh tonnes of which 2.79 lakh tonnes are contributed by marine sector and 0.26 lakh tonnes by inland sector. Marine fish production in the State exhibits a declining trend, with minor fluctuations from year to year. A similar trend is discernible in Kerala's share of all India output also. The exports of marine products from Kerala during 1980-81 amounted to 29148 tonnes valued at Rs. 95.34 crores. The contribution of fisheries sector to State income at current prices in 1979-80 was Rs. 65 crores which represents 5 per cent of the income from primary sector. The annual per capita consumption of fish in Kerala has declined from 10.1 kg. in 1979-80 to 9.1 kg. in 1980-81.

Marine Fish Landings

4.92 The total marine fish catch by both mechanised and non-mechanised vessels along Kerala coast touched a peak 4.48 lakh tonnes in 1973, but declined thereafter to reach disquietingly low level of 2.79 lakh tonnes in 1980. At the all India level the marine fish landings rose from 11.61 lakh tonnes in 1971 to an all time record of 14.23 lakh tonnes in 1975. In 1980 the all India marine fish landing fell to 12.35 lakh tonnes. Kerala's share in the country's marine fish

production fell from 38 per cent in 1971 to 23 per cent in 1980. The data on marine fish landings in Kerala and India from 1971 to 1980 are given in Table 4.25.

TABLE 4.25
Marine Fish Landings in Kerala and India (1971-80)
('000 tonnes)

Year	Kerala	India	Percentage of Kerala to India
(1)	(2)	(3)	(4)
1971	445	1161	38
1972	296	980	30
1973	448	1220	37
1974	420	1218	35
1975	421	1423	30
1976	331	1353	25
1977	345	1260	27
1978	373	1404	27
1979	331	1388	24
1980*	279	1235*	23

* Provisional

4.93 The total marine fish landings in Kerala has declined from 3.31 lakh tonnes in 1979 to 2.79 lakh tonnes in 1980 registering a fall of 15 per cent over the year. At the all-India level also there was a decline of 11 per cent in the marine fish production during the year. Oil sardine continues to constitute the largest single species landed in the State. The landings of oil sardine during 1980 amounted to 69700 tonnes or one-fourth of the total marine fish production of State. But the landings of this species has shown a decline of 40 per cent compared to that of the previous year. The landings of prawns increased from 29500 tonnes in 1979 to 52600 tonnes in 1980, recording an increase of 78 per cent over the year. The contribution of prawns was 18.9 per cent of the total landings in 1980 as against 8.9 per cent in 1979 and 12.1 per cent in 1978. The catches of mackerel stood around 18 thousand tonnes showing little change over the period. Data relating to annual landings of the major species of marine fishes in Kerala from 1976 to 1980 are given in Table 4.26.

TABLE 4.26
Annual Landings of Marine Fish in Kerala (1976-80)
('000 tonnes)

Species	1976	1977	1978	1979	1980
(1)	(2)	(3)	(4)	(5)	(6)
Oil Sardine	123.9	117.4	119.9	116.8	69.7
Mackerel	20.0	20.0	25.9	18.5	18.4
Prawns	34.5	40.3	45.4	29.5	52.6
Other Species	152.6	167.3	182.1	165.7	138.3
Total	331.0	345.0	373.0	330.5	279.0

4.94 A comparison of the average annual sea fish production in Kerala during the two periods 1971-75 and 1976-80 shows that the annual fish catches declined from 406 thousand tonnes to 331 thousand tonnes witnessing a fall of 74 thousand tonnes in absolute terms and 18.3 in percentage terms. The decrease over the period in the actual landing of oil sardine, mackerel and prawns were 14,800

tonnes, 14,400 tonnes and 17,400 tonnes respectively. The variation in terms of percentage was the highest (41.2) in the case of mackerel. The percentage variation of prawns and oil sardine were 30.1 and 11.9 respectively. The data on the average annual sea fish production in Kerala for the periods 1971-75 and 1976-80 are furnished in Table 4.27.

TABLE 4.27
Average Annual Seafish Production in Kerala (1971-75—1976-80)

Species	('000 tonnes)					
	Average Annual Production for 1971-75		Average Annual Production for 1976-80		Variation	
	Actual	Per cent	Actual	Per cent	Actual	Per cent
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Oil Sardine	124.3	30.7	109.5	33.1	(-)14.8	(-)11.9
Mackerel	34.9	8.5	20.5	6.1	(-)14.4	(-)41.2
Prawns	57.7	14.2	40.3	12.1	(-)17.4	(-)30.1
Others	189.1	46.6	161.4	48.7	(-)27.7	(-)14.6
Total	406.0	100.0	331.7	100.0	(-)74.3	(-)18.3

4.95 The total marine fish catch by both mechanised and non-mechanised vessels along Kerala coast has been declining year after year. At the same time the percentage catch by the mechanised boats in the total catch has been increasing. Some studies done by scientists in the CMFRI reveal that there is a declining trend in both the catch and effort and catch per unit of effort, which indicate that there is overfishing along the coast of Kerala. It was also pointed out that the percentage of prawns in the catches by trawlers along Neendakara coast which had been 68.8 in 1973 declined to 26 per cent in 1979. In this context, experts suggest that total ban on trawling throughout the year in the in-shore areas, within a distance of about 7 km. is required to save the fish wealth along the State's coast. In view of the suggestions by fishery scientists and the demands raised by the traditional fishermen, in May 1981, the State Government issued orders banning all trawling operations along Kerala's coast from June to August, the spawning season for many fish species. A marine protection force was also created to enforce the regulations imposed. In addition, an expert committee, to study the economic exploitation of marine fishes without causing problems for the mechanised fishing boats and the traditional fishermen had been constituted.

4.96 Considering the fact that there is a decreasing trend in the marine fish landings along the Kerala shore and consequent reduction in the exports of marine products, the fisheries institutions located in the State have developed various concepts through

their research and development programmes for the enhancement of the sea fish production.

4.97 At Cochin, a summer institute on non-traditional diversified fish products and by-products was conducted during April-May 1981, under the auspices of ICAR. The aim of the course was to communicate the latest technological advances in the subject and provide the necessary orientation to the teachers, research scientists and extension workers. The participants in the institute were officials from different State Fisheries Departments, Fisheries Corporations, Fisheries Colleges, ICAR etc.

4.98 The CMFRI has established a bureau of fish genetics resources at Cochin during the year. The Bureau would be the nucleus of a full-fledged national bureau to have an integrated approach to the collection, conservation and eventual utilisation of genetic resources of fishes, prawns and other shell fishes. In the context of increasing exploitation of fishery resources and hybridisation and the disappearance of certain original wild parent stock of fishes, the bureau would help to study the salt water fin-fishes and shell fishes including important marine fishes.

4.99 During the year, the Exploratory Fisheries Project started a project unit at Vizhinjam to conduct experimental fishing in order to ascertain the economic viability of deep sea fishing, by collecting statistics of different varieties of fish obtainable through actual fishing operations. For the purpose, a ship purchased from Denmark at Rs. 4 crores, equipped with facilities

to preserve fish catch and detect fish shoals in the sea has been introduced. The ship will be moving out to about 60 km. off-shore to do fishing. This project aims at an annual catch of about 61,000 tonnes from the deep sea. The future plans under the project include the commissioning of one more fishing vessel to be operated from Vizhinjam and another from Cochin.

Marine Products Exports

4.100 In 1980-81, the exports of marine products from Kerala were 29,148 tonnes valued at Rs. 95.34 crores. In 1979-80, the exports stood at 30,534 tonnes valued at Rs. 103.93 crores. Thus during the year 1980-81, the marine products exported from Kerala declined by 1386 tonnes (4.5 per cent) in terms of quantity and Rs. 8.59 crores (8.2 per cent) in terms of value. But, Kerala continues to be the principal state exporting marine products from India. In the overall exports of marine products from the country during 1980-81 Kerala alone handled a little over 38 per cent in terms of quantity and about 41 per cent in terms of value. Even though both the volume and value of marine cargo shipped from the State decreased, the State's share in the total exports has shown an increase of about 9 per cent in terms of volume.

4.101 At the national level also, the exports of marine products suffered a setback during 1980-81. The exports of marine cargo from India which stood at 86,401 tonnes in 1979-80 declined to 75,591 tonnes in 1980-81, registering a fall of 10,810 tonnes (12.51 per cent). In terms of value also the export earnings declined from Rs. 248.82 crores to Rs. 234.84 crores, during the period recording a decrease of Rs. 13.98 crores (5.62 per cent). However, the average unit value realisation of marine products exports during the period increased from Rs. 28.80 per kg. to Rs. 31.07 per kg.

4.102 In Kerala, frozen shrimp continued to dominate the exports during 1980-81 as well. Of the total exports, frozen shrimp alone accounted for 84 per cent in terms of volume and 88 per cent in terms of value. But the quantity of this item exported from the State declined from 26,047 tonnes in 1979-80 to 24,481 tonnes in 1980-81. In terms of value the decline over the period was from Rs. 92.37 crores to Rs. 84.27 crores. Another major item responsible for the fall in exports was frozen squids. It accounted for only 382 tonnes valued at Rs. 68 lakhs. Apart from these two items exports of fresh frozen fish and cuttle fish have also experienced a setback both in volume and value. In the case of frozen lobster tails there was decline in terms of value while there was an increase in terms of quantity. However, frozen frog legs was an item which showed significant

progress both in quantity and value in the export front during the year under review.

4.103 The main reasons attributed to the drop in the exports of marine products in 1980-81, both at the national and State levels, are poor fish landings and stagnation in the export of frozen shrimp due to decreased catches of prawn, sharp fall in prices in the foreign markets, selective buying adopted by US buyers on account of revised testing procedures resulting in detention of shrimp and strengthening of Indian Rupee against US Dollar which lowered Rupee value per US Dollar in 1980-81 as compared to 1979-80.

4.104 In view of the sharp fall in the volume and value of marine products exported from the country, the Central and State Governments and the fisheries institutions have launched various programmes to boost the development of the fisheries economy in the State. As a part of this, the Marine Products Export Development Authority, Cochin, implements a scheme for subsidised distribution of fish boxes. Hitherto, the scheme was intended only for mechanised fishing boat owners registered with the authority to carry ice and iced fish. The scheme has now been extended to owners of peeling sheds and processing units. Another important measure undertaken by the Authority during 1980 was the scheme of giving 50 per cent subsidy with a ceiling of Rs. 12,500 to processing plants for setting up their own laboratories. In addition, the MPEDA has launched a technical assistance programme for commercial shrimp farming as a major project, to strengthen the production base of shrimps for export from the country. Under the programme, in August 1981, the Authority organised an intensive campaign of prawn culture in Kasargod, Payyannur, Taliparamba and Edakkad Blocks in Cannanore district. Brackish water area holders interested in availing themselves of the technical assistance for prawn culture, were identified and necessary assistance was given to them at the campaign.

4.105 The Government of India is considering the feasibility of giving excise duty concessions on high speed diesel oil for deep sea fishing vessels to promote exports of marine products. The idea is to cover all marine products under the scheme, taking into account the enormous potential for export of lobsters, tuna and other marine species.

Inland Fisheries

4.106 The inland fish production in the State during 1980-81 was 25,500 tonnes as against 25,000 tonnes in the previous year. This constitutes 8.5 per cent of the total fish production in the State during the year under review. The principal species of inland fish catches comprise Prawns (4700 tonnes), Tilapia (4,100 tonnes), Murrels (2900 tonnes) and Etroplus

(2900 tonnes). The percentage distribution of Prawns, Tilapia, Murrels and Etroplus to the total inland fish catches were 18.5, 16.3, 11.4 and 11.3 respectively. The species-wise composition of inland fish production in Kerala during 1979-80 and 1980-81 is given in Table 4.28.

TABLE 4.28
Species-wise Composition of Inland Fish Production in Kerala

Species	1979-80	Per cent	1980-81	Per cent
(1)	(2)	(3)	(4)	(5)
Prawns	4652	18.55	4724	18.51
Etroplus	2847	11.95	2906	11.38
Murrels	2883	11.50	2912	11.41
Tilapia	4018	16.02	4172	16.34
Catfish	2638	10.52	2685	10.52
Jewfish	1367	5.45	1520	5.95
Others	6675	26.61	6607	25.89
Total	25080	100.00	25526	100.00

4.107 The developmental schemes initiated by the Department of Fisheries under inland fisheries programmes include development of small water areas, construction of fish seed farms, brackish water fish farming, patrolling in backwaters, reservoir fisheries, composite fish culture, demonstration programme etc. The development of inland fisheries under the auspices of the Fresh Water Biological Centre at Malampuzha has been intensified and its cope widened in 1980-81. Experiments at the Centre shows that better indigenous varieties of fish such as culta, robia and mrigal can be bred more profitably. The fingerlings distributed from the Centre are in high demand among the private pisciculturists because of the profit margin per unit area.

4.108 The construction of Polachira and Parappanangadi fish seed farms have been completed. In these farms about 8.78 lakh fingerlings were stocked. Works on the construction of other fish seed farms at Pallom, Vellilamkandom and Kuttiyadi have been initiated during the year under review. The work of shrimp hatchery at Azhikode has been completed and administrative proceedings of the brackish water fish farms at Njarakkal and Malippuram are under way. In order to detect illicit fishing on backwaters, two patrol boats are functioning at Ernakulam and Alleppey and another one will also be introduced very shortly for the purpose.

4.109 Under composite fish culture in ponds, a newly formulated practice on the basis of intensive

research, fast growing fishes namely Indian major carps cutta, mrigal and the exotic carps such as silver carp, common carp and grass carp are employed for the purpose. The survey of ponds for this type of fish culture was continued during the year under review and 83.44 ha. of ponds have been stocked with fingerlings and an area of 7.4 ha. have been harvested. Besides, 50 thousand fingerlings and 25 thousand spawns were distributed to fish farmers. The Fish Farmers' Development Agencies in Quilon, Trichur and Palghat continued their function of identifying and surveying of ponds for fish culture and stocking and distributing fingerlings to fish culturists. About 82.97 lakh spawns were produced and 3.39 lakh fingerlings were stocked in the reservoir heads in the State. Under the programme survey of inland and brackish water fisheries, works on 555 ha. of brackish water and 130 ha. of fresh water resources have been completed. The pilot project on Pearl culture at Vizhinjam has extracted 415 pearls. The mussel culture centre also continued its activities during the year under review.

4.110 The Kerala Inland Fisheries Development Corporation was constituted by Government for the enhancement of inland fish production through scientific culture of species. The Corporation came into being in June 1981. So far the Corporation has started two fish seed farms one each at Njarakkal and Malippuram. The Corporation envisages implementation of thirty schemes involving an investment of Rs. 40 crores in a phased programme extending over ten years, for the development of inland fisheries.

4.111 The Central Marine Fisheries Research Institute, Cochin, has developed a new prawn culture technology under their "lab to land" programme. The programme was implemented during 1980-81, at Valappu, a tiny hamlet off Cochin. It has yielded a rich harvest of export quality prawns of "Naran" variety. The results indicate that there are bright prospects for prawn culture in Vypeen Island for increasing the production through scientific farming and multiple cropping for improving the economy of the local people. On the basis of the experience of Valappu, the CMFRI will set up a model prawn hatchery at Njarakkal so as to supply hatchery produced seed for stocking in the near future.

Refrigeration Facilities

4.112 The refrigeration facilities available in Kerala comprise 220 ice plants, 91 freezing plants, 97 cold storages and 31 fresh fish storage plants. The total ice production capacity of the plants is 2289 tonnes with a storage capacity of 3889 tonnes. The

freezing plants have a total freezing capacity of 506 tonnes. The total storage capacity of the cold storages is above 10,700 tonnes and the fresh fish storages

could accommodate 676 tonnes of fresh commodities. The position regarding refrigeration facilities in Kerala during 1979-80 is shown in Table 4.29.

TABLE 4.29
Refrigeration Facilities in Kerala (1979-80)

Item	Unit	Public	Private	Cooperative	Total
(1)	(2)	(3)	(4)	(5)	(6)
Ice Plants	No	17	201	2	220
Ice Production Capacity	Tonnes	170	2013	16	2289
Ice Storage Capacity	"	705	3166	18	3889
Freezing Plants	No.	8	82		91
Freezing Capacity	Tonnes	52	450	4	506
Cold Storages	No.	9	87	1	97
Storage Capacity	Tonnes	1470	9244	60	10774
Fresh Fish Storage Plants	No.	21	10	..	31
.. Capacity	Tonnes	584	92	..	676

Fishermen Cooperatives

4.113 The fishermen cooperatives working in Kerala may be classified into credit societies, Malsya Ulpadaka Cooperative Societies, Regional Fish Marketing Societies and Fish Marketing Federation. The total number of these co-operatives decreased from 558 in 1979-80 to 472 in 1980-81. Consequently, the membership of the fisheries cooperatives declined from 60,600 to 54,500 during the period and the total paid up share capital from Rs. 69.89 lakhs to Rs. 68.89 lakhs. In the case of MUCS, a drastic decrease both in the number and membership has occurred during the year under review. The number of this type of societies fell from 451 in 1979-80 to 368 in 1980-81 and the membership from 40,000 to 33,000.

4.114 The concept of forming fisheries village societies was evolved in the context of the failure of ordinary cooperatives in the economic up-lift of the fishermen community. The fisheries village societies, the most ambitious programme envisaged for the welfare of the fishermen throughout Kerala, is expected to come into full swing in the near future. So far 226 fishing villages have been identified for the purpose. Appointment of fisheries officers for 164 villages has been made. The fisheries officers will conduct elections to the governing bodies of the village cooperatives. Once the cooperatives are set up the development activities of the KFWC, IFDC, KFG and the Department would be conducted through them. One of the primary activities that the cooperatives will undertake is the distribution of loans to the fishermen for buying nets and boats.

The fishermen will be given 15 per cent subsidy and 75 per cent loan for the purpose. The balance will have to be borne by the fishermen. Another activity of the cooperatives will be marketing of fish. They will thus be able to save the fishermen from the exploitation of middlemen in marketing. The village societies are expected to benefit about 1.3 lakh fishermen who are directly engaged in fishing. Another 6 lakh people who make a living through fish trade will also benefit from the scheme.

Kerala Fisheries Corporation

4.115 The Kerala Fisheries Corporation has a fleet of four deep seas fishing vessels. During 1980-81 the vessels had done fishing for an average 139 days and landed 124 tonnes of fish and prawns valued at Rs. 57.44 lakhs. In the previous year the achievement of the fishing fleet was 85.77 tonnes of fish and prawns, valued at Rs. 44.38 lakhs. In 1980-81, the Corporation exported 50.2 tonnes of frozen shrimp valued at Rs. 21.75 lakhs. The Nylon Net Factory owned by the Corporation produced 16.40 tonnes of nylon webbings and sold 15.88 tonnes for Rs. 23.66 lakhs. The factory also sold 134 kg. polythene webbing and 44 trawl nets worth Rs. 97,000. The total turnover of the factory during the year was Rs 25 lakhs approximately. An amount of Rs. 2 lakhs has been realised as net profit. The turnover of the Azhikode Fish Meal and Oil Plant during the year was 42 tonnes of fish meal and 17 tonnes of fish oil. The sales turnover of the plant was

75 tonnes of fish meal for Rs. 2.10 lakhs and 11.5 tonnes of fish oil worth Rs. 63,500. In 1981 the Corporation started a floating seafood snack bar, the second of its type at Ernakulam. A variety of fish snacks like cutlets, wafers, chips, and samoosas are served at the bar along with hot beverages and soft drinks. The Corporation has a proposal to open a chain of 10 sea food snack bars in major cities and tourist spots in the State. With a view to entering the internal marketing of fish, 35 retail booths have already been opened by the Corporation under the 'Cold Chain Scheme'. During 1980-81 the Corporation, through its internal marketing wing, has sold 164 tonnes of fish and prawns and 11,000 bottles of pickles valued at Rs. 15.82 lakhs.

4.116 The Corporation has four ice-cum-freezing plants located at Cochin, Calicut, Neendakara and Cannanore. These plants were running on a loss for many years. Whatever profits the Corporation makes through its net manufacturing unit, deep sea fishing operations off Vishakhapatanam and fish retail outlets, is eaten among by the loss from the freezing plants which employ more than 60 per cent of workers of the Corporation. As the Corporation's financial position is fast deteriorating it has drawn up some profit making programmes, so as to enable it to stand on its feet. As part of these programmes, the Corporation will organise a deep sea fishing unit, which would have at its disposal some 'factory ships' with full scale processing facilities. It has also plans to expand its net making unit in a bid to increase its profits. The Corporation is expected to come out of the red and play a major role in the fisheries development programmes launched by the State.

Fishermen's Welfare Corporation

4.117 The activities of the Kerala Fishermen's Welfare Corporation include housing programme, relief measures, financial assistance, insurance etc. The scheme of assistance to fishermen to acquire craft and gear envisages extension of financial assistance to groups of fishermen for the purchase of catamarans, dugout canoes and plank built canoes with other accessories. The financial assistance under the scheme will be made available at the rate of 75 per cent as bank loan and 15 per cent as Government subsidy. The balance will be met by the beneficiaries. During the year 1980-81 563 fishermen in 249 groups were extended financial assistance under the scheme. For this purpose, an amount of Rs. 7.74 lakhs was disbursed as loan and subsidy. The contribution by the beneficiaries to the scheme was Rs. 86,000.

4.118 The scheme for mechanisation of country crafts, introduced recently, has evoked considerable response and 800 boats have so far been fitted with out board/inboard engines through private initiative. Therefore, the Welfare Corporation launched a pro-

gramme to finance the mechanisation of country boats and to assist fishermen groups to acquire mechanised fibreglass boats. Operational trials of fibreglass boats have already been conducted at Neendakara under the auspices of the Corporation. For mechanisation of country crafts, the Corporation offers a subsidy of 25 per cent and manages issue finance from banks to the extent of 67.5 per cent, so that the boat owner has to make only 7.5 per cent as initial investment. The target of the Corporation is to mechanise 2000 country boats and to assist fishermen groups to acquire 100 mechanised fibreglass boats. The Corporation has taken steps to implement the scheme.

4.119 The first phase of the scheme for providing houses to traditional fishermen has almost been completed. By availing an amount of Rs. 198.68 lakhs as loan from HUDCO and an equal amount as grant from Government, the Corporation has completed the construction work relating to 10,000 houses. A few houses are under various stages of construction. Rehabilitation of fishermen evicted from Vizhinjam—Kovalam Fishing Harbour area is another scheme undertaken by the Corporation. The idea is to rehabilitate 2000 fishermen families in two townships one at Thennoorkonam and the other at Pulloorkonam. Under the scheme, construction of 165 houses is nearing completion and another 400 houses have already been tendered.

4.120 With a view to ensuring prompt supply of non-adulterated diesel oil to fishing boats in correct measure and at reasonable price, the Corporation has introduced a scheme for the installation of diesel bunks at important fishing centres along the Kerala coast. Two such bunks started functioning at Neendakara Fishing Harbour during 1980-81. Action is under way for the installation of another one at Sakthikulangara. The special Vanitha Bus Service, exclusively for women fish vendors at concessional rates, continued to operate at Trivandrum during the year under review.

4.121 Under the insurance scheme for fishermen, financial assistance is provided to the family of fishermen who meet with death while fishing. The scheme also covers payment to those who suffer disability due to accidents while fishing. In 1980-81 an amount of Rs. 7.16 lakhs was spent on the scheme to benefit 165 persons. Further, an expenditure of Rs. 8.11 lakhs was also incurred under the scheme of gratuitous payment for damages to fishing crafts, fishermen's houses etc., involved in 2640 cases.

Fishing Harbours and Landing Centres

4.122 The Harbour Engineering Wing is in charge of investigation, design and construction of fishing harbours, mini-fishing harbours, fish landing centres and their capital repairs and maintenance. In addition to this certain specific works such as construction of ice

plants and additional work in boat building yards are also entrusted to the Wing. The government have accepted in principle a scheme for developing seven fishing harbours, nine [mini-fishing harbours and twenty-two fish landing centres.

4.123 The construction of the first stage of Vizhinjam Fishing Harbour has been completed. The second stage works such as moulding of tetrapods, blocks, the extension of sea-ward breakwater etc. are in progress. The Government of India has called for data on actual fishing operations to assess the commercial viability of the harbour. Therefore, two deep-sea vessels of the Exploratory Fisheries Project are conducting trial fishing in the Wadge Bank area, at the request of the State Government. The work on the development of Neendakara Fishing Harbour was started during 1980-81 and it is making good progress.

4.124 The construction of fish landing centres at Kasargode, Neeleswaram and Munakkadavu with financial assistance from Government of India, is in progress. The investigation for Puthiappa mini-fishing harbour has been completed. Investigation for Chombal, Kayamkulam, Thankasserry and Muthalapozhi mini fishing harbours has been started. The construction of fish landing platform at Parappanangadi with financial assistance from Marine Products Development Authority has been completed. The work on the Puthiappa fish landing platform is nearing completion and action is being taken to construct platforms at Valanjavazhi, Cheruvakkal and Thalai.

Other Programmes

4.125 For the package schemes at Tanur and Karunagapally which are to benefit 150 fishermen families each, 30 boats have been constructed and issued to 30 fishermen groups. Sixty net and 30 other boards have also been issued to these groups. Under the gill net scheme at Vizhinjam, so far, 10 boats were constructed and issued to beneficiaries. Action has been taken to construct the boats and purchase nylon yarns and ropes to complete the above schemes. The ARDC schemes at Parappanangadi, Puthiappa and Anjengo and special package scheme at Vypeen continued to function during the year. The work of the building of Baliapattom Ice Plant has been completed and a major portion of the machinery required for the plant has been erected.

4.126 Of the 4010 houses sanctioned under the grant scheme for housing, 3663 houses have been completed till the end of 1980-81. The infrastructure facilities schemes at Ambalapuzha and Cheruvathur were continued. In respect of construction of fishery roads, work relating to 12 roads have been completed and construction of 19 roads is in progress. Under construc-

tion of permanent buildings for fisheries dispensaries, works relating to the dispensaries at Thottappally, Karimpuram, Thevarkadappuram, Kottakkal, Ajannoor, Ettikulam, Vellikunnu, Edava and Nattika have been completed. The works connected with other dispensaries at Pallithode, Arikkadi and Paravoor are nearing completion.

4.127 The extension wing of the Department of Fisheries has actively participated in the District Seminars on the new concept of the organisation of village societies. The wing conducted 78 film shows during the year, beside participating in various seminars and exhibitions. The three Regional Fisheries Technical High Schools and Five Fishermen Training Centres continued to function in 1980-81. Besides, three new schools one each at Beypore, Tanur and Chowghat have started functioning during the year.

Fishermen Population and Fishing Crafts

4.128 The estimated fishermen population of Kerala in 1980-81 is 7.96 lakhs. They constitute 3.13 per cent of the total population in the State in 1981. Of the total fishermen population 6.14 lakhs belong to the marine sector and 1.82 lakhs to the inland sector. Among the coastal districts of the State, Alleppey stands first with 1.39 lakh fishermen and Trivandrum ranks second with 1.32 lakhs. According to the livestock census 1977, about 1.72 lakh persons are actively engaged in fishing activities.

4.129 All the general statistics about Kerala go awry when one speaks about the fishing community in the State. While the density of population in Kerala is 654 per sq. km. it is 6000 in the coastal areas inhabited by fishermen. Like-wise, the literacy rate in Kerala is 69.17 per cent, but among fishermen, it is around 15 per cent. Hindus form about 55 per cent of the population in the State. but among fisherfolk except for a small Hindu fishing community at Alleppey, the rest of the fishermen are either Muslims or Christians. Turning to the socio-economic conditions of fishermen, it is found that, inspite of the development and welfare activities undertaken by the State Government and other institutions over the past years, the fishermen, mainly those who use country boats, have taken loans worth Rs. 25 crores from the money lenders both for domestic and industrial purposes.

4.130 As far as fishing crafts and equipment are concerned the latest statistics available are those collected under the livestock census, 1977. The census reveals that the fishing equipment in Kerala consist of 2,988 mechanised boats and 32,377 catamarans, canoes and other country crafts. Besides this, mechanised fishing boats from the neighbouring states frequent the Kerala coast during peak fishing seasons.

Forests

4.131 The forests of Kerala have enormous potential for promoting the economic development of the State. Forest in the State occupy an area of about 9335 sq. kms. This constitutes nearly 24 per cent of the total geographical area of the State. There is also an area of 1915 sq. kms. of vested forest in the state. Besides providing raw materials for industrial development, the forests give fuel for domestic consumption, prevent soil erosion in hilly tracts and exercise control over the ecological system. There has been a declining trend in the forest area in Kerala. A number of factors like diversion of forest land for agriculture, industrial establishments, roads, tribal colonies, irrigation and power projects, settlements of evicted persons have accounted for the depletion of the forest areas. The availability of forest area in Kerala, division wise, is shown in Appendix 4.19.

4.132 Forestry operations are labour intensive. Hence they provide employment to a large number of people and supplement the State revenue to a considerable extent. The contribution of forests to the State income at current prices was Rs. 64.61 crores in 1980-81 as against Rs. 58 crores in 1979-80, the increase over the year being 11.39 per cent.

4.133 At the end of March 1980, 1.40 lakh hectares of land were brought under forest plantations. The area increased to 1.44 lakh hectares by the end of March 1981 registering a rise of 2.5 per cent over the year. The area under principal species of forest plantations is shown in Table 4.30.

TABLE 4.30
Area under Principal Species of Forest Plantations

Species	Area in Hectares		Increase over the year
	As on 31-3-1980	As on 31-3-81	
(1)	(2)	(3)	(4)
1. Teak	73927	75323	1396
2. Softwood	22174	22957	783
3. Cashew	4698	4945	247
4. Rosewood	119	145	26
5. Eucalyptus	32817*	33669*	*852
6. Mahagony	227	227	..
7. Bamboo	965	977	12
8. Wattle	808	997	195
9. Sandalwood	9	9	..
10. Kongu	20	20	..
11. Balsa	115	120	5
12. Pine	429	429	..
13. Cardamom	60	60	..
14. Pepper, Cocoa etc.	315	625	310
15. Zylonicum	4	4	..
16. Others	3916	3957	51
Total	140282**	143849**	3567**

*Includes eucalyptus planted under fuelwood scheme.

**Plantation of pepper, cocoa etc. are not included under total plantation since these are planted as intercrop in existing plantation of other species

4.134 Forest plantations occupy 15.4 per cent of the total area under forests in the State. Of the total area under forest plantations teak constitute the major portion (52.3 per cent) followed by eucalyptus (23.4 per cent) and softwood (15.9 per cent). All other species together cover the remaining area (8.4 per cent). Planting programme is the most important development activity of the Department. During the year 1980-81 an area of 3830 hectares was newly planted with seedlings of different tree species under different plantation schemes. Apart from this, pepper, cocoa, medicinal plants etc., were also planted as inter-crop in the existing plantations.

4.135 Social forestry aims at planting seedlings of different tree species in waste lands, poramboke lands and premises of public institutions to meet the requirements of firewood for the villages. During 1981, an area of 71 hectares was planted under this programme, apart from planting avenue tree seedlings to a length of 34 kms. Ten lakh seedlings were distributed free of cost to individuals by the Forest Department for planting during the Vana Mahotsava celebration of the year. Coinciding with the World Environmental Protection Day in 1981, a Social forestry programme was implemented in 17 selected panchayats in Trichur district. Under the programme massive tree planting was undertaken with public co-operation and through financial assistance from Government and the Kerala Agricultural University. During the campaign about 4.5 lakh seedlings were planted. It is expected that at least 30 per cent of them will survive as majority of the saplings were planted in homestead gardens.

4.136 With a view to improving the natural regeneration of the evergreen forests, operations like canopy, removing etc., were done in 990 hectares. Older plantations are maintained properly for improvement through operations like tending, weeding, climber cutting etc. During the year 12,300 hectares was brought under silviculture operations.

4.137 In order to check the encroachment on forest land, it was felt necessary to protect the forest area through survey and demarcation of forest boundaries and by erecting permanent cairns along the boundaries of the forests. The length of boundaries demarcated during the year was 590 Kms.

4.138 The training centre for prevention of forest fire in Kulamavu was started in 1979, with the technical assistance from the New Zealand Government. The centre has so far trained about 200 conservators of forests and other forest officials, by imparting them a three week training in prevention and control of forest fires. The Government of India is contemplating to take over of the centre with a view to making it a national training centre.

4.139 The sale proceeds of timber increased from Rs. 34.90 crores in 1979-80 to Rs. 36.17 crores in 1980-81, registering an increase of 3.6 per cent over the year. The sale value of firewood and charcoal increased from Rs. 1.34 crores to Rs. 2.04 crores, registering an increase of 52.9 per cent. The aggregate sale value of timber and other forest produces went up from Rs. 40.49 crores in 1979-80 to Rs. 42.89 crores in 1980-81. The growth rate over the year works out to be 5.9 per cent. The data on sale proceeds of forest produce are given in Table 4.31.

TABLE 4.31

Sale Proceeds of Timber and Other Forest Produce

Item	Sale Proceeds (Rs. '000)		Increase/Decrease over the year	
	1979-80	1980-81	Actual	Per cent
(1)	(2)	(3)	(4)	(5)
Timber	349015	361741	12726	3.6
Firewood and charcoal	13371	20449	7078	52.9
Livestock	63	32	-31	-49.2
Other Items	42535	46715	4180	9.8
Total	404984	428937	23953	5.9

Forests Development Corporation

4.140 The Kerala Forest Development Corporation aims raising of plantations of pulpwood, promotion of integrated development of forest plantations, development and utilisation of forest produce etc. The ongoing projects of the Corporation are pulpwood project, matchwood project, cardamom project and Kerala Wood Industries Ltd. Under the pulpwood project, the Corporation has planted an area of 7734 ha. during 1981. The matchwood project which commenced in 1977 has so far completed planting of 887 ha. To increase the production of matchwood, proposals are afoot to take over the existing plantations from the Forest Department and to expand the programme of planting wood species suitable for the match industry. The cardamom project envisages raising and development of cardamom plantations at Kanni Elam in Munnar, Pachakkanam and Nelliampathy. In 1981, the Corporation has raised plantations to the extent of 209 ha. at Kanni Elam, 83 ha. at Munnar, 56 ha. at Pachakkanam and 89 ha. at Nelliampathy.

4.141 The Corporation has proposed a scheme for raising tea plantations in Wynad. The first phase of the tea plantations is to plant 400 ha. An area of 45 ha. has been planted so far. The Corporation has undertaken a scheme to distribute firewood to the public at

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reasonable prices. Firewood depots owned by the Corporation operate at present in all the district headquarters except Quilon, Idukki and Wynad. The Kerala Wood Industries Ltd., is a subsidiary company registered in 1981 under the Corporation with its headquarters at Kozhikode. The project envisages processing of wood for veneers, joinery items etc. The first phase of the project is to establish a veneer unit at Nilambur.

4.142 The Corporation has an engineering wing which is supervising the civil works of the Wood Industries Complex at Nilambur. This wing has taken up construction works of labour lines for 100 families and a Cardamom curing factory at Kanni Elam. Preliminary works for a Tea Factory Complex at Kambamala and head office building at Kottayam will be taken up by the engineering wing soon.

Forest Research Institute

4.143 The Kerala Forest Research Institute is engaged in studies on timber and timber-based industries. The studies are aided by the State Government and other agencies like the Food and Agriculture Organisation. Two sub centres of this Institute for conducting research on teak plantations and wild life are functioning at Nilambur and Thekkady respectively. The entire work of the Institute is distributed among seven divisions namely, Ecology, Entomology, Genetics, Plant Pathology, Plant Taxonomy, Soil Science and Wild Life. A major contribution of the Institute is the development of an effective device to control damage by termites in eucalyptus plantations.

4.144 The Kerala Government proposes to levy a forest development tax. For the purpose, the Kerala Forest Act is being amended and the Amendment Bill has been published. The tax will be imposed on the disposal or sale of forest produce at a rate of five per cent of the amount of consideration through the sale. The finance realised through the tax will be used for establishing a fund called "The Kerala Forest Development Fund", to be utilised for planting softwood and other species which form the raw material for industries and for forest research. Further, considering the shortage of timber used as raw material for wood-based industries the Government has imposed restrictions on the movement of some of the timber species to places outside the State. For the effective implementation of the regulations imposed 48 varieties of timber used for various purposes such as plywood, matchwood, bobbin wood, pencil wood, packing case wood etc., have been declared as essential commodities.

Community Development

4.145 The major programmes being implemented through the Community Development Blocks are

C.D. Pattern Schemes, Women and Children's Programme, National Rural Employment Programme, Integrated Rural Development Programme etc.

4.146 Under the C.D. pattern schemes, programmes are implemented for the development of agriculture, animal husbandry, minor irrigation, industries, etc.

4.147 The Applied Nutrition Programme (ANP) is an important scheme under the Women and Children's Programme. The programme was introduced in 1963, as a joint venture of Government of India, State Government and other agencies, with the intention of producing protein foods, implementing programmes for the well being of rural women, developing the women and youth organisations, providing nutrition education etc. Out of the 151 blocks in the State, including the seven blocks newly formed during 1981-82, 105 are ANP Blocks. Of these, ten blocks were brought under ANP during 1981. Another activity under the Women and Children's Programme is the composite programme for women and pre-school children. The C.P.W.P.C. is centralised around a Village Balawadi sponsored and operated by the local Mahilasamajam. The Mahilasamajams are provided financial assistance for construction of permanent buildings for running the Balawadies. By the end of 1980-81 about 2161 Balawadies have been started under this programme.

The National Rural Employment Programme (NREP)

4.148 The food-for-work programme conceived in January 1977 has been converted as National Rural Employment Programme by the Government of India, since October 1980. The major objectives of NREP are:—

(i) Generation of additional gainful employment for the unemployed and under employed persons in rural areas.

(ii) Creation of durable community assets for strengthening the rural infrastructure which will lead to rapid growth of rural economy and steady rise in the income levels of the rural people.

(iii) Improvement of the nutritional status and the living standards of the rural people.

4.149 In the execution of works under this programme preference will be given to the ecologically and economically backward areas especially the areas predominantly inhabited by scheduled castes and scheduled tribes.

4.150 Another important part of the programme is the preparation of a shelf of projects so that the felt needs of the rural community, particularly of the economically and socially weaker sections, are catered to on a planned and priority basis with the overall objective of the systematic development of the rural infrastructure, through proper utilisation of the local resources.

4.151 The expenditure on NREP is shared on a 50:50 basis between the Centre and the State. Wages and material components of the expenditure for the works under this programme are in the ratio of 60:40. The wage rate for unskilled labourers corresponds to the Minimum Agricultural Wage rates prevalent in the State and it is Rs. 10 per man-day from 30-7-1981. The wage rates for women and adolescent workers are Rs. 8 and Rs. 7.50 respectively. For skilled labourers the Public Works Department schedule of rates is followed. During 1980-81 26236 tonnes foodgrains were utilised for various food-for-work schemes and another 11,286 tonnes for NREP. The total cost of works executed during 1980-81 was Rs. 1175 lakhs. With this investment 97 lakh man-days of employment were generated in the rural areas of the State. As a result of the above investments, 2233 road works with a total length of 2718 Km. were completed and 650 minor irrigation works covering an ayacut area of 9011 ha. were taken up.

Integrated Rural Development Programme (IRDP)

4.152 The integrated Rural Development Programme (IRDP) was started during 1978-79. The programme is under the administrative control of the State Development Department. The aim of the programme is to assist the target groups among the small/marginal farmers, agricultural labourers, village artisans etc. to take up gainful employment to improve their socio economic condition. In the year 1978-79, 58 blocks were brought under IRDP with 100 per cent central assistance. From 1979-80 onwards the pattern of assistance has been changed to 50:50 between the Centre and the State. Now the programme covers all the blocks in the State. The year-wise coverage of IRDP during 1978-79, 1979-80 and 1980-81 is given in Table 4.32.

TABLE 4.32

The Year-wise Coverage of IRDP from 1978-79 to 1980-81

Year	Total number of Blocks	No. of Blocks covered	No. of families benefited		Percentage of Scheduled Castes / Scheduled Tribe Families
			Total SCs/STs		
(1)	(2)	(3)	(4)	(5)	(6)
1978-79	144	58	32146	5320	16.5
1979-80	144	63	74552	11048	14.81
1980-81	144	144	58992	10317	17.48

4.153 During the year 1980-81, 58,992 families were given assistance of which 10,317 were Scheduled Caste/Scheduled Tribe families. Under agriculture

and allied sectors 40,656 individual economic programmes were assisted. Under rural industries 5523 units and under tertiary sector 23,585 units were given assistance during the same period.

4.154 In accordance with the guidelines issued by Government of India, detailed household survey has been conducted in all the blocks and beneficiary families from the lower income strata have been identified for assistance during 1981-82. The block level functionaries and the officials of the DRDA were given necessary orientation through workshops, Seminars and discussions at different forums.

Training of Rural Youth for Self Employment (TRYSEM)

4.155 The scheme, "Training of Rural Youth for Self Employment, was sanctioned for implementation in the State during November 1979, with the aim of imparting training to the rural youth in various trades/skills. The target under this programme is to train 40 persons per block per year in institutions like Extension Training Centres, Industrial Training Centres, Agricultural University etc. The training capacity available with industrial units, service establishments, master craftsmen, artisans and skilled workers are also utilised for imparting training.

4.156 During 1980-81, an amount of Rs. 14 lakhs was spent for this purpose and 1287 persons were trained. Of these 263 persons could set up their own units. Now the programme has been decentralised as desired by the Government of India and the District Rural Development Agencies have been made responsible for its implementation. During 1981-82, 6040 persons were targeted to be trained.

Rural Functional Literacy Programmes

4.157 The functional literacy programme is another scheme implemented by the Development Department. The scheme is having hundred per cent central assistance and is implemented in two blocks each in the districts of Trivandrum, Alleppey, Palghat and Cannanore. In each block 150 literacy centers are operated for a period of ten months in an year. The learners are supplied with learning materials and instructors are given a monthly allowance at Rs. 50 per month. During 1980-81 1493 functional literacy centres were conducted and 42,984 persons were made literate.

Social Inputs in Area Development

4.158 The Government of India and UNICEF have jointly sponsored a programme "Social Inputs in Area Development" with technical and financial assistance of UNICEF in selected geographical areas where development work is already initiated and additional provision for social development input is

required. The Department has selected the five backward coastal districts of Trivandrum, Alleppey, Ernakulam, Malappuram and Kozhikode for implementation of this programme.

Extension Training Centres

4.158 The Development Department has three training centres at Kottarakkara, Mannuthy and Taliparamba imparting training to village level workers and senior officers. These centres bring together planners, trainees and field workers and encourage exchange of ideas and experience. The Kottarakkara Centre is a composite type of training centre where there is facility for training village level workers, extension officers, block development officers and non-officials in various positions. There is also a good training farm, poultry unit, workshop wing and Kerala Indigenous Food Unit attached to this Centre.

4.159 A monthly journal called "Gramabhoomi" is being published by the Development Department since March 1980. It is a monthly with a circulation of 15,000 copies. The magazine highlights the various activities of rural development and gives guidance to rural people engaged in agriculture and other vocations.

Agricultural Credit

4.160 In the field of co-operative development. Kerala has advanced considerably especially on the credit front. The High Level Committee on Co-operative Credit constituted by Government of Kerala in April 1979 has assessed that the co-operative credit societies can contribute 60 per cent of the total credit requirements of the agriculturists in our State.

4.161 The total number of societies functioning during the year 1979-80 was 1581 with 35.74 lakh members. The total amount of loans advanced by the co-operative credit societies during the year 1979-80 was Rs. 169.18 crores as against 138.97 crores during 1978-79. Short term loans advanced during the year 1979-80 amounted to Rs. 129.52 crores of which Rs. 78.65 crores were issued for agricultural purposes alone. The amount advanced under medium term credit was Rs. 36.46 crores of which Rs. 24.59 crores was for agricultural purposes alone. The long term loans advanced during 1978-79 amounted to Rs. 3.20 crores. The total amount advanced for agricultural purpose alone constituted Rs. 103.24 crores i.e. 61.02 per cent of the total amount of loans advanced as on 30-6-1980. It is also estimated that as much as 65 per cent of the loans under short term and medium term credit advanced by co-operatives was for weaker sections.

4.162 As regards the progress of the co-operative credit sector in the State, there were 1581 primary agricultural credit societies as on 30-6-1980 of which 1332 societies were viable and potentially viable. The selected indicators of the performance of these societies are given in Table 4.33. These reflect the tempo of development in the activities of these societies. The average membership per society increased from 1954 as on 30-6-1979 to 2260 as on 30-6-1980. The average loan advanced per member also went up from Rs. 445 during 1978-79 to Rs. 473 during 1979-80. The average amount of loan issued per advancing society as on 30-6-1980 was Rs. 1.24 lakhs while the average loan amount per borrowing member was Rs. 1127. The total deposit mobilised by the societies showed an increase of 25.37 per cent over that of the previous year. The total amount mobilised during 1979-80 was Rs. 113.85 crores. The average deposit per member was Rs. 318 and the average deposit per society was Rs. 7,20,100. (See Table 4.34).

4.163 The net profit earned by the societies as on 30-6-1980 was Rs. 413.98 lakhs as against Rs. 336.08 lakhs during the previous year, the increase being 23.17 per cent. The number of societies which worked on profit was 948 during the year under review while during the previous year it stood at 915.

4.164 The co-operative marketing sector plays a vital role in the marketing of agricultural produce in the State. There are two Co-operative Marketing Federations (The Kerala State Co-operative Marketing Federation and the Kerala Co-operative Rubber Marketing Federation) with 94 primary co-operative marketing societies in the State. Besides this, the CAMPCO has been operating throughout the State for marketing of arecanuts. The total value of agricultural produce handled by co-operatives in 1978-79 was Rs. 53.35 crores and it reached Rs. 61.92 crores in 1979-80. The Kerala State Marketing Federation had exported agricultural produce worth Rs. 1083.98 lakhs during 1979-80. The Kerala State Rubber Marketing Federation marketed 10200 tonnes of rubber valued at Rs. 1048 lakhs in 1979-80. The value of retail sales of fertilisers in 1978-79 by co-operative retail outlets was Rs. 17.51 crores and it increased to 21.30 crores in 1979-80.

4.165 In the field of consumer activities also co-operatives have a significant role to play. The co-operative consumer structure in the State consists of the Kerala Co-operative Consumer Federation at the State level with 11 wholesale co-operative stores at district level.

TABLE 4.33

Selected Indicators of the Credit Operations of the Agricultural Credit Societies

Details	As on 30-6-1979	As on 30-6-1980
(1)	(2)	(3)
1. Number of Societies	1616	1581
2. Number of Members (lakhs)	31.58	35.74
3. Paid up Share Capital (Rs. in lakhs)	2254.19	2593.71
4. Statutory Reserves	261.20	297.68
5. Other Reserves	934.72	1089.28
6. Deposits	9081.00	11384.79
7. Other Borrowings	6329.00	8401.56
8. Working Capital	18860.00	23767.94
9. Loans advanced during the year		
(a) Short Term Loans (Rs. in lakhs)	10262.06	12952.85
(b) Medium Term Loans	3536.07	3645.24
(c) Long Term Loans	268.15	319.59
(d) For Agricultural Purpose Alone	8412.04	10324.02
10. Loans outstanding at the end of the year (Rs. in lakhs)	13013.39	17137.04
11. Loans Overdue	2600.64	3358.74
12. Number of Societies that Worked at Profit (Nos.)	915	948
13. Net Profit for the year (Rs. in lakhs)	336.08	413.98
14. Number of Societies that Worked at Loss (Nos.)	699	633
15. Loss Sustained (Rs. in lakhs)	552.07	132.89
16. Number of Societies Without Profit/Loss (No.)	2	..

Source: Registrar of Co-operative Societies.

TABLE 4.34

Selected Indicators of the Performance of Agricultural Credit Societies

Indicators	As on 30-6-1979	As on 30-6-1980
(1)	(2)	(3)
1. Average Membership per Society (Nos.)	1954	2260
2. Average Share Capital per Society (Rs.)	139480	164059
3. Average Deposit per Society (Rs.)	561943	720100
4. Average Deposit per Member (Rs.)	287	318
5. Average Working Capital per Society (Rs.)	1167079	1885725
6. Average Loan per Member (Rs.)	445	473
7. Percentage of Borrowing Members to Total Members	43	41
8. Average Loan Advanced per Advancing Society (Rs.)	1236000	1243033
9. Average Loan Advanced per Borrowing Member (Rs.)	1036	1127
10. Percentage of Overdue to Outstanding	19.99	19.59

Source: Registrar of Co-operatives Societies.

4.166 The district co-operatives have 239 branches and 1037 retail outlets. The retail sales of consumer goods in rural and urban areas by co-operatives rose from Rs. 58.50 and 18.32 respectively in 1978-79 to Rs. 65 crores and Rs. 22 crores respectively in 1979-80.

4.167 Besides, 338 Co-operative societies were working for the welfare of Harijans as on 30-6-1980. Under Western Ghat Development Scheme, 5 joint farming co-operatives are functioning for the welfare of Girijans. Various types of other co-operative societies like housing societies, employees' societies, autorickshaw drivers and taxi drivers co-operatives, literary co-operatives and co-operative hospitals are functioning in the State.

Kerala State Co-operative Bank

4.168 The short term co-operative credit structure consists of the State Co-operative Bank working as the apex institution at the State level, district co-operative banks at the district level and primary agricultural credit societies at the village level.

4.169 The State Co-operative Bank provides short term credit for seasonal agricultural operations, medium term production and investment credit for agriculture and allied activities, finance to meet the working capital requirements of traditional industries like handloom, coir etc., working capital requirements of district wholesale consumer stores, marketing societies and non-agricultural credit for financing employees societies, urban co-operative bank etc.

4.170 The bank also undertakes several developmental projects in the co-operative sector like (a) financing of integrated fisheries projects and schemes under IRDP with refinance facility from Agricultural Refinance and Development Corporation (b) financing of rubber marketing societies for establishment of crumb rubber factories under the Kerala Agricultural Development project with refinance assistance from Agricultural Refinance and Development Corporation (c) assisting rubber marketing societies for establishment of processing units with assistance from NDCDC, (d) meeting the working capital requirements of mini industrial estate co-operatives with refinance assistance from Industrial Development Bank of India and (e) financing working capital requirements of Central Arecanut Marketing and Processing Co-operatives Ltd., Mangalore (CAMPCO) on consortium basis with the Karnataka State Co-operative Bank and four commercial banks for procurement and marketing of arecanut from Karnataka and Kerala.

4.171 The State Co-operative Bank's membership is limited to district co-operative banks and State Government. At present the Bank has twelve members on its rolls—eleven district co-operative banks and the

Government of Kerala. The management of the Bank is vested in a Board of Directors consisting of eleven representatives of the District Co-operative Banks at the rate of one from each bank and four nominees of the State Government (three officials and one non-official), the Registrar of Co-operative Societies and the Managing Director of the Bank.

4.172 As regards the financial position of the Bank, its net profit during the year 1981 was Rs. 62.28 lakhs. There was a rise in the profit level from that of 1980 which stood at Rs. 14.59 lakhs. The paid up share capital increased from Rs. 300.49 lakhs in 1980 to Rs. 359.29 lakhs in 1981. The Reserves and Deposits of the Bank also rose to Rs. 378.18 lakhs and Rs. 4836.48 lakhs respectively during 1981 from Rs. 352.72 lakhs and 3986.41 lakhs respectively during 1980. The financial position of the Bank during 1981 is given in Table 4.35.

TABLE 4.35

Financial Position of the Kerala State Co-operative Bank as on 30th June

Particulars	(Rs. lakhs)	
	1980	1981 (subject to audit)
(1)	(2)	(3)
1. Paid up Share Capital	300.49	359.29
2. Reserves	352.72	378.18
3. Deposits	3986.41	4836.48
4. Borrowings	1698.87	2367.28
5. Working Capital	6303.00	8785.16
6. Loans and Advances Outstanding	4512.60	6011.51
7. Investments	1133.80	1418.81
8. Net Profit	14.59	62.28

Source: Kerala State Co-operative Bank, Trivandrum.

Long Term Credit

Kerala Co-operative Central Land Mortgage Bank

4.173 The Kerala Co-operative Central Land Mortgage Bank is the primary agency in the State charged with the responsibility of making available long term credit to farmers for agricultural development. At present there are 31 Primary Land Mortgage Banks affiliated to the Central Bank, which undertake loaning programme to individuals. The Bank has seven regional offices at Trivandrum, Quilon, Kottayam, Ernakulam, Perinthalmanna, Calicut and Cannanore.

4.174 During the financial year 1980-81 the Primary Land Mortgage Banks advanced Rs. 1440.99 lakhs under normal lending and Rs. 483.95 lakhs under special schemes to the borrowers, the total being Rs. 1924.94 lakhs. The loans advanced during 1979-80 totalled Rs. 836.96 lakhs under ordinary loaning programme and Rs. 376.15 lakhs under special schemes. The lending activities expanded during the year under review registering an increase of 72% and 29 per cent respectively in ordinary and special schemes. There is an increase of 59 per cent in the total amount compared to that of 1979-80 which amounted to Rs. 1213.11 lakhs. Besides, the Bank advanced Rs. 341.99 lakhs to Kerala State Electricity Board for energisation of pumpsets under ARDC Schemes. The amount advanced to K.S.E.B. during 1979-80 was Rs. 196.73 lakhs.

4.175 The Bank charges differential rates of interests for loans advanced for different purposes and different categories of borrowers. The rate of interest charged for loans issued for Minor Irrigation/Land Development is 10.25 per cent. The rate is the same for loans advanced to small farmers for diversified purposes. On other advances for diversified purposes the rate imposed is 12.50 per cent.

TABLE 4.36

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

(Rs. in lakhs)

Purpose	1979-80	1980-81
(1)	(2)	(3)
1. New Wells	88.93	178.92
2. New Tanks	29.59	51.52
3. Pumpsets and Persian Wheels	28.87	43.75
4. Agricultural Machinery	9.34	50.64
5. Repairs to Tanks	24.79	38.19
6. Repairs to Wells		

	(1)	(2)	(3)
7. Field Channels and Pumphouse		5.83	11.55
8. Cattle Sheds and Farm Houses		129.13	217.74
9. Fencing		69.47	139.40
10. Levelling and Bunding		245.96	413.60
11. Terracing		22.90	44.20
12. Drainage Channels		1.82	4.05
13. Plantations		124.08	157.80
14. Other Major Programmes		56.25	89.63
Total		836.96	1440.99

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

4.176 All the primary banks except Wynad Bank were eligible for unrestricted lending. The percentage of overdues of the Wynad PLMB has also come down to 29.95 per cent from 56.27 per cent. The percentage of overdues at the Central Bank level for loans against primaries had also come down to 3.08 per cent during the period under review from 4.64 per cent during 1979-80.

4.177 The purpose-wise classification of the loans issued under ordinary loaning programme during 1980-81 is given in Table 4.36. From the total loan amount of 1980-81 the major share had gone for levelling and bunding i.e. 28.7 per cent as against 29.4 per cent during 1979-80. For Minor Irrigation the percentage of loan issued during the year under review was 22.5 per cent. For the year 1979-80 it was 21.3 per cent.

4.178 The Banks lending activities cover various development purposes like minor irrigation works, land reclamation and soil conservation, cultivation of plantation crops and other diversified activities like dairying, fisheries etc. The Bank is also engaged in lending activities with refinance assistance from ARDC.

IRRIGATION AND POWER

Irrigation

In view of the variability of rainfall in the State, high priority has been accorded to irrigation projects in the State's Five Year Plans. These projects help the State in stabilising food crop production and in increasing the production of non-food crops. The irrigation potential of the State is assessed at 16 lakhs ha. (net) or 25 lakhs ha. (gross). Till the end of March 1981 the total area brought under irrigation is 4.48 lakh ha. (gross) which is only 18 per cent of the total irrigation potential of the State. A total investment of Rs. 300 crores has been made in irrigation projects in the State. During 1980-81 it was possible to extend irrigation facilities to 16,138 ha. (net) or 26,396 ha. (gross) at a total cost of Rs. 47.94 crores.

Major and Medium Irrigation Projects

5.2 The total extent of land that can be brought under irrigation in Kerala through major and medium irrigation projects is estimated at 6 lakhs ha. (net) or 14 lakhs ha. (gross). The ten completed projects viz. Chalakudy, Peechi, Malampuzha, Neyyar, Pothundy, Gayathri, Walayar, Vazhani, Mangalam and Cheerakuzhi have an ayacut area of 1.34 lakh hectares. These projects are irrigating a gross area of 1.47 lakh ha. By March 1981, some of the on-going projects like Pamba, Periyar valley, Chitturpuzha and Moolathara, Kanhirapuzha, Kuttiadi and Pazhassi have added through partial commissioning, another 1.49 lakh ha.

(gross) to the irrigated area in the State. Thus the total gross irrigated area built up till March 1981 through major and medium irrigation projects is 2.96 lakh hectares (gross).

5.3 During the year 1980-81 alone 15,508 ha. (gross) have been added to the irrigated area by the partial commissioning of some of the on-going projects viz. Pamba (5581 ha.), Muvattupuzha (2028 ha.), Chitturpuzha (565 ha.), Kanhirapuzha (2716 ha.), Kuttiadi (1694 ha.) and Pazhassi (2924 ha.). An amount of Rs. 41.81 crores has been spent in 1980-81 as against the Plan outlay of Rs. 42.30 crores for the year. Out of the total expenditure an amount of Rs. 41.16 crores has been spent on on-going projects, Rs. 0.29 crore on research and investigation, and Rs. 0.35 crore, for modernisation of old projects.

5.4 In the current year (1981-82) an amount of Rs. 25.05 crores was spent on major and medium projects including research and investigation till the end of November 1981 as against the Annual Plan outlay of Rs. 45 crores. Out of the total expenditure incurred during the year an amount of Rs. 24.60 crores was spent for on-going projects, Rs. 0.21 crore on research and investigation, and Rs. 0.23 crore on modernisation of old projects.

5.5 The details of the physical and financial achievements of the major and medium irrigation projects are given in Table 5.1.

TABLE 5.1

Major and Medium Irrigation Projects—Achievement During 1980-81

Name of Projects	Command Area (in hectares)		Physical Achievement during 1980-81 (in Hectares)		Cumulative Total at the end of 1980-81 (in Hectares)		Expendi- ture during 1980-81 (Rs. in lakhs)	Anticipated Achievement during 1981-82		
	Net	Gross	Net	Gross	Net	Gross		Financial	Physical	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Net	Gross
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
A. COMPLETED PROJECTS										
1. Chalakudy	26680	39380	..	..	19884	27258	..	..	..	..
2. Peechi	25500	23168	..	..	17256	23918	..	..	..	..
3. Malampuzha	29463	42090	..	..	19748	40208	..	..	..	..
4. Neyyar	16042	17952	..	..	8198	15966	..	..	..	..
5. Pothundy	8792	10930	..	..	5098	10046	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
6. Gayathri	7651	10930	..	..	4868	10114	..	..	..	..
7. Walayar	4536	6470	..	..	3685	6506	..	..	..	..
8. Vazhani	7668	7130	..	..	2190	4226	..	..	..	..
9. Mangalam	4816	6880	..	..	3305	6608	..	..	..	..
10. Checrakuzhy	2268	2828	..	..	927	1746	..	..	..	..
Total A	133416	167758	..	..	79159	146596	..	..	..	..

B. ON-GOING PROJECTS

1. Kallada	83087	92000	..	..	..	..	1095.75	2000	6308	8200
2. Pamba	17806	41683	2385	5581	14935	34089	333.47	400	2991	7000
3. Muvattupuzha	20880	52200	..	..	..	..	363.88	290	..	..
4. Periyar Valley	36500	85600	780	2028	25226	51158	404.03	220	1923	5000
5. Chimoni	13000	26200	..	..	..	..	91.14	140	..	..
6. Chitturpuzha and Moolathara	17287	32550	304	565	13519	31463	67.39	100	108	200
7. Kanhirapuzha	9713	21863	1207	2716	1207	2716	415.92	350	2044	4600
8. Kuttiadi	25495	31161	706	1694	11508	22394	342.81	160	3292	7900
9. Pazhasi	22255	32374	1462	2924	3708	6946	615.79	450	2150	4300
10. Vamanapuram	9600	24250	..	..	..	..	2.47	10	..	..
11. Idamalayar	13659	39318	..	..	..	..	12.40	110	..	..
12. Kuriarkutty—Karappara	..	23472	..	..	..	..	20.58	30	..	..
13. Beyporepuzha	..	13624	..	..	..	..	3.56	10	..	..
14. Kakkadavu	16700	26106	..	..	..	..	39.67	30	..	..
15. Attappadi	5187	8047	..	..	..	..	100.34	55	..	..
16. Karapuzha	5580	9300	..	..	..	..	145.71	50	..	..
17. Meenachil	..	10000	..	..	..	..	1.19	10	..	..
18. Banasurasagar	..	4800	..	..	..	..	60.00	5	..	..
Total B	296749	574548	6844	15508	70103	148766	4116.10	4420	18816	37200

C. RESEARCH AND INVESTIGATION

Total C	28.93	40
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D. MODERNISATION

Total D	35.60	40
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Total A+B+C+D	430165	742306	6844	15508	149262	295362	4180.63	4500	18816	37200
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Minor Irrigation

5.6 In the development of irrigation facilities in the State the role of minor irrigation schemes assumes special importance. Minor irrigation structures are quick yielding and require only low capital investment. Minor irrigation schemes include diversion weirs across streams and regulators, tanks and wells, irrigation and drainage channels, salinity control structures and lift irrigation works. The estimated potential for minor irrigation in the State is 10 lakh ha. (net) or 11 lakh ha. (gross). Till the end of March 1981 a cumulative area of 131,238 ha. (net) or 153,004 ha. (gross) has been brought under irrigation through minor irrigation schemes at a total cost of Rs. 45 crores.

5.7 During the year 1980-81 an amount of Rs. 6.13 crores was spent on minor irrigation schemes including the investigation and development of ground water resources. This helped to create an additional irrigation potential of 9294 ha. (net) or 10888 ha. (gross). During this period 11 Class I works, 2 Class II works (P. W. D.), 25 lift irrigation schemes and 112 I. P. D. 'yela' schemes were completed. In the current year (1981-82) 54 class I works, 7 class II works (P. W. D.), 73 lift irrigation works and 177 I. P. D. 'yela' works are in progress and it is expected that an additional area of 8810 ha. (net) or 11240 ha. (gross) will be brought under irrigation through minor irrigation schemes by the end of March 1982.

5.8 The details of the physical and financial achievements during 1980-81 are given in Table 5.2.

TABLE 5.2
Physical Achievement in Minor Irrigation

Type of Minor Irrigation Scheme	Achievement in hectares during 1980-81		Total at the end of 1980-81		Anticipated achievement during 1981-82		
	Net	Gross	Net	Gross	Financial (Rs. lakhs)	Net	Physical (Ha.) Gross
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Minor Irrigation Class I	1492	2238	17525	26438	165.00	2535	3800
2. Minor Irrigation Class II (P. W. D.)	318	318	73218	73218	25.00	405	405
3. Minor Irrigation Class II with People's Participation	2580	2580	..	..	75.00	810	810
4. Lift Irrigation	1695	2543	25704	28557	165.00	2585	3800
5. I. P. D. Yelah	2462	2462	12848	12848	100.00	2025	2025
6. Repairs to Damages caused to M. I. Structures	747	747	..	..	24.00	400	400
7. Construction and Deepening of Wells and Tanks	..	..	1943	1943	1.00	..	..
8. Irrigation Facilities to Drought prone areas	..	..	..	..	..	..	..
9. Investigation	..	..	..	..	10.00	..	..
Total	9294	10888	131238	153004	565.00	8810	11240

Flood Control and Anti-sea Erosion

5.9 Floods occur in almost all regions of the State causing damages to agricultural lands, public property, roads, canals etc. Due to deforestation and silting of river beds the problems of floods are likely to increase in future unless necessary control measures are planned and executed as time bound programme. The programme of work included in the Sixth Plan include protection of river banks which are subject to serious and frequent floods, widening and deepening of the leading channel to Thottappally spill-way, completion of work of improving Amayizhanchanthodu in Trivandrum, completing the works of providing better drainage facilities to low lying areas in Cochin and Calicut cities etc.

5.10 During the year 1980-81 Rs. 1.14 crores was spent to protect 1115 ha. of land from floods. During the year 1981-82 it is expected that an area of 116 ha. would be protected at a cost of Rs. 1.28 crores.

5.11 It is estimated that out of a total coast line of 520 km. about 320 km. is exposed to erosion. Till March 1981 an amount of Rs. 45 crores has been spent to protect 256.13 km. of coast line.

5.12 During the year 1980-81, 26 km. length of sea wall were completed at a cost of Rs. 5.68 crores. By the end of March 1982, 18 km. of new sea wall and 10 km. of reformation of existing sea wall will be constructed by spending Rs. 9.52 crores.

5.13 The physical and financial achievements for the year 1980-81 in respect of flood control and anti-sea erosion works are given in Table 5.3.

TABLE 5.3
Flood Control and Anti Sea Erosion

Classification of Scheme	Benefits during 1980-81	Anticipated Achievements during 1981-82	
		Financial	Physical
(1)	(2)	(3)	(4)
1. Anti Sea Erosion	25.929 km. length of sea wall and 3.2 km. of reformation of existing seawall.	952.348 lakhs	18 km. of new sea wall and 10 km. of reformation of existing sea wall
2. Flood Control	1115 Ha.	128.00 lakhs	1116 Ha.

Power

5.14 The power system in the State is entirely hydro-based. It is estimated that Kerala has a power potential of 3 million Kilowatts of hydel power at 60 per cent load factor. So far the State has harnessed only one-third (1011.5 MW) of this potential through eleven completed projects. The State has also eight power projects at various stages of implementation which when completed will add 600 MW to the power generation capability (excluding Idukki Stage II which adds to peaking power) and 2350 Mkw to the energy generation capacity.

5.15 Till March 1981 the total investment in the power sector was of the order of Rs. 528 crores. This accounts for more than 25 per cent of the total plan expenditure incurred by the State. As a result of the sizeable investment in the power sector, the installed power generation capability recorded an impressive

growth from 132.5 MW in 1960-61 to 1011.5 MW in 1980-81. During this period power generation increased from 591 Mkw to 5242 Mkw. The per capita consumption of power also rose from 30 kwh in 1960-61 to 95 kwh in 1980-81. Though Kerala is a power surplus State, its per capita power consumption is lower than that of all India.

5.16 During the earlier plan period much emphasis was laid on generation of power. Till 1977-78 about 61 per cent of the total investment on power development was made on generation of power. However from 1978-79 top priority was given to strengthening transmission and distribution net work in the State so as to provide steady power supply and adequate voltage stability, clear the arrears of backlog in power connections, etc.

5.17 The details of investment on power generation, transmission, distribution and rural electrification during the successive Plan period are given in Table 5.4.

TABLE 5.4
Plan Investment on Power Development

Period	Generation	Transmission and Distribution	Rural Electrification	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)
Up to I-4-1957	2337.31	109.95	45.47	..	2492.73
II Plan	883.82	798.68	258.18	..	1940.68
III Plan	4750.01	1084.47	235.00	..	6069.48
Annual Plan (1967-68 to 1968-69)	2857.07	1280.64	49.98	..	4187.69
IV Plan	6676.33	4667.20	332.17	168.02	11843.72
V Plan (1974-75 to 1977-78)	6162.26	4757.31	1135.56	..	12055.13
1978-79	964.74	2243.34	86.73	..	3294.81
1979-80	906.00	2884.00	300.00	..	4090.00
1980-81	1278.00	5284.00	293.00	..	6855.00
Total till March 1981	26815.54	23109.59	2736.09	168.02	52829.24
1981-82 (anticipated)	3299.00	4366.00	307.00	..	8469.00

5.18 In 1980-81 an amount of Rs. 68.55 crores was spent against a plan outlay of Rs. 50.07 crores, thus incurring an additional expenditure of 37 per cent over the budgeted outlay. This increase was mainly due to the additional expenditure on transmission schemes. It is anticipated an amount of Rs. 79.60 crores would be spent during the current year (1981-82) against an outlay of Rs. 50 crores, an increase of more than 59 per cent. The expenditure till December 1981 was Rs. 57.67 crores.

5.19 During the year under review the power generation capacity of the State stood at 1011.5 MW and the total quantity of power generated was 5242 Mkw. Five generation schemes Idamalayar Hydro-electric Scheme, Idukki Stage III, Sabarigiri Augmentation, Kakkad and Idukki Stage II—are under various stages of execution. On the transmission side 110 KV sub station at Payyannur, 66 KV sub station at Perinthalmanna, Pathanapuram, Edarikode, Varkala and Trichur were commissioned. 104 Ct. Km. of 110 KV lines and 75 Ct. Km. of 66 KV lines were commissioned during the year. Under distribution and rural electrification programme all line extension works for which agreements were executed prior to 1-4-1978 were completed by the end of 1981. Works sanctioned prior to 1-4-1980 have been fully carried out. A total number of 2.56 lakhs service connections were provided, 41,454 street lights were installed, 14,120 pumpsets were energised and 271 harijan and tribal colonies were provided with electricity during 1980-81.

Generation Projects

5.20 The power generation potential created through the completed power projects in the State and the actual generation of power in 1980-81 are given in Table 5.5.

TABLE 5.5

Power Projects in Kerala— Power Generation capability 1980-81

Name of Project	Installed Capacity in M.W.	Energy Potential Mkw.	Units Generated Mkw.
(1)	(2)	(3)	(4)
1. Pallivasal	37.5	284	233.92
2. Sengulam	48	182	156.34
3. Neriamangalam	45	237	243.77
4. Panniar	30	148	106.63
5. Peringalkuthu	32	170	178.33
6. Sholayar	54	233	184.66
7. Sabarigiri	300	1213	1267.81
8. Kuttiadi	75	248	256.89
9. Idukki	390	2015	2613.28
Total	1011.5	4730	5241.63

Source: Kerala State Electricity Board.

The following power generation schemes are in various stages of execution in the State:

(1) Idamalayar Hydro Electric Scheme

5.21 The Idamalayar Project is a low head hydro electric scheme in Idukki District. It is a multipurpose scheme for irrigation, power, industrial and domestic water supply and salinity control in the lower reaches of Periyar. The Project comprises construction of a reservoir of 1090 cum. capacity by constructing a 91 M high straight gravity concrete dam across Idamalayar river and diversion of this water through a water conductor system to the 75 MW generating station located on the left bank of the river to produce 320 Million units of energy per annum. This Project will be the first hydel schemes in the State to generate electric power with complete equipment manufactured in our country. The total excavation for the dam is 4.10 lakh cum. out of which 3.83 lakh cum. has been completed so far. The pouring of concrete in the dam is in progress and so far 2.96 lakh cum. has been placed against the total quantity of 9 lakh cum. The power house excavation has been completed and concreting of columns commenced. Generating machinery parts also have arrived at site. Works connected with power tunnel could not be carried out as per schedule due to labour problem. According to the latest programme, partial storage in the reservoir is possible by July 1982 and commissioning of the first and second units by April 1983, September 1983 respectively. The expenditure on the project upto 31-3-1981 is Rs. 30.85 crores. During the current financial year the cash flow upto December 1981 is Rs. 12.52 crores.

(2) Idukki Stage -III

5.22 This is an augmentation scheme which aims at diversion of Kallar and Erattayar waters to the Idukki reservoir for augmenting the power generation at Idukki power station by 376 million units per annum. The work on the scheme was commenced in 1975-76. On the Erattayar diversion system the 3803 m. long tunnel has been completed. Only 27 per cent of the dam could be raised till date due to labour troubles and demand of the local people for alternate land, the distribution of which is delayed on account of the Forest Conservation Act, 1980. In respect of Kallar diversion system, the driving of the 2.96 km. long diversion tunnel is progressing and 2499 m. have been completed till date. The construction of the Kallar diversion dam is also behind schedule. It is expected to complete all the works relating to the scheme by 1982-83. The latest revised cost of the project is Rs. 10.55 crores and the cumulative expenditure as on 31-3-1981 is 8.14 crores. During the current year the cash flow upto December 1981 is Rs. 1.02 crores.

(3) *Sabarigiri Augmentation*

5.23 This scheme envisages diversion of waters of Kullar, Gaviar and Meenar into the existing Pamba reservoir and the waters from the Upper Moozhiyar stream into the existing Kakki reservoir. These diverted waters will enable additional power generation to the tune of 125 million units per annum at the existing Sabarigiri Power Station. All works relating to the diversion of the Upper Moozhiyar waters to the Kakki reservoir were completed and diversion effected from May 1979 onwards. The works on diversion of waters to Pamba reservoir were badly affected due to labour problems. According to the present programme the works relating to the scheme are expected to be completed by 1983-84. The latest cost of the scheme is Rs. 4.50 crores out of which Rs. 3.75 crores have been spent up to March 1981. The cash flow on this scheme during the current year upto December 1981 is Rs. 0.61 crore.

(4) *Silent Valley Hydro Electric Scheme*

5.24 The Silent Valley Hydro-Electric Scheme located in Palghat District envisages utilisation of waters of Kunthipuzha river, a tributary of Bharathapuzha for power generation. This scheme when completed would add 522 million units of energy to the Kerala Power grid per annum. The water released from the power house can be further utilised for irrigating about 10,000 hectares of land lower down the valley. The project assumes greater importance in improving the voltage conditions and efficiency of transmission in the Northern Kerala besides maintaining the load generation balance in that region. The latest revised cost of Project is Rs. 58 crores for the first stage of 120 MW installed capacity. Though the scheme was commenced in 1973, it was slowed down due to paucity of funds at the initial stages and later due to objections raised regarding the disturbance to the ecology of the area. At present all the works in respect of the Project have been suspended. The total expenditure on the scheme upto March 1981 is Rs. 2.77 crores.

(5) *Kakkad Hydro Electric Scheme*

5.25 This 50 MW (2 × 25) scheme is primarily a tailrace development of the existing Sabarigiri Hydro Electric Project. This project will add to the State grid 262 million units of energy per annum. Works on the scheme were commenced in 1978-79. Major portion of the construction of infrastructure works is over. Though contracts for the construction of the 3 km. long interconnecting tunnel and 7.5 km. long power tunnel were entered into and works commenced these contracts had to be terminated due to contract failures. Fresh contracts are yet to be arranged. The latest cost of the scheme is Rs. 29.20 crores and the expenditure

upto March 1981 is Rs. 3.52 crores. During the current year the cash flow upto December 1981 is Rs 0.60 crore.

(6) *Idukki Stage—II*

5.26 This project costing Rs. 31.68 crores envisages installation of additional three units of 130 MW each in the existing Idukki Power Station to meet the peaking needs of the power system of the State. All the three generating units are to be imported from Canada. The project is aided by the Government of Canada and the Aid Agreement between the Government of India and Government of Canada has been signed. Foreign consultants have also been appointed. Expenditure upto December 1981 for the project is Rs. 0.15 crore.

(7) *Lower Periyar Hydro Electric Scheme*

5.27 This scheme is conceived as a tailrace cum run off the river scheme in the lower reaches of Periyar just below the Neriambangalam Power Station. The installed capacity, firm power benefit and annual energy generation of the scheme are 180 MW (3 × 60) 66 MW and 493 million units respectively. The scheme, report costing Rs. 88.43 crores has been cleared by the Central Electricity Authority and approval of the Planning Commission is awaited. Preliminary and enabling works on the scheme were commenced in 1978-79 and till December 1981 the expenditure is Rs. 1.18 crores.

(8) *Kuriarkutty—Karappara H. E. Scheme*

5.28 This scheme consists of three dams and three power stations for the utilisation of the waters of Kuriarkutty, Pulikkal and Karappara rivers, all tributaries of the main Chalakudy river, for power generation and irrigation in about 11736 hectares of land in the Chitturpuzha Valley. On completion of the Project, at an estimated cost of Rs. 48.55 crores 210 million units of energy per annum will be added to the power system in the State. Preliminary works on the scheme were started in 1979-80. The expenditure on the scheme till December 1981 is about Rs. 0.31 crore. The scheme report has been forwarded to the Central Electricity Authority for sanction.

(9) *Kallada H. E. Scheme*

5.29 The scheme costing Rs. 12 crores envisages installation of two units of 7.5 MW each to generate 65 million units of energy per annum. This is a low head scheme with the power station located just downstream of the Kallada irrigation dam which is scheduled for completion in the Sixth Plan period. The power project has been approved recently by the Planning Commission and works are being commenced shortly.

(10) *Survey and Investigation*

5.30 Extensive survey and investigation works for future hydel schemes as well as collection of hydrological and meteorological data required for the preparation of project reports were continued during the current year also. During 1980-81 the expenditure under this head was about Rs. 0.65 crore.

(11) *Transmission*

5.31 Till the end of the Fifth Five Year Plan period greater emphasis was laid on generation scheme while the investment made in the transmission sector was comparatively low and inadequate. Consequently the transmission net work of the State could not be built in a manner adequate enough to meet the load demand of the State. This resulted in unsatisfactory voltage levels and frequent interruptions in supply in many parts of the State. Owing to inadequacy of outlays, several substations and lines originally scheduled for completion as early as 1974 are still incomplete. The situation is being improved slowly by providing enhanced allocations for transmission works. With the formulation of the Forest Conservation Act and organised mass resistance from the public against cutting of trees in private land, construction of EHT lines is not progressing as demanded by the prevailing situation. Delay in acquiring land required for substations is also creating problems in the construction of EHT substations.

5.32 The plan allocation for transmission works in 1980-81 was Rs. 14.60 crores. The physical achievements during the year 1981 are; 110 KV substation at Payyannur and 104 Ct. Kms. of 110 KV lines. 110 KV supply for Velloor Newsprint Factory, 66 KV substations at Perinthalmanna, Pathanapuram, Edarikode, Varkala and Trichur Municipality and 75 Ct. Kms. of 66KV lines.

5.33 The progress of achievements in the transmission sector is given in Table 5.6.

TABLE 5.6

Progress of Achievements on Transmission and Distribution.

Particulars	Position	Position
	as on 31-3-1980	as on 31-12-1981
(1)	(2)	(3)
1. 220 KV Lines Ct. Km.	886.8	886.8
2. 110 KV Lines Ct. Km.	1545.2	1551.7
3. 66 KV Lines Ct. Km.	2064	2126
4. 11 KV Lines Km.	13439	14392
5. LT Lines Km.	48037	59621

4/855|MC.

	(1)	(2)	(3)
6. Step up Transformer Capacity MVA	1149.6	1198.0	
7. No. of E.H.T. Sub-Stations	90	95	
8. Step down Transformer Capacity MVA	1389.5	2910.5	
9. Distribution Transformers			
(a) Nos.	11244	12300	
(b) Capacity—KVA	968712	978600	
10. No. of Villages Electrified	1268	1268	
11. No. of Consumers	1479031	1735714	
12. No. of Street Lights	354086	392672	
13. No. of Irrigation Pumpsets	83975	93463	

5.34 The plan allocation for transmission works for 1981-82 is Rs. 15 crores. In this year expenditure till December 1981 is Rs. 13.1 crores. The actual expenditure for the year 1981-82 is expected to be about Rs. 18 crores.

Distribution and Rural Electrification

5.35 During the year 1980-81 the State Electricity Board launched a special programme to give the pending electric connections. The programme envisaged clearing all the pending applications by the end of 1982-83. By the end of 1981 all line extension works for which agreements were executed prior to 1-4-1978 were completed. Works sanctioned prior to 1-4-1980 have been fully carried out in many divisions. The programmes drawn up for the year have been executed fully. The main achievements during the year are as follows:-

Service Connections	256000 Nos.
Installation of Street Lights	41454 Nos.
Energisation of Pumpsets	14240 Nos.
Electrification of Harijan and Tribal Colonies	271 Nos.

5.36 Even though all the villages in the State have been provided with electricity distribution lines by 1979-80, electricity is still to reach several parts of the villages. During the year 1981 special efforts were made to take electricity to all parts in the State as far as possible. Non availability of funds continue to be the major hurdle in the implementation of these programmes in the Distribution sector. Even though the plan allocation for Distribution and Rural electrification works was only Rs. 18.21 crores for 1980-81 the actual expenditure during the year 1980-81 was about Rs. 42.66 crores. If larger outlays for Distribution and Rural Electrification works could be earmarked applicants for new connections could be provided with connections without much delay.

5.37 The district-wise distribution of pumpsets energised in the State by the end of December 1981 is given in Table 5.7. The net additional pumpsets energised during 1980-81 was 14240 as against a target of 12000.

TABLE 5.7
Pumpset Energised—District-wise

Name of District	No. of Pumpsets Energised		
	As on 31-3-1980	As on 31-3-1981	As on 31-12-1981
(1)	(2)	(3)	(4)
Trivandrum	1073	1528	1866
Quilon	719	1079	1164
Alleppey	851	906	957
Kottayam	2805	3481	3647
Idukki	1603	1993	2078
Ernakulam	15291	16858	17728
Trichur	34103	41327	43934
Palghat	9662	11047	12125
Malappuram	2944	3792	4342
Kozhikode	884	1428	1321
Cannanore	2663	3399	3971
Wynad	..	..	330
Total	72598	86838	93463

Financial Position of the K. S. E. Board

5.38 The gross revenue of the State Electricity Board increased from Rs. 91.25 crores in 1979-80 to Rs. 109.42 crores in 1980-81 and the revenue for the

year 1981-82 is expected to be Rs. 117.45 crores showing an increase of about 20 per cent in 1980-81 and 7 per cent in 1981-82 over the corresponding previous years. The net operating surplus has risen to Rs. 38.59 crores in 1980-81 from Rs. 27.77 crores during the previous year. It is anticipated that the net operating surplus for the year ending March 1982 would be Rs. 29.17 crores showing a decline of Rs. 9.42 crores as compared to the previous year and it is mainly due to the payment of Electricity Duty to the State Government. The receipts by sale of power increased from Rs. 87.95 crores in 1979-80 to Rs. 105.77 crores in 1980-81 an increase of nearly 21 per cent and it is expected that the revenue by sale of energy would be Rs. 113.45 crores during 1981-82. With regard to the sale of energy outside the State the revenue has increased from Rs. 38.56 crores in 1979-80 to Rs. 43.15 crores in 1980-81 and it is expected that the revenue by sale of power to outside the State would decline to Rs. 38.16 crores in 1981-82. The revenue expenditure of the Board (excluding interest) has shown an increase of only 0.07 per cent in 1981-82 as compared to the previous year, but it is expected to record an increase of 27 per cent in 1981-82.

5.39 The total capital investment of the State Electricity Board stood at Rs. 537.24 crores in 1980-81 (an increase of Rs. 75.50 crores over the previous year) and the total loan outstanding at Rs. 356.75 crores (a net increase of Rs. 22.71 crores), Loan repaid during the year 1980-81 was Rs. 27.34 crores. The total interest payable during the year was Rs. 23.61 crores and the amount available as surplus was Rs. 40.67 crores. The return on investment before payment of interest was 14 percent in 1980-81. (The figures furnished are provisional subject to finalisation of the Annual Accounts of the Board for the year 1980-81).

TABLE 5.8
*Electrical Energy Consumed and Revenue Realised
(1980-81)*

Category	No. of Consumers	Percentage to Total	Energy Consumed		Revenue Collected	
			MK wh	Percentage to Total	Rs. lakhs	Percentages to Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Industrial High Voltage and EHT and Low and Medium Voltage	38252	2.41	2025	70.66	2494.06	45.60
2. Domestic Lights and Fans Heat and Small Power	1166715	73.49	409.2	14.26	1546.77	28.30
3. Commercial Lights and Fans, Heat and Small Power	293898	18.52	174.4	6.00	836.77	15.30
4. Others (Excluding Export)	88712	5.58	260.7	9.08	591.40	10.80
Total	1587577	100.00	2869.3	100.00	5469.00	100.00

Source: Kerala State Electricity Board.

5.40 During 1980-81, out of the 5241.6 MKwh units of energy generated in the State 54.7 percent has been consumed within the State. The energy sold

to the neighbouring States is 33 per cent of the total energy generated. The balance of the energy generated is reckoned as losses in transmission and distribution.

An Overview

Industrial production in Kerala during the first three quarters of 1979-80, registered, on an average, eight per cent increase compared to the corresponding period in the previous year. As a result of the package of incentives announced by the State Government and the concerted efforts of the industrial promotional agencies in the State like KSIDC, KFC, SIDECO etc., the industrial scene of Kerala has started to show positive results. KSIDC, the premier industrial promotional agency in the State in the field of medium and large industries, has launched an intensive programme for the industrialisation of the State. Seventy-five companies have been promoted/assisted by KSIDC as at the end of 1980-81. Kerala Chlorates and Chemicals Ltd., Mavelikara and Balmer Lawrie & Co. Ltd., Aroor, two promoted companies and Travancore Electrochemical Industries Ltd., Chingavanam and South India Wire Ropes Ltd., Edathala, two existing companies assisted by KSIDC, started commercial production during 1980-81. At present the KSIDC has 170 project ideas and efforts are on to identify more projects in the field of rubber industry, electronics, light engineering, chemicals and drugs industry.

6.2 The package of incentives introduced by the State Government in 1979 has helped in bringing about a better response from the industrialists in considering Kerala as a possible location for their industries. Kerala Government had recently issued orders enhancing the State investment subsidy for Quilon District from 10 per cent to 15 per cent. The package of incentives, especially in regard to sales-tax concessions and subsidy go a long way to improve the cash flow of a new project, especially in the early years of its commissioning and therefore plays a vital role in decision making in the setting up of industries within the State. Another important factor facilitating the setting up of industries is the availability of basic infrastructure facilities like developed land, power etc. Because of various factors like high density of population, scarcity of land, intensity of cultivation on available land etc., it is becoming difficult to locate suitable land for an industry and this problem is likely to get aggravated in future. The State Government have decided in principle to set up an Infrastructure Development Corporation and have appointed a Special Officer to prepare a detailed report on the subject.

6.3 In line with the all-India Industrial Policy Statement announced in 1980, it was decided to set

up a few nucleus plants/downstream units in the industrially backward districts, promoting the concept of economic federalism. A Task Force for proposing suitable nucleus plant industries in the backward districts of Alleppey and Malappuram was set up. The Task Force, in its report, has identified 13 projects, with an estimated outlay of Rs. 55 crores and employment potential of 3275, to be set up in Alleppey District.

6.4 Investment in the Central Public Sector undertakings in Kerala during 1979-80 was to the tune of Rs. 40 crores, raising the total central investment in the State (gross block) as on March 31, 1980 to Rs. 422.84 crores. But Kerala's share, as percentage of the total central investment came down from 2.44 at the end of 1978-79 to 2.33 at the end of 1979-80. One hundred and forty-seven joint stock companies, including 14 public limited companies were registered in Kerala during 1980-81. Two Government companies viz. (1) Kerala State Development Corporation for Christian converts from Scheduled Castes and recommended communities and (2) Kerala Inland Fisheries Development Corporation were registered during the period.

6.5 The Kerala State Electronics Development Corporation has taken up several diversification programmes like instrumentation system, micro processor based system etc. The total turn over of the Company including subsidiaries during 1980-81 was Rs. 11.70 crores and the expected turnover during 1981-82 Rs. 30 crores. Two hundred and seventeen persons were given additional employment in the Corporation during the year. The activities of the Kerala State Textile Corporation during 1980-81 were encouraging. The working of the Corporation has resulted in a net profit of Rs. 2.63 lakhs. The bleaching and calendaring plant was transferred to the Corporation during the year. The Film Development Corporation is concentrating mainly in completing the studio complex and the theatre project. The studio complex is in the final stages of completion and the construction of theatres at Trivandrum, Calicut, Shertallai and Parur is in progress. The Corporation has produced ten short films including two news reels during the year.

6.6 Five of the Seven subsidiary companies under the Kerala State Industrial Enterprises Ltd., have shown profits during 1980-81. As a result of the various reforms, under production techniques, marketing, management etc., brought about by the holding company, loss of the other two companies could be brought down. Performance of Kerala Electrical

and Allied Industries, Kerala Soaps and Oils Ltd., Kerala Drugs and Pharmaceuticals Ltd., and Travancore Plywood Industries Ltd. during the year, was encouraging. Total value of production and sales turnover of these seven companies under the Kerala State Industrial Enterprises Ltd., have increased by 36 per cent and 30 per cent respectively during 1980-81. As regards Government companies outside the control of Kerala State Industrial Enterprises, Kerala Minerals and Metals has enhanced its capacity utilisation and evinced increase in production, both in physical and financial terms. The net profit earned by the company increased to Rs. 22.06 lakhs from Rs. 17.95 lakhs in the previous year. The working of Trivandrum Spinning Mills, during 1980-81 on the other hand, resulted in a reduced production, sales turnover and profit compared to those of the previous year. Two Government Companies which commenced commercial production during 1980-81 are Steel Industrials and Foam Matting (India) Ltd., the former sustaining a loss of Rs. 9.35 lakhs and the latter Rs. 7.83 lakhs. Malabar Cements and Kerala Automobiles are expected to commence production during 1982-83.

6.7 Out of 10 Government majority Companies, three companies viz. Chalakudy Refractories, Pallathara Bricks and Tiles and Travancore Sugars and Chemicals have suffered losses during 1980-81 and the remaining 7 companies were running on profit. Among the companies working on profit special mention may be made of Travancore-Cochin Chemicals which increased its profit of Rs. 5 lakhs in 1979-80 to Rs. 130 lakhs in 1980-81 and of Transformers and Electricals Kerala Ltd., and Travancore Titanium Products Ltd., which have managed to earn profits of Rs. 28 lakhs and Rs. 34 lakhs respectively, as against losses of Rs. 75 lakhs and Rs. 34 lakhs respectively during the previous year.

6.8 Among Government of India companies, Cochin Refineries, FACT, Indian Telephone Industries and Modern Bakeries have earned higher profits during 1980-81 compared to those of the previous year, while Hindustan Insecticides and Hindustan Latex have shown increased losses. HMT, Kalamassery, which earned a profit of Rs. 143.64 lakhs during 1979-80 incurred a loss of Rs. 143.55 lakhs during 1980-81.

6.9 The Department of Industries and Commerce, SIDECO, SISI, KFC etc. extend various technical, managerial and financial assistance for the promotion of small scale industries. Small scale industrial units numbering 2980 and artisans' units numbering 5760 with a total employment potential of about 35,000 were newly started during 1980-81. Twenty small scale industrial co-operative societies were newly registered during the year making the total number of such societies in the State as on 31-3-1981 to 1289. There was substantial increase in the sales turn over of the three apex organisations in handi-

crafts sector viz. Kerala State Handicrafts Development Corporation, Handicrafts Apex Society and the Central Lapidary Society. Taluk level offices with Assistant District Industries Officer as head of office, started functioning with effect from 1st June, 1981.

6.10 Traditional industries of coir, handloom and cashew, together employing about 8 lakh persons in the State, continued to be beset with a number of problems. Non-availability of raw husk in adequate quantities to provide full employment to the large work force in the coir industry is the major problem in that sector. Stock piling of finished products, as a result of fall in demand in the internal as well as external markets, affected the working of coir co-operatives. The quantity of coir and coir products exported dwindled to an all time low during 1980-81 and no improvement in the trend was discernible in the first half year of 1981-82 also. Government have initiated a number of steps to save the coir industry, including procurement of husk to make available sufficient raw material for the smooth functioning of coir co-operatives. Further, interest free loan is being given to the Kerala State Coir Marketing Federation and the Kerala State Coir Corporation for distress purchase of coir and coir products. Shortage of raw nuts continued to be the major problem in the cashew sector. About 85,000 tonnes of raw nuts, consisting of internal procurement of 60,000 tonnes and import of 25,000 tonnes, were processed in the various cashew factories in Kerala during 1981 and this could provide employment only for about two months, on an average, during the year. In the handloom sector, emphasis is laid on bringing more looms into the co-operative fold. About 4,000 looms have been newly brought under the cooperative sector during 1980-81. At the end of the year there were about 39,000 looms in the cooperative sector, constituting about 41 per cent of the total number of looms in the State. The total production of handloom cloth in the co-operative sector has increased by 1.5 million metres to 30.5 million metres during 1980-81. Production of handloom cloth in the State, both in the cooperative and private sectors together, during the year, was about 90 million metres valued at Rs. 45 crores. There was about 25 per cent increase in production in the khadi and village industries sector during 1980-81. The Khadi and Village Industries Board is implementing a special employment programme with a view to create one lakh additional employment. During 1980-81 about 22,000 additional employment opportunities were created by various programmes of the Board.

Industrial Production

6.11 The average annual index of industrial production in Kerala (base 1970-71 = 100) rose from 139.22 in 1977-78 to 154.21 in 1978-79, recording a growth of 10.8 per cent over the previous year. The rate of growth in 1978-1979 was remarkable compared to the

rates of growth of 8.1 per cent in 1976-77 and 6.4 per cent in 1977-78. The quarterly indices of industrial production during the first three quarters of 1979-80, that is, quarters ending June 1979, September 1979 and December 1979 recorded rates of growth of 12.2 per cent, 8.8 per cent and 2.9 per cent respectively over the corresponding periods in the previous year. The average rate of growth in the first nine months of 1979-80 is about 8 per cent over the corresponding period in 1978-79. Indices of industrial production in respect of the manufacture of food production, cotton textiles, wool, silk and synthetic fibres, wood and wood products showed decline during the quarter ended June 1979, compared to the corresponding period in the previous year; but the indices in respect of these industry groups evinced increases in the subsequent two quarters compared to the corresponding periods in the previous year. Indices in respect of industry groups engaged in the manufacture of paper and paper products and non-metallic mineral products recorded

increases in production during all the three quarters compared to the corresponding period in the previous year.

¶ 6.12 Value added by manufacture at constant prices, in Kerala, evinced an increase of only 2 per cent in 1979-80, as against 11.4 per cent in 1978-79. The all-India picture is even worse in 1979-80 with a decline of 2 per cent in the net value added by manufacture in real terms. This decline in the industrial production is specially noticeable in view of the substantial increase of about 14 per cent in 1978-79. Value added by manufacture, both in the registered and unregistered sectors in Kerala and all-India, at constant (1970-71) prices, is given in Table 6.1. It can be seen that while unregistered sector accounts for 45 to 50 per cent of the total value added under manufacturing in Kerala, the share of this sector in the total value added in the manufacturing sector of all India is only around 36 per cent.

TABLE 6.1

Value added by the Manufacturing Sector (At 1970-71 Prices)

Year	(Rs. Crores)							
	Kerala				India			
	Registered	Unregistered	Total	Index (1970-71 =100)	Registered	Unregistered	Total	Index (1970-71 =100)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1970-71	70	79	149	100.0	2874	1745	4619	100.0
1975-76	82	92	174	116.8	3896	2157	5553	120.2
1976-77	94	89	183	122.8	3795	2278	6073	131.5
1977-78	101	83	184	123.5	4001	2431	6432	139.2
1978-79	115	90	205	137.6	4649	2680	7329	158.7
1979-80	112	97	209	140.3	4564	2625	7189	155.6

Working Factories and Employment

6.13 The number of registered working factories in Kerala increased from 7784 at the end of 1978 to 8491 at the end of 1979. Thus, during the year 1979 the number of factories has increased by 707, which is about 9 per cent over that at the end of the previous year. The growth in the number of registered factories in the State during the latter half of the seventies was remarkable. During the four years from December 31, 1975 to December 31, 1979 the number of registered working factories has increased by 2174 from 6317 to 8491, registering 34 per cent increase, which is equivalent to an average annual growth of 8.5 per cent. There was considerable variation between districts in the matter of total number of factories existing, as also in the increase in the number of factories year after 4/655]MC.

year. During 1979, the highest increase of 212 in the number of factories was in Cannanore district followed by 187 in Ernakulam district. Alleppey was the only district where the number of factories registered a decline of 10 from 580 at the end of 1978 to 570 at the end of 1979. Average daily employment in the registered factories of the State increased from 2.72 lakhs at the end of 1978 to 2.96 lakhs at the end of 1979, registering an increase of about 9 per cent over the previous year. Thus at the end of 1979 there was 9 per cent increase both in the number of factories and the average number of employment in the State, over those at the end of 1978. As in earlier years, cashew industry employs the largest number of persons working in the factory sector. With 3 per cent in the number of factories 44 per cent of the average number of employment is provided by this industry. See Appendix tables 6.1 and 6.1(a).

TABLE 6.2
Registered working Factories in Kerala

District	No. of Factories as on 31st December		
	1978	1979	1980*
1. Trivandrum	303	324	361
2. Quilon	787	837	901
3. Alleppey	580	570	625
4. Kottayam	619	639	697
5. Idukki	114	123	125
6. Ernakulam	1249	1436	1563
7. Trichur	876	970	1001
8. Palghat	816	908	942
9. Malappuram	169	184	240
10. Kozhikode	1172	1189	1235
11. Cannanore	1099	1311	1414
Total	7784	8491	9104

* Provisional

Central Public Sector Investment

6.14 The total value of Central public sector investment (gross block) in India increased from Rs. 15,668 crores at the end of 1978-79 to Rs. 18,161 crores at the end of 1979-80, registering an increase of about 16 per cent. The public sector investments by Central Government in the core sectors of the economy act as a catalyst in the economic growth of the region in which investments are made. There has been considerable imbalance in the development of various regions in the country due mainly to the investment decisions taken in the past. Although investments cannot be made on regional considerations alone, deliberate efforts have to be made to correct regional imbalances in development through public sector investments. Out of Rs. 2493 crores of investment made in the Central public sector during 1979-80 Kerala's share was only Rs. 40 crores, constituting 1.6 per cent. Total central sector investment in Kerala, as percentage of the total all India central investment, has thus come down from 2.44 at the end of 1978-79 to 2.33 at the end of 1979-80. Details of State-wise Central investment as at the end of 1978-79 and 1979-80 with percentage shares of each State are given in Table-6.3

TABLE 6.3

State-wise Value of Property (Gross Block) under Central Public Sector

(Rs. in crores)

State/Union Territories	As on 31st March 1979		As on 31st March 1980	
	Value of property	Percentage	Value of property	Percentage
(1)	(2)	(3)	(4)	(5)
1. Andhra Pradesh	513.89	3.28	775.12	4.27
2. Assam	382.68	2.44	490.37	2.70
3. Bihar	2877.02	18.36	3151.67	17.35
4. Delhi	427.82	2.73	501.89	2.76
5. Gujarat	762.24	4.86	879.80	4.85
6. Haryana	213.90	1.37	252.97	1.39
7. Himachal Pradesh	107.55	0.69	127.02	0.70
8. Karnataka	529.82	3.38	746.45	4.11
9. Kerala	382.74	2.44	422.84	2.33
10. Madhya Pradesh	1846.13	11.79	2230.77	12.28
11. Maharashtra	976.56	6.23	1313.94	7.23
12. Orissa	710.28	4.53	928.37	5.11
13. Punjab	344.52	2.20	362.52	2.00
14. Rajasthan	291.97	1.86	337.62	1.86
15. Tamil Nadu	615.78	3.93	747.74	4.12
16. Uttar Pradesh	658.12	4.20	802.28	4.42
17. West Bengal	1082.88	6.91	1540.39	8.48
18. Jammu and Kashmir	6.20	0.04	7.05	0.04
19. Goa	5.35	0.04	6.37	0.03
20. Union Territories (excluding Delhi)	130.24	0.83	150.2	0.83
21. Unallocated and Others	2802.24	17.89	2385.4	13.14
Total	15667.93	100.00	18161.72	100.00

Source: Public Enterprises Survey 1979-80, Vol. 1, Bureau of Public Enterprises, Ministry

of Finance, Government of India.

Joint Stock Companies

6.15 Joint stock companies numbering 147 consisting of 14 public limited companies and 133 private limited companies were newly registered in Kerala during 1980-81. Seventeen joint stock companies, including 3 public limited companies were wound up during the year, making the net addition to the number of companies in 1980-81 to 130. The total number of companies has thus increased from 1738 (471 public and 1267 private) at the end of March 1980 to 1868 (482 public and 1386 private) at the end of March 1981.

There were 74 Government Companies as on 31-3-1981. Of these 34 were public limited companies and 40 private limited companies. Two Kerala Government Companies were registered during 1980-81. They were: (1) The Kerala State Development Corporation for Christian Converts and Recommended Communities Limited with an authorised capital of Rs. 5 crores; and (2) Kerala Inland Fisheries Development Corporation Limited with an authorised capital of Rs. 2 crores. The following statement gives the position of joint stock companies in Kerala as on 31-3-1981.

TABLE 6.4
Joint Stock Companies in the State

Item (1)	Public (2)	Private (3)	Total (4)
1. Total No. of Joint Stock Companies as on 31-3-1980	471	1267	1738
2. No. of Companies Newly Registered during 1980-81	14	133	147
3. No. of Companies Wound up during 1980-81	3	14	17
4. Net Addition to the No. of Companies during 1980-81	11	119	130
5. Total No. of Joint Stock Companies as on 31-3-1981	482	1386	1868
6. Total No. of Government Companies Registered upto 31-3-1981	34	40	74
7. No. of Government Companies Registered during 1980-81	Nil	2	2

Industrial Promotion Agencies

(i) Kerala State Industrial Development Corporation Limited

6.16 Kerala State Industrial Development Corporation is the major industrial promotional institution, set up by the State Government for the development of medium and large scale industrial units in the State. The activities of the Corporation include obtaining of letters of intent and industrial licenses, identification of industrial projects, arranging technical collaboration, securing institutional finance and infrastructure facilities, participation in management etc. The number of companies promoted/assisted by the Corporation increased to 75 by 31st March, 1981. The number of

promoted companies rose from 18 to 23 and that of companies availed financial assistance for undertaking expansion or diversification or modernisation increased from 14 to 16 during the period. The net financial assistance sanctioned by the Corporation recorded a substantial increase from Rs. 96.30 lakhs in 1979-80 to Rs. 351.11 lakhs in 1980-81, comprising share capital of Rs. 87.96 lakhs, loan of Rs. 224.15 lakhs and guarantee of Rs. 39 lakhs. Disbursement during 1980-81 totalled Rs. 179.26 lakhs by way of share capital (Rs. 28.07 lakhs) and loan (Rs. 151.19 lakhs).

6.17 A comparative statement of financial assistance sanctioned and disbursed by the Corporation during the last three years is given in Table 6.5

TABLE 6.5

Item (1)	(Rs. lakhs)		
	1978-79 (2)	1979-80 (3)	1980-81 (4)
Applications Received	204.07	190.30	351.11
Applications Sanctioned	173.07	96.30	351.11
Amount Disbursed	167.27	163.18	179.26

6.18 The types of financial assistance applied for, last three years are shown in Table 6.6 sanctioned and disbursed by the Corporation during the

TABLE 6.6

(Rs. Lakhs)

Item	1978-79		1979-80		1980-81	
	Sanctioned	Disbursed	Sanctioned	Disbursed	Sanctioned	Disbursed
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Share Capital	10.57	54.65	3.30	41.44	87.96	28.07
Loan	141.50	111.93	93.00	121.74	224.15*	151.19
Guarantee	21.00	0.69**	..	..	39.00	..
Total	173.07	167.27	96.30	163.18	351.11	179.26

*Of this Rs. 20 lakhs was subsequently withdrawn.

**This corresponds to guarantee loan.

6.19 Four of the companies assisted by the Corporation with an approved cost of Rs. 393 lakhs and employment potential of 495, started commercial production during 1980-81. These are Kerala Chlorates and Chemicals Limited, Mavelikara (promoted project), Balmer Lawrie and Company Limited, Aroor (new company assisted), Travancore Electrochemical Industries Limited, Chingavanam (expansion) and South India Wire Ropes Limited, Edathala (partial expansion). Fifteen other projects assisted/promoted by the Corporation costing Rs. 2475 lakhs and having an employment potential of 1435 are at different stages of implementation. The products envisaged by these units include, carbon black, formaldehyde/resins, mineral water, transfusion fluids, wood wool cement board, LPG cylinders, polyols, wood veneers, formic acid, photo copiers, refractory products, rubber compounds, cotton/SF yarn and cyle tyres/tubes. Other projects on the anvil of the Corporation include rice bran oil, mini paper plants, sanitary wares, tea bags, graphite beneficiation, surgical rubber goods, phytochemicals, printed circuit connectors, wood veneers and a few expansion schemes of certain existing units.

6.20 During 1980-81 four projects were sanctioned for IDBI refinance of Rs. 75.90 lakhs. The number of project ideas with KSIDC has increased from 138 to 170 during the year. Efforts are on to identify more projects in the field of rubber industry, electronics, light engineering, chemicals and drug industry. In regard to project identification, technical advisory committees consisting of officials of the Government of India, experts in the concerned field and offices of the KSIDC are being constituted. A Technical Advisory Committee for Chemicals and Drugs has already started functioning and it is proposed to set up similar committees for other major areas like electronics and light engineering industries.

6.21 As on 31-3-1981, with the release of Rs. 25 lakhs by the Government of Kerala as advance towards share capital the Corporation's share capital stood at Rs. 519 lakhs as against an authorised share capital of Rs. 700 lakhs. At the same time, KSIDC's investment in shares of promoted and assisted companies totalled Rs. 721 lakhs including an amount of Rs. 57.20 lakhs given as advance towards share capital. Market borrowings of the Corporation amounted to Rs. 110 lakhs during 1980-81, making the total market borrowings of the Corporation as on 31-3-1981 to Rs. 1071 lakhs. The overall performance of the Corporation resulted in a net profit of Rs. 0.44 lakh during 1980-81 compared to Rs. 10.90 lakhs of the previous year. This fall in profit is mainly attributed to switching over to what is called the 'Hybrid System' of accounting from 1980-81 onwards. In this system of accounting the interest income of Rs. 12.44 lakhs, due for the Corporation from the assisted companies which have not made any payment towards interest during the last three years, is not taken into account as income, resulting in a reduction in profit.

(ii) Kerala Financial Corporation

6.22 The Kerala Financial Corporation established in 1953 is the Major State level financing institution for the development of small and medium scale industries in the State. During 1980-81 the Corporation received 924 applications for an aggregate amount of Rs. 2321.04 lakhs as against 967 applications for Rs. 2571 lakhs in the previous year. Applications numbering 567 for an aggregate amount of Rs. 1301.05 lakhs were sanctioned during the year. The amount of loan sanctioned during 1980-81 was thus marginally higher than the amount of Rs. 1218 lakhs sanctioned to 833 applicants during the previous year. But there were only 431 effective sanctions for an amount of Rs. 995.10 lakhs as against 704 amounting to Rs. 997 lakhs during

1979-80. Actual disbursement of loan during 1980-81 amounted to Rs. 842 lakhs which is higher than the corresponding figure for the previous year by Rs. 112 lakhs. A comparative Statement showing the loan transactions during the last three years is given in Table 6.7

TABLE 6.7
Kerala Financial Corporation—Loan Transactions (Amount in Rs. lakhs)

Particulars	1978-79		1979-80		1980-81	
	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Applications Received	514	1309	867	2571	924	2321
Applications Sanctioned (Gross)	525	790	833	1218	567	1901
Applications Sanctioned (Effective)	410	548	704	997	431	995
Amount Disbursed	473	629	430	730	636	842

6.23 Small scale industries and backward areas continued to receive high priority in the loaning operations of the Corporation. As on 31-3-1981, 3466 small scale units have been assisted to the tune of Rs. 3741 lakhs out of the total disbursement of Rs. 5521 lakhs and this works out to 67.76 per cent of the total amount of loan disbursed and 92.35 per cent of the total units assisted. The cumulative figures of loan transactions of the Corporation as on 31-3-1981 is given in Table 6.8.

During 1980-81 the sanction receipt sanction and disbursements of applications from backward districts (Trivandrum, Alleppey, Trichur, Malappuram and Cannanore) constituted 44.8 percent 43.4 percent and 26.1 per cent as against 55.5 percent, 55 percent and 51 percent respectively during 1979-80. District-wise details of sanction and disbursement are shown in Appendix 6.4 and industry-wise details in Appendix 6.5

TABLE 6.8
Cumulative Figures of Loan Transactions Till 31-3-1981

Particulars	(Rs. in lakhs)					
	Small Scale		Others		Total	
	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Applications Received	6225	10730	437	3704	6662	14434
Effective Sanctions	4182	5639	316	2381	4498	8020
Loan Disbursed	3466	3741	287	1780	3753	5521

6.24 During 1980-81, Rs. 29.32 lakhs as Central Investment subsidy and Rs. 7.89 lakhs as State subsidy were routed through the Corporation to assisted units. The Corporation is also engaged in the implementation of Schemes like seed capital assistance, monitoring of sick units and credit guarantee etc. The Corporation has received an amount of Rs. 25 lakhs by way of special share capital for assistance under this scheme. Out of 39 applications involving an amount of Rs. 28.04 lakhs received by the Corporation under seed capital scheme 14 applications for an amount of Rs. 11.15 lakhs have been sanctioned. Actual disbursement under this scheme, however, was only Rs. 8.97 lakhs to 13 applicants. The sick unit monitoring cell of the

Corporation in participation with SIDECO identified 3 units involving an amount of Rs. 6.28 lakhs in 1980-81. Out of the 11 units assisted during 1979-80 the rescheduling of six units has been completed and the remaining cases are at various stages of implementation. All the eligible small scale industries have been reported to the Credit Guarantee Organisation for Credit Guarantee Coverage and as on 28-9-1980, 2276 cases involving an aggregate amount of Rs. 2410 lakhs have been reported for coverage. During 1980-81 steps have been taken to invoke the guarantee claims in respect of 33 units. Out of 50 units invoked as on 31-3-1981, amounting to Rs. 63.32 lakhs claims in respect of 3 units for a total sum of Rs. 1.73 lakhs have been allowed.

6.25 The authorised share capital of the Corporation is Rs. 7 crores and paid up capital as on 31-3-1981 is Rs. 4.48 crores. About 51 per cent of the share capital is contributed by the Government of Kerala and about 44 per cent by the Industrial Development Bank of India. The working of the Corporation during 1980-81 resulted in a profit of Rs. 70.10 lakhs. But after making provision of Rs. 29.70 lakhs towards income tax, Rs. 42.96 lakhs towards bad debts and Rs. 20.54 lakhs towards special reserves the net position was a loss of Rs. 23.10 lakhs. The loss in the balance sheet has been shown as Rs. 9.99 lakhs after setting off Rs. 13.11 lakhs available as opening balance in the general reserve accounts. A summary of the Profit and Loss Account of the Corporation is given in Table 6.9

TABLE 6.9

Summary of Profit and Loss Account of the Kerala Financial Corporation

Item	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)
Income			
Interest on Loans	304.65	299.05	425.55
Other Income	7.79	11.09	15.11
Total	312.44	310.14	440.66
Expenditure			
Interest on Bonds and Borrowings	188.00	231.28	284.00
Other expenses	61.65	77.10	86.56
Profit before Taxation	62.79	1.76	70.10
Total	312.44	310.14	440.66
Appropriation			
Provision for Taxation	21.00	..	29.70
General Reserve	7.73	..	..
Special Reserve	25.00	1.00	20.54
Bad Debt Reserve	0.76	..	42.96
Balance Available for payment of Dividend	8.40	0.76	..
Dividend Payable	8.30	9.10	11.33

6.26 At the end of 1980-81 an amount of Rs. 665.30 lakhs was overdue to the Corporation, resulting in severe resource constraint. This has considerably impeded the loan disbursement programme of the Corporation. The Corporation has launched a

number of steps including personal contact of defaulter loanees, intensifying revenue recovery measures etc. in order to improve loan recovery measures. On the organisational front, the Corporation opened a new branch office at Kattappana in Idukki district. The Corporation has at present got regional/branch offices in all district headquarters except Wynad. The Corporation proposes to restructure its activities to fulfil the needs of small and medium scale industrial financing of the State in a better manner.

*Other State Government Corporations**(i) Kerala State Electronics Development Corporation, Limited*

6.27 The Corporation, established in 1973 by the State Government for promoting electronics industry in the State, continued its developmental activities. In order to stimulate the growth of electronics industry, the Corporation is engaged in developing, manufacturing and marketing components for the industry, consumer electronics products for enhancing the quality of life and electronics equipments and systems for industrial defence and space applications. The Corporation, besides setting up manufacturing units directly under its control, has established twelve associate/subsidiary companies to take up manufacturing programmes. The product range of these units include aluminium electrolytic capacitors, piezo-electric crystals, carbon film resistors, assembly lines for colour T.V., loudspeakers, power transistors, silicon rectifiers and diodes, a range of transistor radios, a range of T.V. receiver sets, 16mm cine projectors, voltage stabilizers, a range of electronic calculators etc.

6.28 The manufacturing activities of the units directly under the control of the Corporation have improved noticeably during 1980-81. As against the installed capacity of 15,000 numbers of T.V. receivers per annum, the Company produced 10,471 T.V. receivers worth Rs. 367 lakhs during the year. The production of electronic calculators of the order of 5015 valued at Rs. 63 lakhs is above the installed capacity of 5,000 numbers per annum. Total sales turnover of the Company including that of subsidiaries and associates during 1980-81 was of the order of Rs. 1169.58 lakhs. Of this Rs. 36.74 lakhs is realised through export sales. The Corporation incurred a net loss of Rs. 28.19 lakhs during 1980-81. The paid up share capital of the Corporation stood at Rs. 909.86 lakhs as on 31st March 1981. The net fixed assets created amounted to Rs. 454.10 lakhs. The Corporation and its subsidiary/associate companies employed 3432 persons directly during 1980-81. Details of product-wise installed capacity and production are given in the Table 6.10

TABLE 6.10
Kerala State Electronics Development Corporation Limited
(Capacity and Production)

Name of Product	Unit	Licence capacity	Installed capacity	Production in 1980-81
(1)	(2)	(3)	(4)	(5)
1. T. V. Receivers	Nos.	20000	15000	10471
2. Electronic Calculators	"	5000	5000	5015
3. Electronic Printers	"	5000	5000	128
4. Static Inverter Systems	"	5000	5000	403
5. Variable Speed Drives	"	2000	2000	279
6. XY & Digital Incremental Plotters	"	200	200	Nil
7. Electronic Cash Registers	"	250	250	Nil
8. Electronic Card Attendance system	"	100	100	44
9. Electronic Display for Weighing Scales	"	100	100	Nil
10. T. V. Cameras	"	100	100	39

6.29 The Corporation proposes to take up, during the Sixth Plan period, a number of projects such as control valves, telephone based systems and minicomputers, communication equipments etc. The major project taken up by the Corporation for the manufacture of control instrumentation systems, micro-processor based systems etc. are fast nearing completion. The annual sales turnover of the Corporation is expected to be Rs. 30 crores during 1981-82 and Rs. 50 crores by 1982-83.

(ii) *Kerala State Textile Corporation Limited.*

6.30 The Kerala State Textile Corporation was incorporated in 1972 with the major objective of promoting textile industry in the State and ensuring rapid modernisation of sick mills by providing adequate financial assistance to procure necessary plant and machinery. The Corporation is managing three textile mills, viz, Malabar Spinning and Weaving Company, Calicut Kottayam Textiles, Kottayam and Praburam Mills, Chengannur which were entrusted with the Corporation in 1978 by the Government of India under the provisions of the Industrial Development (Regulation) Act of 1951. The modernisation scheme drew up by the Corporation is being implemented in these mills. The working of these mills has improved considerably. During 1980-81, the total production in terms of quantity was 19.05 lakh kg. of yarn and 18.45 lakh metres of cloth. The profit earned by these mills during 1980-81 was of the order of Rs. 6.85 lakhs after providing for depreciation. The activities of the knitting and marketing division of the Corporation were given new thrust during the year.

The bleaching and calendering unit has been transferred to the Corporation with effect from 1-4-1981.

6.31 During 1980-81, the Corporation sold knitwear, mill cloth and handloom goods worth Rs. 8.69 lakhs. The interest income received from the mills managed by the Corporation amounted to Rs. 13.98 lakhs. The gross income earned by the Corporation during 1980-81 was of the order of Rs. 36.97 lakhs as compared to Rs. 26.74 lakhs in the previous year. Total expenditure incurred by the Corporation increased to Rs. 30.40 lakhs as against Rs. 17.76 lakhs in the previous year. After providing for taxation and investment allowance reserve, the Corporation earned a net profit of Rs. 2.63 lakhs during 1980-81 as compared to Rs. 3.60 lakhs in 1979-80.

6.32 As on 31-3-1981, the Corporation advanced Rs. 139.61 lakhs to the three mills managed by the Corporation for meeting their working capital, modernisation and other requirements. The projects proposed by the Corporation to be implemented during the Sixth Plan period involve a total outlay of Rs. 25 crores. The schemes include besides the ongoing schemes of expansion of the IDR Mills, knitting complex and the central testing laboratory, new project such as 5 spinning mills, a process house for hosiery, expansion of warping and sizing plant and an elastic tape project. Licence for importing machinery and equipment for the elastic tape project has already been obtained by the Corporation.

(iii) *Kerala State Film Development Corporation Ltd.*

6.33 The Kerala State Film Development Corporation was set up in 1975 by the State Government

with the main objective of the overall development of the Malayalam film industry and for the effective utilisation of the medium of cinema to meet the needs of education and mass communication. The activities of this Corporation was mainly directed at the completion of the studio complex and theatre project. On completion, the studio project is so designed as to enable the film producers to undertake and complete all the works connected with the production of a film under one roof. The studio project consists of recording theatre, laboratory, lab-theatre, editing rooms, studio floor, workshops, rest house, dormitories and a city office with preview theatre attached to it. The recording theatre is in full working order and the Corporation is getting work from private film producers. The laboratory is at present used only for the work relating to news reels. The Corporation has ordered for colour processing and printing machines, only after installation of which in the laboratory, the Corporation will get work from private producers, who produce mostly colour films at present.

6.34 The Corporation proposes to construct 12 theatres consisting of twin theatres at Trivandrum, Ernakulam and Calicut and single theatres at Alleppey, Trichur, Shertalai, Parur, Chittur and Taliparamba. Construction of theatres at Trivandrum, Calicut, Shertalai and Parur is in progress. The Corporation has taken steps for the construction of theatres at Chittur Alleppey and Trichur.

6.35 As on March 1981, the paid up share capital of the Corporation stood at Rs. 233.46 lakhs as against Rs. 118.46 lakhs of the previous year. The total amount of loan sanctioned by the State Government to the Corporation as on March 1981, was of the order of Rs. 118.69 lakhs. The net fixed assets created by the Corporation amounted to Rs. 320.69 lakhs during the period. The Corporation is having four outdoor units which are being hired out to private parties as well as for production of documentaries and newsreels by the Corporation. An income of Rs. 5.50 lakhs was realised by way of hire charges as against Rs. 4.32 lakhs in the previous year. During 1980-81 the Corporation produced ten short films including two newsreels as against four short films and three documentation shots during the previous year. Three short films viz. 'Keltron' for the Kerala State Electronics Development Corporation, 'Wild Life' for the Forest Department and 'Natural Rubber' for the Rubber Board were under production. The documentary film 'Visala Cochi' produced by the Corporation for the Greater Cochin Development Authority won the State award for the best documentary for the year 1980. During the period, the Corporation earned a total income of Rs. 15.56 lakhs through its various activities. The working of the Corporation ended with a loss of Rs. 0.95 lakh as compared to Rs. 0.60 lakh in the previous year. Including the loss incurred during the previous years,

the total loss of the Corporation as on 31-3-1981 was Rs. 7.96 lakhs.

(iv) *Kerala State Industrial Products Trading Corporation*

6.36 The major objective of this Corporation, incorporated in August, 1976, is to organise the sale of some monopoly products manufactured by the public sector companies of the State. Major items being procured by the Corporation are titanium dioxide from Travancore Titanium Products and white cement from the Travancore Cements Limited. During 1980-81, the Corporation sold titanium dioxide, white cement, kaolin etc. worth Rs. 1414.70 lakhs as compared to Rs. 1196.22 lakhs in the previous year. Through these trading activities the Corporation earned a profit of Rs. 7.10 lakhs during 1980-81. In addition to titanium dioxide, white cement and kaolin the Corporation tries to procure more items for sale. The Corporation has a proposal to enter into the export market.

Medium and Large Scale Industries

6.37 Three groups of manufacturing concerns are there in the public sector of the State, viz. (i) companies, the share capital of which are fully owned by the State Government; (ii) companies in which more than fiftyone per cent of the shares are held by the State Government and public sector financing institutions, and (iii) companies fully owned by the Government of India.

A. *Government Owned Companies*

6.38 Companies fully owned by the State Government are the following:—

1. Foam Mattings (India) Limited, Alleppey
2. Kerala Automobiles Limited, Trivandrum
3. Kerala Ceramics Limited, Kundara.
4. Kerala Electrical and Allied Engineering Co., Limited, Mamala, Cochin.
5. Kerala Minerals and Metals Limited, Quilon.
6. Kerala Premo-pipe Factory Limited, Quilon
7. Kerala Soaps and Oils Limited, Calicut.
8. Kerala State Detergents and Chemicals Limited, Kuttipuram.
9. Kerala State Drugs and Pharmaceuticals Limited, Alleppey.
10. Malabar Cements Limited, Palghat.
11. Scooters Kerala Limited, Alleppey
12. Sitaram Textiles Limited, Trichur.
13. Steel Industrials Kerala Limited, Trivandrum
14. Travancore Plywood Industries Limited, Punalur.
15. Trivandrum Rubber Works Limited, Trivandrum.
16. Trivandrum Spinning Mills Limited, Balaramapuram.

(i) *Kerala State Industrial Enterprises Limited*

6.39 Management of seven companies among the above group, viz. Kerala Ceramics, Kerala Electrical and Allied Engineering Co., Kerala Soaps and Oils, Kerala State Detergents and Chemicals, Kerala State Drugs and Pharmaceuticals and Trivandrum Rubber Works, is entrusted by the State Government with Holding Company, the Kerala State Industrial Enterprises Limited, set up in 1973. The performance of the Holding Company and its subsidiaries during 1980-81 was encouraging. Total value of production of these seven subsidiary companies has gone up from Rs. 1885.54 lakhs in 1979-80 to Rs. 2603.99 lakhs in 1980-81, the increase over the previous year being 38 per cent. This remarkable increase in production was achieved in spite of certain problems like go slow tactics resorted to by the employees in the Travancore Plywood Industries, Kerala Electrical and Allied Engineering Co, Trivandrum Rubber Works and Kerala State Drugs and Pharmaceuticals, lock out in the Olavakkot division of the Kerala Electrical and Allied Engineering Company, power interruption in Kerala State Detergents and Chemicals, agitation by local population of Kundara against mechanised mining by Kerala Ceramics, and shortage of working capital in Trivandrum Rubber Works and Kerala Ceramics.

6.40 Sales turnover of these subsidiary companies has also increased by 35 per cent from the previous year's level of Rs. 1832.98 lakhs to Rs. 2465.37 lakhs during 1980-81. The increase ranges from 5 per cent to 54 per cent in different companies. Four companies showed increase in sales over the actual production during the year, thanks to the hard work put in by the marketing wings of these companies. But the aggressive sales promotion tactics resorted to by powerful competitors in the field headed by multinationals and

monopoly houses continued to be a serious impediment in the marketing efforts of these companies.

6.41 Operating results of these companies during 1980-81 have evinced considerable improvement over the previous year. Of the seven companies, five were working on profit. The performance of Travancore Plywood Industries, Kerala Electrical and Allied Engineering Company and Kerala State Drugs and Pharmaceuticals was quite satisfactory. The Travancore Plywood Industries earned a net profit of Rs. 30.13 lakhs as compared to a marginal profit of Rs. 0.57 lakhs in 1979-80. The Kerala Electrical and Allied Engineering Company made a profit of Rs. 19.43 lakhs as against a net loss of Rs. 15.41 lakhs in the previous year. The profit earned by the Kerala State Drugs and Pharmaceuticals increased to Rs. 26.08 lakhs from Rs. 2.86 lakhs in the previous year. The Trivandrum Rubber Works and Kerala Ceramics, on the other hand, continued to incur losses during 1980-81 also. Marginal improvement was noticed in the case of Trivandrum Rubber Works by bringing down the loss from the previous year's level of Rs. 30.52 lakhs to Rs. 29.49 lakhs during 1980-81. Kerala Ceramics continued to incur heavy loss and it has increased from Rs. 47.43 lakhs in 1979-80 to Rs. 66.32 lakhs in 1980-81. Though the loss incurred by the Kerala Ceramics alone increased by nearly Rs. 20 lakhs in a single year, total loss of the subsidiary companies could be brought down to Rs. 7.32 lakhs during the year 1980-81 from the previous year's total loss of Rs. 78.31 lakhs, i.e. to the extent of Rs. 70.99 lakhs in a single year. It is gratifying to note that the total loss of all these seven companies put together is on the decrease since 1977-78, when it was Rs. 170.63 lakhs and in 1978-79 Rs. 146.29 lakhs.

6.42 Salient features of the subsidiary companies of the Holding Company are shown in the Table 6.11.

TABLE 6.11

Salient Features of the Subsidiary Companies of the Kerala State Industrial Enterprises Limited

(Rs. lakhs)

Name of Company	Paid up Capital		Value of Production		Sales		Net Profit(+)/Loss(-)		Persons Employed (Nos.)	
	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Kerala Ceramics Limited	107.95	107.95	107.44	113.22	95.01	117.88	(-)47.43	(-)66.32	616	609
2. Kerala Electrical and Allied Engineering Co. Limited	105.82	122.16	322.08	405.51	318.90	444.75	(-)15.41	(+)19.42	714	578
3. Kerala Soaps and Oils Ltd.	149.97	149.97	515.63	849.37	528.36	747.35	(+)10.14	(+)11.80	484	505

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
4. Kerala State Detergents and Chemicals Ltd.	67.00	89.00	208.65	328.65	155.51	238.91	(+)1.48	(+)1.25		159	243
5. Kerala State Drugs and Pharmaceuticals Ltd.	130.00	210.00	269.00	327.53	310.61	325.15	(+)2.86	(+)26.08		283	302
6. Travancore Plywood Industries Ltd.	48.59	48.59	204.20	293.40	198.82	303.26	(+)0.57	(+)30.13		520	659
7. Trivandrum Rubber Works Ltd.	213.62	213.62	258.54	286.31	230.77	288.06	(-)30.52	(-)29.49		435	442
Total	822.95	941.29	1885.54	2603.99	1832.98	2465.97	(-)78.31	(-)7.32		3221	3338

Improvement in the performance of these companies could be brought about by implementing a package of promotional measures by the Holding Company, significant among them, being the following:

1. A scientific system of budgeting and budgetary control, involving all aspects of working of each company.
2. System of regular performance evaluation.
3. Identification of production constraints and providing balancing equipment, changing the processes, making available raw materials etc. in time.
4. Market development.
5. Efforts to push up export sales of subsidiaries.
6. Quality improvement of products by introducing strict quality control measures.
7. Assistance for importing raw materials.
8. Preparation of project reports for expansion/diversification/modernisation.
9. Arranging bank finance.
10. Introduction of internal audit system.
11. Long term arrangements with labour unions for maintaining industrial peace and incorporating work norms in new agreements.
12. Identification and recruitment of competent managerial personnel.

6.43 Various expansion/diversification/modernisation schemes are now being implemented in the subsidiary companies. The second phase of the detergent plant of Kerala State Detergents and Chemicals has made considerable progress. The Vitamin 'A' project in the Kerala State Drugs and Pharmaceuticals is planned to be commissioned in June 1982. The expansion of soap and hydrogenation plants in the Kerala Soaps and Oils has been completed and inaugurated on 3-10-1981. Steps are being taken for the revival of the switchgear division of Kerala Electrical and Allied Engineering Company. The rationalisation of the Kaolin Division of the Kerala Ceramics is progressing. Some new products like truck tyre flaps,

moped tyres, rims, transmission belts etc. have been developed in the Trivandrum Rubber Works. In addition to this, works relating to the conversion of HT into LT Scooter tyre/tube project and journal lubricating pad project etc. are in progress.

(ii) Other Government Owned Companies

1. Kerala Minerals and Metals Limited

6.44 Working of the Kerala Minerals and Metals, one of the fully owned Government companies outside the management of Kerala State Industrial Enterprises, has been quite encouraging. Total equity share capital of the Company rose to Rs. 1979 lakhs as on 31st March, 1981 from Rs. 479.05 lakhs as on March 31 of previous year. Value of net fixed assets created by the Company stood at Rs. 2,722 lakhs as on March, 1981. Total value of production of the Company, during 1980-81, was Rs. 86.09 lakhs and sales turnover Rs. 85.13 lakhs, as against Rs. 77.34 lakhs and Rs. 79.13 lakhs respectively during the previous year. In quantity terms, there has been an overall increase in the production of minerals, the total production being 26491 tonnes as against 22590 tonnes in the previous year. Rate of capacity utilisation in respect of each product has also registered increase during the year. The working results of the Company in 1980-81 have shown a profit of Rs. 22.06 lakhs compared to Rs. 17.95 lakhs during the previous year. After providing for taxation the net profit earned during the year stood at Rs. 9.72 lakhs. Implementation of the development projects initiated by the Company is fast progressing. By March, 1981 more than fifty per cent of the civil works in respect of the titanium dioxide plant has been completed and orders have been placed for most of the structures and equipments.

2. Trivandrum Spinning Mills Limited.

6.45 The Trivandrum Spinning Mills was functioning on profit during 1980-81 also; but its working results, in respect of value of production, sales turnover, etc. have shown marginal decline during the

year compared to those of the previous year. The value of yarn produced by the Company during 1980-81 was Rs. 225.68 lakhs and the sales turnover Rs. 218.87 lakh as against Rs. 227.75 lakhs and 225.31 lakhs respectively during 1979-80. In quantity terms the cotton yarn produced by the Company declined to 5.93 lakh kg. from 6.38 lakh kg. of the previous year. The Company earned a net profit of Rs. 15.86 lakhs during 1980-81, which is only around half of the previous year's level of Rs. 32.58 lakhs. Major reasons for the reduction in profit were hike in prices of cotton, to the extent of about 40 per cent from October, 1980. Cost of other inputs like stores and spares has also shot up to an all time high. On the other hand prices of yarn have fallen by about 15 per cent. The programme of modernisation taken up by the Company has almost been completed. One sliver lap machine and two combing machines, costing Rs. 16.11 lakhs were imported from Japan in order to produce superfine combed yarn required by the handloom weavers of the region. The programme, envisaging expansion of spindleage capacity from the existing level of 25,200 to 50,000 for which industrial licence has been obtained from Government of India, is scheduled to be implemented in 1982-83.

3. *Sitaram Textiles Limited*

6.46 The Sitaram Textiles was registered as a Government Company on 14-2-1975 and started functioning with the assets taken over by the Government from the erstwhile Sitaram Spinning and Weaving Mills, a private company established in 1908. Now the Company owns 300 ordinary looms and 36 automatic looms. During 1980-81, the Company produced 8,62,875 kg. of cotton yarn worth Rs. 246.95 lakhs and 50,66,195 metres of cloth valued at Rs. 210.25 lakhs. Sales turn over of the Company during 1980-81 was of the order of Rs. 412 lakhs. Working of the Company during 1980-81 ended with a net loss of Rs. 57.09 lakhs. Sales turn over of the Company is targetted to achieve a level of Rs. 540 lakhs by the end of 1981-82. The unsatisfactory performance of the Company during 1980-81 was mainly due to the increase in price of cotton and other materials like dyes, chemicals and components, etc. The loss is also attributed to the obsolescence of the ordinary type of looms having low width, resulting in low level of efficiency. The Company is implementing a modernisation scheme covering both the spinning and weaving sections.

4. *Steel Industrials Kerala Limited*

6.47 The Steel Industrials Kerala was established in 1975 for setting up steel based industrial units in the State. A Structural Fabrication Unit, Steel Forging Unit, Ship Breaking Unit, Integrated Casting Unit and a Roller Bearing Unit are the projects which

are being implemented by the Company. A mini structural fabrication unit established in Shertallai has started commercial production on 1st April, 1980. Sales turn over of this unit amounted to Rs. 20.70 lakhs during 1980-81. Production of fabricated steel sections and ferrous scrap in the units already started functioning was of the order of 388.34 tonnes and 356 tonnes respectively. Major consumers of these items were Velloor Newsprint Project, Transformers and Electricals Kerala, Cochin Shipyard, etc. Total sales turn over realised during 1980-81 amounted to Rs. 29.22 lakhs. The working of the Company during this period resulted in a net loss of Rs. 9.35 lakhs. During 1980-81, the Company made concerted efforts to complete the projects already taken up for implementation. The Structural Fabrication Unit, when completed will have a capacity to process 6,000 tonnes of steel structures per annum. The expansion of the mini steel fabrication unit, with an additional investment of Rs. 27 lakhs, is being completed. The steel forging unit costing Rs. 530 lakhs with an installed capacity of 3,500 tonnes of steel forgings is in an advanced stage of implementation. Purchase orders have been placed for most of the items of plant and machinery required for the unit. The import of 're-rollable scrap in the form of old ships for breaking' has been canalised through the Metal Scrap Trade Corporation for the Ship Breaking Unit at Beypore. All the preliminary works like acquisition of land, preparation of project report, selection of technical consultants, etc., have been completed for the Integrated Castings Unit to be located at Shertallai. The first stage of the first phase of this unit is expected to start production by the middle of 1982. The aggregate value of production and sales turn over of the three units, viz. Steel Fabrication Unit, Ship Breaking Unit and the Steel Forging Unit under Steel Industrials Kerala are expected to reach the levels of Rs. 818.80 lakhs and Rs. 792.61 lakhs respectively during 1982-83.

5. *Foam Mattings (India) Limited*

6.48 The Foam Mattings (India), a factory with an installed capacity for manufacturing 3.6 million sq. metres of rubber backed coir mattings of 4 metre width per annum, was incorporated as a Government owned company in 1978. The paid up capital of the Company as at the end of 1980-81 was Rs. 34 lakhs, as against the authorised capital of Rs. 100 lakhs. The first part of the project, viz. installation of foam backing plant has been completed and commercial production started on 1st September, 1980. During 1980-81, the Company produced only 33,214 sq. metres of foam backed coir mattings of which sales turn over was 24,480 sq. metres valued at Rs. 9.96 lakhs. Of this Rs. 8.84 lakhs was earned through export sales to Tapis Benoit of France and Andeas Jenow of Denmark. The Company incurred a net loss of Rs. 7.83

lakhs during 1980-81. The estimated production of the Company during 1981-82 is 2 lakh sq. metres of foam backed mattings and it is proposed to implement the project in full during 1982-83. The Company also proposes to manufacture PVC backed tufted coir carpets, etc., during 1982-83, as part of its diversification programme, the proposal for which has been sanctioned.

6. Kerala Premopipe Factory

6.49 The Kerala Premopipe Factory manufactured 3586 premopipes worth Rs. 71.76 lakhs and 5045 RCC pipes worth Rs. 8.62 lakhs during 1980-81. Sales turn over of the company during this period amounted to Rs. 83 lakhs. The company earned a net profit of Rs. 2 lakhs after providing for taxation, depreciation and interest charges. Sales turn over of the company is expected to reach Rs. 95 lakhs by the end of 1981-82 which will enable the company to earn a net profit of the order of Rs. 7 lakhs. The company is now setting up an RCC pipe unit costing Rs. 38 lakhs, at Calicut. This plant is scheduled to go into production by October, 1982. Besides this, the company has obtained a letter of intent for establishing an Asbestos Cement Pressure Pipe Project, having a capacity of 30,000 tonnes per annum. Steps have been taken to establish this Rs. 9 crore project in the Palghat—Walayar region.

(iii) Companies Under Implementation

1. Kerala Automobiles Limited

6.50 The Kerala Automobiles was incorporated on 15th March, 1978 as a fully owned Government Company with an authorised share capital of Rs. 200 lakhs. The Company entered into a collaboration agreement with Messrs Automobile Products of India in November, 1978, for setting up a three wheeler manufacturing unit in Trivandrum with a capacity to manufacture 10,000 three wheelers per annum. The detailed Project Report prepared by the Automobile Products of India, Bombay was approved by the State Government in September 1980. The civil construction work started in January, 1981 and at the end of March 1981, 30 per cent of the work has been completed. The authorised share capital of the Company has been raised to Rs. 400 lakhs by creation of two lakh new equity shares of Rs. 100 each, during 1980-81. An agreement was entered into with Messrs Automobile Products of India for marketing the products of the company for a period of five years from the commencement of commercial production. The Company is scheduled to commence production in September, 1982.

2. Malabar Cements Limited

6.51 The Malabar Cements Limited was incorporated in 1978 for establishing a cement plant at

Walayar in Palghat district with a capacity of 1,200 tonnes per day. The project is in an advanced stage of implementation. An amount of Rs. 28.50 crores has already been spent on the Project by the middle of December, 1981. The paid up capital of the company has been raised to Rs. 735 lakhs during 1980-81. All items of machineries have been brought to site and erection of machineries and electrical installations commenced. Mining operations started in 1981-82 and the plant is scheduled to be commissioned during the first quarter of 1982-83. Main features of the working results and details of production and capacity utilisation of the Government owned Companies are given in Appendix tables 6.6 and 6.7 respectively.

B. Government Majority Companies

6.52 The manufacturing companies in the States majority of the share of which are held by the State Government are the following:

1. Chalakudy Refractories Limited, Chalakudy
2. Forest Industries (Travancore) Limited, Alwaye
3. Pallathra Bricks and Tiles Limited, Shertallai
4. Traco Cable Company Limited, Ernakulam
5. Transformers and Electricals Kerala Ltd. Angamaly
6. Travancore Cements Limited, Kottayam
7. Travancore Cochin Chemicals Ltd., Udyogamandal, Ernakulam
8. Travancore Titanium Products, Ltd., Trivandrum
9. Travancore Sugars and Chemicals Ltd. Pulikeezh, Thiruvalla
10. United Electrical Industries Ltd., Quilon.

6.53 Among this group of companies, the performance of the Travancore Cochin Chemicals was remarkable during 1980-81. Total value of goods produced by the Company increased from the previous year's level of Rs. 916 lakhs to Rs. 1141.56 lakh during this period. Corresponding increase has been reflected in the sales turn over also, which rose from Rs. 1025.70 lakhs to Rs. 1288.96 lakhs registering an increase of 26 per cent. Total quantity of caustic soda produced during 1980-81, was 33711 tonnes as compared to 31,002 tonnes in 1979-80. As regards sodium sulphide, production increased to 659 tonnes. Chlorine gainfully utilised during 1980-81 continued to be low at 60 per cent. It was higher compared to the previous year, despite the stoppage of off-take for about two months by Kerala Chemicals and Proteins on account of their labour troubles and reduced drawal of chlorine by Hindustan Insecticides due to their production problems. The Company was incurring losses for the last few years. But the profit earning capacity achieved during 1979-80 could be

enhanced during 1980-81. Net profit earned by the Company during 1980-81 rose to Rs. 129.76 lakhs from a marginal profit of Rs. 4.71 lakhs of the previous year. It is expected that the performance of the Company will be improved considerably in the coming years, for which steps have already been taken by the Company.

6.54 The working of the Travancore Titanium Products has also improved considerably. The Company earned a profit of Rs. 109.02 lakhs during the year ending 31st December, 1980, after providing for depreciation of the order of Rs. 75.28 lakhs. After providing Rs. 74.72 lakhs for taxation, the net profit amounted to Rs. 34.30 lakhs in the place of a net loss of Rs. 33.74 lakhs in the previous year. Sales turnover of the Company rose to Rs. 1283.23 lakhs from the previous year's level of Rs. 1100.92 lakhs. An amount of Rs. 12.64 lakhs was realised through export sales. As against the installed capacity of 24,500 tonnes per annum, the Company produced 10,939 tonnes of titanium dioxide during 1980. The rate of capacity utilisation has registered an increase of 10.4 per cent over the previous year. The Company is now implementing an expansion scheme which is envisaged to achieve the rated capacity of 68 tonnes per day by installing additional balancing equipments. An amount of Rs. 20.68 lakhs has already been spent on this project by March, 1981.

6.55 The Transformers and Electricals Kerala, earned a net profit of Rs. 27.99 lakhs during 1980-81 as against a net loss of Rs. 74.78 lakhs in the previous year. Though the income of the company was only Rs. 2190.97 lakhs as against the target of Rs. 2720.83 lakhs, value of production and sales turnover increased noticeably during 1980-81. Value of goods produced by the Company amounted to Rs. 2083.21 lakhs as compared to Rs. 1065.33 lakhs in the previous year. Sales rose from Rs. 941.07 lakhs to Rs. 2064.29 lakhs during 1980-81. The operations of the Company were adversely affected by the non-availability of railway wagons to move the finished products in time and also by the undue delay in realisation of dues on sales bills from the customers. The Company's fourth stage expansion programme, envisaging the manufacture of SF-6 Gas Circuit Breakers upto 400 KV, is in progress. The additional facilities being installed are progressively utilised. Production of power transformers increased from 1710 MVA to 3356 MVA during 1980-81. The number of current and potential transformers etc. produced has also rose from 404 to 712 during this period. The Company aims at attaining a sales turnover of Rs. 2867 lakhs by 1981-82, yielding a net profit of Rs. 165 lakhs.

6.56 The working of the United Electrical Industries during the year ending 31st December, 1980 showed a

net profit of Rs. 22.46 lakhs as compared to Rs. 17.17 lakhs in the previous year. There was an allround improvement in production and sales of all the products except electronics items. Production and sales turnover of the Company during the year, were of the order of Rs. 280.67 lakhs and Rs. 276.39 lakhs respectively as against the previous year's levels of Rs. 208.78 lakhs and Rs. 226.57 lakhs. Production of KWH metres increased to 136537 during 1980 registering a rate of capacity utilisation of 77 per cent. Such increases in the rates of capacity utilisation were noticed in respect of all the products. Necessary machinery has been imported for the manufacture of 1/2 watt resistors during 1980. Motor starters above 60 HP upto 150 HP have been developed by the Company and marketing commenced. Export quality single-phase KWH metres to suit the continental requirements have also been developed during this period. The development of 15 MVA LT switch gears is under progress. The sales turnover of the Company is expected to reach the level of Rs. 325 lakhs during 1981.

6.57 Travancore Cements earned a net profit of Rs. 21.97 lakhs during the year ending December, 1980, as compared to the previous year's level of Rs. 45.14 lakhs. Sales turnover of the Company decreased to Rs. 423.56 lakhs from Rs. 479.19 lakhs in the previous year. Production of white cement was of the order of 37,867 tonnes as against the installed capacity of 30,000 tonnes per annum, registering a rate of capacity utilisation of 126 per cent. Nearly 93 per cent of the installed capacity was utilised in respect of cement paints, production during the year being 556 tonnes against the installed capacity of 600 tonnes per annum.

6.58 Marginal improvements have been noticed in all aspects of the working of Traco Cable Company during 1980-81. Value of production and sales turnover during the year were of the order of Rs. 450.71 lakhs and Rs. 449.08 lakhs respectively as against Rs. 419.76 lakhs and Rs. 428.08 lakhs during the previous year. The net profit earned by the Company during 1980-81 stood at Rs. 13.71 lakhs, registering a marginal increase over the previous year's level of Rs. 12.42 lakhs. The reasons for the less than expected growth in profit are attributed mainly to the general increase in the expenditure on account of inflation and reduction in the utilisation of installed capacity in all the three divisions of the Company, resulting in decreases in production and sales. Lesser utilisation of capacity in the AAC and ACSR divisions was due to non-availability of aluminium in adequate quantities in the first few months of the year which was followed by labour unrest for nearly three months. Production of AAC and ACSR decreased from the previous year's level of 859 MT to 851 MT during 1980-81. Lower production in the

power cable division was mainly due to lack of orders. Frequent break-downs of machines and labour unrest affected the performance of telephone cable division.

6.59 The activities of the Forest Industries (Travancore) Limited continued to be the manufacture of furniture for Schools and offices, doors, windows etc. and Ascu treatment of teakwood poles. The value of these items produced during 1980-81 rose from Rs. 47.03 lakhs to 67.14 lakhs. Sales turnover of the Company increased to Rs. 77.67 lakhs from the previous year's level of Rs. 62.15 lakhs. The Company earned a net profit of Rs. 1.74 lakhs during 1980-81 in the place of a marginal profit of Rs. 0.61 lakh in 1979-80. This could be achieved inspite of severe competition from private sector small producers who are exempted from payment of excise duty and sales tax. The excise duty and sales tax paid by the Company during 1980-81 were of the order of Rs. 5.84 lakhs and Rs. 5.76 lakhs respectively. Further, the full requirements of timber of the Company could not be met from the Forest Department due to the non-availability of certain species. The Company therefore procured these varieties of timber from open market incurring higher expenditure. The Company expects a sales turnover of Rs. 110 lakhs by the end of 1981-82.

6.60 The Chalakudy Refractories, Pallathra Bricks and Tiles and Travancore Sugars and Chemicals were working on loss during 1980-81. Of these, the Chalakudy Refractories alone incurred a loss of Rs.27.17 lakhs as compared to Rs. 6.41 lakhs in the previous year. The production of refractories fell to 1841 tonnes from the previous year's level of 2077 tonnes. But the sales increased from Rs. 8.51 lakhs to 14.88 lakhs during 1980-81. This was mainly due to the slight shift in the product mix of the Company. The project for the expansion of production capacity to 12,480 tonnes per annum could not be completed as envisaged, since certain items of essential machinery and balancing equipments are yet to be acquired and those already acquired have not been erected and commissioned. The Shaft Kiln, a major item of the expansion project was commissioned during the year and trial runs proved satisfactory.

6.61 The Pallathra Bricks and Tiles continued to incur loss during 1980-81 also. The Company manufactured 92 lakhs of sand lime bricks during 1980-81. Besides manufacture and sale of sand lime bricks, the Company is engaged in the trading of processed silica sand to various companies in the State. The working of the Company has resulted in continuous loss from its inception, and has not been able to attain economic viability due to various reasons, the most important being the hike in cost of production compared to selling price of products. The Company is making all attempts

to bring down the cost of production by substituting cheap raw materials in the place of limeshell, furnace oil etc.

6.62 The working results of the Travancore Sugars and Chemicals during 1980-81 showed a net loss of Rs. 1.49 lakhs in the place of a net profit of Rs. 9.69 lakhs in the previous year. Value of production and sales turnover of the Company made only marginal improvements over those of the previous year. Value of production rose to Rs. 257.07 lakhs from Rs. 253.91 lakhs and sales from Rs. 272.73 lakhs to Rs. 274.68 lakhs. During 1980-81, only 43,150 tonnes of sugarcane have been crushed and 3,334 tonnes of sugar produced, as against crushing of 60,691 tonnes of cane and production of 4,363 tonnes of sugar during the previous year. Fall in production of other items was also noticed during 1980-81. Production of spirit decreased from 2,073 proof kilo litres in 1979-80 to 1,792 proof kilo litres, during the year, as a result of the closure of the distillery for more than a month for want of molasses. Sales of arrack declined by 28 per cent mainly due to non-availability of spirit from other states in adequate quantities. Production and sale of Indian made fine liquors also decreased by 29 per cent from those of the previous year.

6.63 Main features of the working results of these Government majority Companies are given in Appendix Table 6.8 and the details of installed capacity and capacity utilisation in Appendix Table 6.9

G. Government of India Companies

6.64 Following are the manufacturing companies in the State fully owned by Government of India.

1. Cochin Refineries Limited, Ambalamugal.
2. Fertilisers and Chemicals, Travancore Limited, Alwaye and Cochin Divisions.
3. Indian Rare Earths Limited, Udyogamandal and Chavara Divisions.
4. Modern Bakeries (India) Limited, Edappally, Cochin.
5. Indian Telephone Industries Limited, Kanjikode, Palghat.
6. Hindustan Latex Limited, Peroorkada, Trivandrum.
7. Hindustan Insecticides Limited, Udyogamandal.
8. Hindustan Machine Tools Limited, Kalamasserry.
9. Instrumentation Limited, Kanjikode, Palghat
10. Cochin Shipyard, Cochin.
11. Velloor Newsprint Project, Velloor, Kottayam District.

6.65 The Cochin Refineries processed 29,12,451 tonnes of crude oil, averaging 59,282 BPCD during 1980-81 as compared to 2,866,900 tonnes averaging 58,076 BPCD in the previous year. Value of total production of petroleum products increased from the previous year's level of Rs. 39,607.67 lakhs to Rs. 55,823.38 lakhs registering an increase of 41 per cent during 1980-81. Sales turnover of the Company also increased by 45 per cent to Rs. 56,064.65 lakhs from the previous year's level of Rs. 38,540.68 lakhs. Net profit earned by the Company rose to Rs. 202.63 lakhs, as against Rs. 182.10 lakhs in 1979-80 inspite of the closing down of the Crude Distillation Unit for 36 days due to plant emergency, non-availability of crude oil and labour problems. The Government of India continued to arrange supply of crude oil to the Refinery as in the previous years under agreements with oil producing countries of the Middle East. Besides Bombay High crude which amounted to 3,94,577 tonnes different types of crude oil were processed by the Refinery during 1980-81. The proposal of the Company for the expansion of refinery capacity to 4.5 million tonnes per annum costing Rs. 15.93 crores has been cleared by the Public Investment Board of the Government of India. Necessary technical know-how for the expansion is received from Messrs Phillips Petroleum Corporation, USA at no extra cost under the Technical Service Agreement. The detailed engineering for the expansion project is being done by Messrs. Engineers India Ltd. This project is expected to be completed along with the Fluid Catalytic Cracking Unit, thereby ensuring minimum down time for tie-ins and maximum capacity utilisation for the Fluid Catalytic Cracking Unit.

6.66 The Fertilisers and Chemicals, Travancore Ltd., continued to show overall progress in its performance during the year 1980-81. The Company has established new records both in production and sales during the year. Profitable working results achieved during the previous year for the first time, after ten years, have been further improved during the year. Fertiliser production, during the year, was a record quantity of 616,188 tonnes registering an increase of 5.5 per cent over the production of 5,84,404 tonnes in the previous year. In terms of nutrient nitrogen, production reached an all time high of 1,70,335 tonnes against 1,63,475 tonnes of the previous year. Production of nutrient phosphorus pentoxide was also a record at 70,876 tonnes. Total value of production during 1980-81 amounted to Rs. 13,443.51 lakhs showing an increase of 76 per cent over the previous year's level of Rs. 7,629.04 lakhs. Sales turnover for the year was also an all time high amounting to Rs. 12,267.92 lakhs, showing an increase of 27 per cent over the last year's sales turnover of Rs. 9694.19 lakhs. The Company has improved upon its previous year's profitability position of Rs. 65 lakhs and earned a net profit of Rs. 160.37 lakhs after providing for depreciation and interest charges. This again is the highest

profit ever earned by the Company in its 36 years of existence. The Company made these appreciable achievements inspite of certain constraints like problems in steam net work and RG boiler system which affected production in the Cochin Phase-I, non-availability of sulphur for the Cochin Phase-II towards the end of the year, sulphuric acid limitation caused by equipment problems, irregular supply of sulphur, power interruptions, labour unrest among contract loading/unloading workers etc.

6.67 Two major units of the Indian Rare Earths are located in Kerala one at Udyogamandal in Ernakulam District and another at Chavara in Quilon District. Main products of the Udyogamandal Division are rare earths chloride and trisodium phosphate etc. and those of Chavara unit are ilmenite, monazite, rutile, zircon etc. Total value of production of the Company during 1980-81 increased to Rs. 1148.3 lakhs from Rs. 1031.7 lakhs in the previous year. Value of products manufactured by the Rare Earths Division and Minerals Division were of the order of Rs. 532.1 lakhs and Rs. 616.2 lakhs respectively. Total sales turnover of the Company amounted to Rs. 1078.4 lakhs during 1980-81 as compared to Rs. 1007.5 lakhs in the previous year. Share of the two divisions in the total sales turnover during 1980-81 are Rs. 511.7 lakhs and Rs. 566.7 lakhs respectively. Of these, the sales turnover in Udyogamandal unit was Rs. 510.55 lakhs and that in Chavara Unit Rs. 420.07 lakhs. These two units in Kerala together provided employment to 1005 persons at the end of 1980-81, additional employment generated during the year being 70. The Udyogamandal unit provided casual/contract labour equivalent to 95,046 mandays and the Chavara unit 200 mandays during the year. The increased input cost, by about Rs. 141 lakhs over the previous year, due to inflationary conditions have eroded the gains resulting from the increased sales turnover. Although the Company was able to obtain better selling prices for most of the products, it could not completely compensate the extra costs of inputs. Moreover the Company faced problems of power cuts, power failures, maintenance problems, etc. during 1980-81. Though, the Company could maintain the profit earning capacity attained in the past, the net profit during 1980-81 has declined from the previous year's level of Rs. 90.70 lakhs to Rs. 85.20 lakhs. The Company has been intensifying its efforts both in sales and production spheres, to obtain optimum results. Efforts have already been made to diversify its product range on a small scale by producing compounds of individual rare earth, zirconium chemicals and zircon based products. The Company has proposed a large scale diversification in the field of separation of high valued rare earth element from mixed rare earth.

6.68 The working of the Edappally unit of the Modern Bakeries (India) has also improved during 1980-81.

The value of modern bread and bun produced in this unit amounted to Rs. 257.50 lakhs marking an increase of 34 per cent over the previous year's level of Rs.191.53 lakhs. Corresponding improvement has been noticed in the sales turnover of the unit which amounted to Rs. 257.23 lakhs recording an increase of 25 per cent over the previous year's level of Rs. 206.29 lakhs. In quantity terms, the production of modern bread increased to 181.18 lakh numbers as against 170.39 lakh numbers of the previous year. With regard to the production of modern bun, the increase was of the order of 1.19 lakh numbers over the previous year's level of 6.85 lakh numbers. The net profit earned by the unit during 1980-81 was of the order of Rs. 29.53 lakhs as against Rs. 14.45 lakhs in the previous year. Production of modern bread and bun is expected to reach a level of 216.10 lakh numbers of standard loaves by 1981-82 which will enable the Company to achieve a sales turnover of Rs. 332.88 lakhs.

6.69 The working results of the Palghat unit of the Indian Telephone Industries during 1980-81, show a net profit of Rs. 14.25 lakhs as compared to a marginal profit of Rs. 0.42 lakh in the previous year. Sales turnover of the Company has increased from Rs. 37.60 lakhs of the previous year to Rs. 78.31 lakhs, which shows an increase of 108 per cent. Manufacture of electronic switching instruments during 1980-81 registered a growth of 275 per cent with 9680 lines as against the previous year's level of 2581 lines. This unit achieved its rated capacity of 10,000 lines per annum, in the first five months of the year 1981-82 itself. During the period, April 1981 to November 1981 production was 16,655 lines which exceeded the target of 15,845 lines. At the close of the year 1981-82, total production is expected to be 25,000 lines. An amount of Rs. 24.26 lakhs has already been spent by 31-3-1981, on the Phase-II expansion project of the Unit which is envisaged to manufacture 60,000 lines of electronic PAXs., PABXs. etc. per annum. The work on the project is expected to be completed by March 1982.

6.70 The Hindustan Latex continued to incur loss during 1980-81 also. The net loss incurred by the Company during the year was to the tune of Rs. 44.98 lakhs, as compared to Rs. 2.67 lakhs in the previous year. Though the value of production declined to Rs. 234 lakhs during 1980-81, from Rs. 268 lakhs in the previous year, sales turnover registered an increase of Rs.45 lakhs to Rs. 238.28 lakhs over the previous year's level of Rs. 193.28 lakhs. An amount of Rs. 28.50 lakhs has been earned during 1980-81 through export sales to USSR. The increase in the loss was mainly due to suspension of operations for three months owing to strike by the employees of the factory, and resultant fall in production. Increase in the prices of inputs and production problems in the first half of the year

also affected the performance of the Company adversely. The Company could produce only 105.23 million pieces of saleable condoms during the year, as against 177.70 million pieces during the previous year, the installed capacity being 288 million pieces per annum. One of the achievements of the Company during 1980-81 was the manufacturing of lubricated condoms in the sophisticated square pack for export to USSR.

6.71 The Udyogamandal unit of the Hindustan Insecticides was running on loss during 1980-81, which amounted to Rs. 135.65 lakhs as compared to Rs.18.29 lakhs in the previous year. Though the value of production increased from the previous year's level of Rs. 707.05 lakhs to Rs. 865.80 lakhs during 1980-81, sales turnover decreased by Rs. 274.90 lakhs to Rs. 517.50 lakhs as compared to Rs. 792.40 lakhs in the previous year. In quantity terms, production of all the items except formulated BHC, which increased by 50 tonnes over the previous year's level of 2551 tonnes, declined considerably. Production of technical DDT was only 1001 MT as compared to 1362 MT in 1979-80. Formulated DDT production decreased to 2001 MT from 2551 MT technical BHC from 2442MT to 1541MT

6.72 Performance of the Kalamasserry Unit of HMT Limited during 1980-81 was also not encouraging. Value of production came down to Rs. 629.13 lakhs from Rs.1151.75 lakhs in the previous year. There was corresponding decline in sales turn over from the previous year's level of Rs. 1183.47 lakhs to Rs. 664.20 lakhs, during the year. The export earnings of the unit during the year amounted to Rs.108.28 lakhs. Production of machine tools and accessories during 1980-81 was of the order of only 263 numbers as compared to 471 numbers in the previous year. Only 33 printing machines and accessories were manufactured in the Unit during 1980-81 as against 78 in the previous year. Shortfall in production and sales of the unit resulted in a net loss of Rs. 143.55 lakhs as compared to a net profit of Rs. 143.64 lakhs earned during the previous year.

6.73 Main features of the working results and details of production of these eight Government of India concerns, for which reports have been received, are given in Appendix Tables 6.10 and 6.11 respectively.

Village and Small Scale Industries

A. Small Scale Industries

(i) Department of Industries and Commerce

6.74 Rapid development of small scale industries is one of the major objectives of economic planning. Modern small scale industries, while adopting modern technologies, have greater employment potential. In spite of the availability of resources and

infrastructure facilities like power, transport facilities etc. the growth of modern small scale industries was rather tardy. The functioning of District Industries Centres in all the districts of the State and the package of assistance given to the entrepreneurs in establishing industrial units have made a positive impact on starting new small scale industrial units in the State. As on 31st March 1981, there were 18,954 registered small scale industrial units in the State of which 2980 were registered during 1980-81. The number of units registered during the year has been 15 per cent higher than the number of units registered during the previous year (2588). Table 6.12 shows district-wise distribution of registered small scale units in the State. During 1980-81 the largest number of small scale units was registered in Ernakulam district, followed by Trichur and Alleppey. The number of units registered in the districts of Kottayam, Kozhikode and Cannanore was less than that registered during the previous year. The additional employment created as a result of the small scale units newly registered during 1980-81 is estimated to be around 26,000. About 5,760 artisans units have also been started during the year providing self employment to about 9000 persons. Thus the total additional employment created during the year in the small scale industrial units and artisans units together would be of the order of 35,000. Total investment made in these sectors during the year was to the tune of Rs. 37.19 crores including institutional finance of Rs. 13.26 crores.

TABLE 6.12

District-wise Number of Registered Small Scale Units as on 31-3-1981

District	Registered during 1978-79	Registered during 1979-80	Registered during 1980-81	Total Registered Units as on 31-3-1981
(1)	(2)	(3)	(4)	(5)
1. Trivandrum	102	185	252	2122
2. Quilon	162	230	293	2066
3. Alleppey	148	248	333	1862
4. Kottayam	100	323	201	1559
5. Idukki	8	49	66	297
6. Ernakulam	150	402	505	3024
7. Trichur	136	281	372	2178
8. Palghat	147	160	232	912
9. Malappuram	55	75	250	955
10. Kozhikode	110	313	208	1743
11. Cannanore	150	322	268	2236
Total	1268	2588	2980	18954

4/655/MC.

6.75 The Mini Industrial Estate Programme which was organised in 1975 with a target of establishing one mini estate consisting of 10 units in every panchayat continued during 1980-81 also. The tempo of progress of the programme has considerably scaled down in recent years, as can be seen from the fact that only two mini industrial estates could be started during 1980-81, raising the total number of estates to 108 (see Table 6.13). As on 31-3-1981, 952 entrepreneurs were selected for starting industrial units in these estates.

TABLE 6.13

Statement showing the progress of implementation of Mini Industrial Estate in Kerala as on 31-3-1981

District	No. of Mini Industrial Estates as on 31-3-1980	No. of Mini Industrial Estates as on 31-3-1981
(1)	(2)	(3)
1. Trivandrum	10	10
2. Quilon	9	9
3. Alleppey	10	10
4. Kottayam	11	11
5. Idukki	7	7
6. Ernakulam	15	15
7. Trichur	8	10
8. Palghat	9	9
9. Malappuram	7	7
10. Kozhikode	11	11
11. Cannanore	9	9
Total	106	108

6.76 Rehabilitation assistance was given to 17 sick units during 1980-81. Scarce raw materials like iron and steel items, pig iron, steam, coal, hard coke, breeze coke, paraffin wax and cement were procured and distributed to entrepreneurs in the small scale sector through district level raw material depots of the Kerala State Small Industries Development and Employment Corporation.

6.77 Special efforts have been made for co-operativisation of the small scale industrial units. As on 31-3-1981 there were 1,289 small industrial co-operative societies in the State of which 20 were registered during 1980-81. Only 7 per cent of the total registered small scale units are in the co-operative sector, as shown in Table 6.14. In Trivandrum district 10 per cent of the units are in the co-operative sector whereas in Ernakulam district only three per cent of the units are

covered by co-operative societies. An amount of Rs. 11.22 lakhs has been spent towards share capital, working capital loan, managerial assistance etc. to these industrial co-operatives.

TABLE 6.14
District-wise Distribution of Small Scale Industrial Co-operatives
as on 31-3-1981

District	No. of Small Scale Societies Registered during 1980-81	Total No. of Co-operative Societies as on 31-3-1981	No. of Societies as percentage of No. of Registered Units
(1)	(2)	(3)	(4)
1. Trivandrum	3	202	10
2. Quilon	..	185	9
3. Alleppey	1	146	8
4. Kottayam	1	89	6
5. Idukki	..	20	7
6. Ernakulam	3	102	3
7. Trichur	2	199	9
8. Palghat	1	71	8
9. Malappuram	5	70	7
10. Kozhikode	2	92	5
11. Cannanore	2	113	5
Total	20	1289	7

6.78 The Department of Industries and Commerce extends a package of assistance for the promotion of small scale industrial units in the State. The Department keeps constant liaison with industrial promotion agencies like SIDECO, technical consultancy organisations like KITCO and industrial financial agencies like KSIDC and KFC for the allround industrial development of the State. Provision of developed plots or areas, built-in sheds with infrastructure facilities in Industrial/Mini Industrial Estates, supply of scarce raw materials, investment subsidy and sales tax concessions are some of the major incentives offered by the Department. With effect from 1-4-1981 the State investment subsidy in Quilon district has been enhanced from 10 per cent to 15 per cent subject to a maximum of Rs. 15 lakhs. At present subsidy is given for procuring feasibility/project reports, procurement of technical know-how, development of proto-type, purchase of testing equipment and for registration fee. Special assistance is offered for harijan and women entrepreneurs for starting small scale industries.

6.79 During 1980-81 an amount of Rs. 241 lakhs has been spent for the development of small scale industries

and Rs. 24 lakhs for industrial estates. About 37 per cent of the expenditure under small scale industries was for administrative purpose, 33 per cent for promotional programmes and a little over 8 per cent for the development of women's industries.

(iii) *The Kerala State Small Industries Development and Employment Corporation (SIDECO)*

6.80 SIDECO was incorporated in November 1975 by the amalgamation of two Corporations, viz. the Kerala State Small Industries Corporation (KSSIC), and the Kerala Employment Promotion Corporation (KEPCO) for the efficient implementation of the objectives of these two Corporations viz. promotion of industrial estates, distribution of raw-materials, hire-purchase arrangements for machinery etc. and creation of employment opportunities commensurate with investment, with the added responsibility of all-round development of small-scale industries in consonance with the policies and programmes of Government. The SIDECO has at present a paid up capital of Rs. 415.36 lakhs as against an authorised capital of Rs. 500 lakhs. SIDECO has 12 divisions. A brief account of the functioning of these divisions during 1980-81 is given below:

1. *Research and Development Division*

6.81 This Division collects information on project ideas developed by national laboratories and research institutions with sufficient technical details and passes them on to interested entrepreneurs. More than 500 project profiles have so far been obtained from agencies like SIET, KITCO, NRDC, etc. This Division also maintains a Data Bank.

2. *Industrial Estate and Infrastructure Division*

6.82 This Division has two branches viz. Industrial Estates Branch and 'Construction' Branch. The Corporation owns 17 conventional type of Industrial Estates, one functional Industrial Estate for ceramics and 36 mini industrial estates all over Kerala. There are 540 sheds in conventional estates which are classified as A, B and C type according to the plinth area. Two hundred and eighty-six units are functioning in the conventional estates and all the sheds in the mini industrial estates are occupied. The construction Branch of this Division is engaged in the construction and maintenance of conventional industrial estates, development plots, mini industrial estates and in making available infrastructure facilities to ancillary industrial estates, functional industrial estates, industrial complex etc. This Division also takes up the construction works of organisations like Coir Marketing Federation, Film Development Corporation, Khadi and Village Industries Board, Co-operative Banks, Department of Industries and Commerce etc.

3. *Production Division*

6.83 SIDECO, at present manages 14 production and service units in addition to the Common Facility

Service Centre and SIDECO Porcelain Products. Working results of these 14 units during 1980-81 are given in Table 6.15.

TABLE 6.15
Working Results of SIDECO Units

Name of Unit (1)	Nature of Product (2)	Production in 1980-81 (Rs. lakhs) (3)	Profit+ Loss (-) (Rs. lakhs) (4)
1. Tile Factory, Amaravila	Tiles and Bricks	9.14	(+)0.48
2. Government Instrument Workshop, Pappanamcode	Optical Instruments & Wooden Furniture	30.21	(+) 6.91
3. Die Casting Unit, Pappanamcode	Die Cast Parts	5.84	(-)1.19
4. Kerala Water Proof Products, Pappanamcode	Garments and Upholstery items	2.76	(-)0.26
5. Wood Workshop, Kollakadavu	Wooden Furniture	17.20	(+)0.94
6. Straw Board Factory, Parumala	Ascu Treatment of timber	3.16	(+)0.47
7. Service Workshop, Ollur	Steel Fabrication	6.16	(+)0.60
8. Wood Workshop, Calicut	Wooden Furniture	30.00	(+)4.56
9. Ceramic Service Centre, Mangattuparamba	Sanitary and Crockery items	1.00	(+)0.14
10. SIDECO Tools, Umayanallor	Dies, Jigs and Fixtures	2.40	(-)1.89
11. SIDECO Auto Engineering, Pachalam	Steel Fabrication and Automobile Repairs	16.46	(+)1.26
12. SIDECO Khaitan Fans, Kalamassery	A.C. Ceiling Fans	15.52	(-)3.08
13. SIDECO Equipment Complex, Thycaud	N. M. Charkas	7.20	(-)3.77
14. SIDECO Foundry	G. I. Castings	3.92	(-)1.12
Total		150.97	(+)4.05

SIDECO is establishing another project viz. SIDECO Mohan Tools for the manufacture of handtools, fasteners etc. at Athani, Trichur in Collaboration with M/S Mohan Meakings Ltd. During the last four years from 1977-1978 to 1980-81 the total investment in the production units has increased from Rs. 98 lakhs to Rs. 158 lakhs and employment from 331 to 727. The total turnover of these units has increased from Rs. 40 lakhs in 1977-78 to Rs. 73 lakhs in 1979-80 and to Rs. 151 lakhs in 1980-81. These units together earned a profit of Rs. 4.05 lakhs during 1980-81, as against a net loss of Rs. 0.59 lakhs in the previous year.

4. *Raw materials Division*

6.84 This Division is running sales depots in all the districts through which scarce raw materials are collected and distributed to the SSI units at reasonable rates. Iron and Steel items, B.P. Hard Coke, steam coal, wax, ingots, paraffin wax, Polythene Granules, Titanium Dioxide, Mutton Tallo, Umbrella cloth etc. are the main items procured and distributed by SIDECO. Retail distribution of cement through District Depots

and wholesale handling of imported cement arriving at Cochin Port and its distribution within the State to the allottees of the Government of India are other important functions of this Division.

5. *Machinery Division*

6.85 Assistance in the selection and procurement of machines is rendered by this Division. So far, the Corporation procured machinery and equipments on behalf of 660 entrepreneurs of the mini industrial estates and provided bridge finance in certain cases for taking delivery of the machines in time. SIDECO is also implementing the scheme of issuing machines on hire purchase basis on a limited scale.

6. *Finance Division*

6.86 Fifty per cent of the margin money requirements to SSI units availing of financial assistance from KFC and Banks is provided by SIDECO as soft loan on liberal terms and conditions. Repayment of this soft loan starts only after the loan is repaid to the principal lender.

7. *Technical Consultancy Division*

6.87 This Division imparts a package of consultancy services such as providing project reports and technical know-how secured from other approved agencies to the SSI units.

8. *Entrepreneur Development Division*

6.88 This Division identifies suitable entrepreneurs and imparts training with the co-operation and assistance of various Training Institutes for starting small scale industries in the Mini Industrial Estates. Special Programmes for the development of Harijan entrepreneurs are also implemented by this Division.

9. *Imports and Exports Division*

6.89. The Export Division started functioning on 18-3-1978. Assistance rendered by this division includes collection and dissemination of information on foreign markets, identification of SSI units with export potential co-ordination of other agencies in the export field, consultancy services for participation in fairs, training courses on export strategy etc.

10. *Marketing Division*

6.90 This division gives effective assistance in the marketing of the products of SSI units by passing on the information regarding requirements of Government Departments, Quasi Government Organisations, Medium and Large Scale Industries etc.

11. *Sick Units Rehabilitation Division*

6.91 Up to the end of 1980-81, 130 sick small scale units were got registered with SIDECO. Thirty seven units were given margin money assistance to the extent of Rs. 10 lakhs to avail institutional finance. Steps are being taken to make available institutional finance to the remaining units also. The Industrial Reconstruction Corporation of India (IRCI) Calcutta, is associating with SIDECO in its sick units revitalisation programme by providing credit to the extent of Rs. 50 lakhs. Concessional rates of interest and liberal conditions of repayment are offered under this scheme.

12. *Information and Publicity*

6.92 This Division, besides publishing a monthly journal 'Vyavasaya Keralam', is issuing booklets and pamphlets for the benefit of industrialists and entrepreneurs.

6.93 The working of SIDECO during 1980-81 resulted in a net profit of Rs. 10.36 lakhs. While Raw Materials Division, Auto Engineering, Wood Workshop and Government Instrument Workshop earned profits, SIDECO Foundry, Die Casting Unit, Construction Wing, SIDECO Khaitan Fans, Equipment Complex Marketing Division, SIDECO Tools and Functional Industrial Estates for ceramics incurred losses.

(iii) *Small Industries Service Institute*

6.94 Small Industries Service Institute, Trichur, a unit of the Small Industries Development Organisation, is set up to develop small scale industries in the State. Under the Small Industries Development Organisation there are also five Extension Centres at Alleppey, Calicut, Shoranur, Attingal and Muvattupuzha, one Footwear Service Centre at Trichur and three Production Centres at Ettumanur, Kottayam and Tiruvalla. The Institute and Extension Centres provide a comprehensive range of consultancy services—technical, managerial and marketing—to the small scale sector and conduct technical and managerial training courses for entrepreneurs and workers to make them well equipped with the latest advancements in the field of industry. The Institute extends technological and managerial support to D.I.C. programme and helps rehabilitating sick units. Workshop and common facility services are provided at reasonable charges besides helping small industries in solving specific problems.

6.95 During 1980-81 the Institute has prepared feasibility reports on voltage stabiliser, rolling shutters, spices and curry powder industries and 60 project profiles in different trades and organised eight clinics/seminars on different industries. The mobile vans attached to this Institute conducted demonstrations for carpentry, leather and general engineering and trained 200 persons. Under the area development programme the growth centre study of Thodupuzha was undertaken and a number of industries having scope for further development identified. The Institute rendered a variety of services to small industrialists and entrepreneurs of the State in diversified fields. The Institute assisted a pottery making unit by suggesting the right and uniform temperature in the furnace for proper burning of the tiles and also the use of kiln for terracotta products. An industrialist possessing a tile unit near Trichur was given technical guidance and details of establishing a modern mechanised factory in Andhra Pradesh. Assistance has been rendered by the Institute to certain units from project ideas to the production stage. In the field of electronics industry also the Institute rendered valuable services. Women entrepreneurs were given training in radio assembly and servicing in the electronics laboratory set up at the premises of the Institute.

6.96 By adopting suitable technology, the Extension Centre, Shoranur, helped to improve the efficiency level of a machine installed in one unit and to increase the output substantially in certain other units. A furniture manufacturing unit was assisted in converting the diesel power machinery into electric power machinery. This Centre fabricated a portable leather

skiving machine, incorporating the features of its imported counterparts, at substantially reduced cost, for use of the leather craft unit.

6.97 The Extension Centre, Alleppey developed a paper pulp moulding machine for a unit and fabricated a coir machine for another unit. At the request of Central Coir Research Institute, Alleppey this Centre effected improvement of the existing hand-operated coir looms by providing a clutch similar to the one in the power hack-saw machine. The Extension Centre, Kallai, developed hand-operated coir looms for making Karnatic Coir Mat.

6.98 During the year 1980-81 the S.I.S.I. and the Extension Centres provided consultancy services and assistance to a total of 10,112 existing and prospective entrepreneurs. The Institute and the Extension Centres provided workshop and laboratory facilities to 1871 small scale units and performed 2771 jobs during the year. Forty-four technical schemes, 17 blue prints, 24 drawing, 4 designs, 4 proto types and 37 other technical documents were prepared and supplied to entrepreneurs. Under ancillary development programme, the Institute contacted 21 parent units and identified 25 items suitable for ancillarisation by small units, besides identifying 19 new ancillary units and assisting 50 existing units.

B. Handicrafts Industry

6.99 There are about 32 flourishing crafts in the State of which the most important are carvings in wood, ivory and horn, bell metal castings, mat weaving and fancy items in bamboo, screwpine, fibre, coconut shell and synthetic gems. Excluding goldsmiths, about 85,000 craftsmen are engaged in this industry. The value of annual production of handicrafts is estimated at about Rs. 25 crores.

6.100 As on 30-6-1981, there are 82 working Co-operative Societies in this sector with 9,432 members and Rs. 26.92 lakhs as paid up share capital. The annual turn over of these societies is about Rs. 135 lakhs. For the marketing of handicraft products of the co-operative sector there is a Handicrafts Apex Society with its Headquarters at Ernakulam and a Central Imitation Diamond Manufacturers, Industrial Co-operative Society at Trichur. The Handicrafts Development Corporation, Trivandrum is mainly engaged in procurement and marketing of handicraft products from private sector. These three Apex Bodies, apart from their regular marketing functions, arrange to supply raw materials to artisans at subsidised rates. The aggregate sales turnover of these institutions during 1980-81 was Rs. 206.69 lakhs. The corresponding figure for 1979-80 was Rs. 168.83 lakhs. The details regarding sales turnover of these three apex bodies during the last three years are given in Table 6.16.

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TABLE 6.16

Sales Turnover of Handicrafts Apex Organisations

(Rs. lakhs)

Name of Organisation	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)
1. Handicrafts Development Corporation of Kerala Ltd., Trivandrum	75.29	110.49	142.36
2. Handicrafts Apex Society Ltd., Ernakulam	34.11	43.44	48.69
3. Central Lapidary Society Ltd., Trichur	23.07	14.90	15.64
Total	132.47	168.83	206.69

Apart from the programmes of assistance of these State-level organisations, the craftsmen are assisted by the All India Handicrafts Board by giving advanced training in improved techniques of production and development of new designs.

C. Handloom Industry

6.101 Handloom industry is one of the most important traditional industries of Kerala, providing employment to over 2 lakhs persons. Though handloom industry is scattered throughout the State, 82 per cent of the looms are concentrated in the district of Cannanore, Kozhikode and Trivandrum. Cannanore district alone accounts for 42 per cent of the total number of looms in the State. While Cannanore district produces mainly export variety items like crape, furnishing items etc., the southern districts produce handloom varieties for the local market. As a result of the development programmes initiated by the State Government under the Five Year Plans this industry could be rehabilitated to a certain extent. Still problems like soaring prices of raw materials, accumulation of unsold stock, competition from the organised mill sector etc. continue to persist in this sector. The strategy adopted for the revitalisation of the industry is to organise viable handloom weaver's co-operative societies. It is proposed to bring at least 60 per cent of the looms under the co-operative sector by the end of the Sixth Five Year Plan.

6.102 The total number of looms in the State is about 95,000 of which 39000 are under the co-operative fold as on 31-3-1981, constituting about 41 per cent of the total number of looms as against 37 per cent during the previous year. The number of weavers' co-operative societies increased from 510 in 1979-80 to 552 in 1980-81, of which 83 are factory type industrial co-operatives. In the programme of co-operativisation, stress is laid on the organisation and expansion of factory type industrial co-operative societies. Of the 83 factory type societies, 79 are functioning satisfactorily

These include 10 societies organised during 1980-81. As part of the programme of co-operativisation of looms strengthening of primary handloom weavers co-operative societies and the State Handloom Weavers' Co-operative Society (Apex Society) has been given greater emphasis. An amount of Rs. 6 lakhs towards share capital to primary societies and another Rs. 14 lakhs towards share capital of the Apex Society were contributed by Government during 1980-81. Fifty per cent of this expenditure is met by the Government of India.

6.103 As the sales of handloom products are seasonal a large amount of working capital is necessary for the smooth working of the industry. At present bulk of the working capital requirements of the primary societies and the Apex Society is met from the cash credit accommodation provided by the Reserve Bank of India. During 1981 RBI cash credit accommodation to Apex Society and primary societies amounted to Rs. 795 lakhs as against Rs. 620 lakhs during 1980. To tide over the problem of accumulation of unsold stocks 20 per cent rebate on sale of handloom cloth is allowed. Government of India assistance for rebate is available only for a period of 30 days. In spite of the rebate of 20 per cent during 30 days there has been considerable accumulation of stocks. During 1980-81 State Government have allowed rebate for a total period of 75 days incurring an expenditure of Rs. 131.41 lakhs including central assistance.

6.104 Production of handloom cloth in the co-operative sector during 1980-81 showed a slight increase at 30.5 million metres valued Rs. 15.25 crores, as against 29 million metres valued Rs. 12 crores during the previous year. The estimated production of handloom cloth in the private sector evinced a slight decline from 60 million metres, valued at Rs. 30 crores during 1979-80 to about 59.5 million metres valued at Rs. 29.75 crores during 1980-81. The total production of handloom cloth during 1980-81 in the State is estimated to be about 90 million metres worth Rs. 45 crores.

6.105 Kerala State Handloom Development Corporation was set up in 1968 with the objective of assisting the weavers in the private sector in the matter of supply of raw materials and marketing of finished products. The Corporation was entrusted with the implementation of two Intensive Handloom Development Project of Cannanore and Trivandrum and the Export Production Project at Cannanore. The total outlay for these project was Rs. 410 lakhs of which Rs. 185 lakhs each were for the two Intensive Development Projects and Rs. 40 lakhs for the Export Production Project.

6.106 The Intensive Development Project at Cannanore envisages organisation of 14 Weavers Co-operative Societies with 100 looms each. Nine

societies have already been registered and production commenced in six societies. This project covered 1138 looms of which 733 are modernised looms. The total expenditure incurred for this project upto 31-3-1981 was Rs. 139.60 lakhs. The other project at Trivandrum envisages the organisation of 12 industrial co-operative societies with 2175 looms, seven Societies with 787 looms have already gone into production and one is nearing completion. The project now covering 2315 looms incurred an expenditure of Rs. 115.25 lakhs till 31-3-1981. The Export Production Project, Cannanore started functioning in 1977-78 envisages to cover 1000 looms, of which 500 looms will be in the five new co-operative societies proposed to be set up and the remaining 500 looms in the existing co-operative societies and belonging to individual weavers. Out of the five societies proposed, three societies have already gone into production and the remaining two are nearing completion. An amount of Rs. 31 lakhs has been spent for the project upto 31-3-1981. Kerala Garments Ltd., a subsidiary unit of the Handloom Development Corporation, produced 1.18 lakh pieces of garments valued at Rs. 8.45 lakhs during 1980-81.

6.107 Exact figures of the quantity and value of handloom goods exported from Kerala are not available since the bulk of the exports is made by exporters based in cities like Bombay, Delhi, Madras, Bangalore etc. However, it is estimated that Kerala handloom goods worth Rs.25 crores to Rs. 30 crores are exported annually. But, of late and especially since the latter part of 1980-81 export of Kerala handloom goods has declined considerably, since Kerala's export variety items are at present produced in the neighbouring States also. The direct export of handloom products by the exporters of Kerala, registered with the Handloom Export Promotion Council, Madras, amounted to Rs. 3.82 crores during 1980-81.

D Coir Industry

(i) Department of Coir Development

6.108 Coir industry is the most important traditional industry in the State, providing employment to about 5 lakh persons, mostly women, inhabiting the densely populated coastal areas. Availability of coconut husks and existence of natural retting facilities, trained manpower, export market etc. were some of the favourable conditions which enabled the industry to thrive along the coastal belt of Kerala. But of late, the industry is beset with a number of problems, the most important of them being non-availability of raw-husk in sufficient quantities at reasonable price to sustain the large number of workforce in the industry. The dwindling export market and the consequent stockpiling of finished produces have further aggravated the problem.

6.109 The programme of revitalising the coir industry was initiated in the First Five Year Plan itself. The major scheme under the plan is the organisation of workers in viable co-operatives. During the earlier plans the programme of co-operativisation was mainly concentrated in the spinning sector. Societies for the procurement and supply of husk were also organised during the period. During subsequent plans the co-operative sector was extended to manufacturing and marketing activities. During the first four five year plans, including the intervening three annual plans, an amount of Rs. 742.37 lakhs was spent under various schemes for the restructuring of coir industry. During the Fifth Plan period the State Government had drawn up a comprehensive programme costing about Rs. 86.39 crores for the allround development of coir industry. The scheme was implemented with central assistance during the Fifth Plan period and the total expenditure was Rs. 552 lakhs including central assistance of Rs. 431 lakhs. During the two years 1978-80 the expenditure under coir development was Rs. 205.51 lakhs.

6.110 The provision for coir development scheme for 1980-81 was Rs. 125 lakhs. This outlay has subsequently been enhanced and the actual expenditure was Rs. 326.44 lakhs. The outlay of Rs. 205 lakhs for the year 1981-82 has also been revised and the actual expenditure would be of the order of Rs. 282 lakhs. Efforts are being made to restructure the coir co-operatives to make them viable and to organise more co-operatives to bring at least 60 per cent of the workers under co-operative fold. Upto the end of March 1981, 273 primary coir co-operative societies, one husk procurement and distribution society and 13 manufacturing societies were restructured, besides organising 185 primary societies, 4 manufacturing societies, 2 husk procurement and distribution societies and one fibre manufacturing society. The Coir Marketing Federation formed by amalgamating four Central Coir Marketing Societies with headquarters at Alleppey is actively engaged in promoting marketing efforts. The details of the different types of Coir Co-operative Societies as on 31-3-1981 are given in Table 6.17

TABLE 6.17

Number of Coir Co-operative Societies as on 31-3-1981

Type of Co-operative Societies	No. of Societies as on 31-3-1981				
	Viable	Potentially viable	Total (2)+(3)	Non-viable Societies under Liquidation	Total (4)+(5)
(1)	(2)	(3)	(4)	(5)	(6)
1. Primary Coir Co-operative Societies (in the Spinning Sector)	105	353	458	160	618
2. Manufacturing Societies	8	9	17	4	21
3. Coir Marketing Federation	1	..	1	..	1
4. Husk Procurement and Distribution Societies	..	3	3	8	11
5. Fibre Manufacturing Societies	..	1	1	1	2
6. Other Types of Societies	..	..	..	37	37
Total	114	366	480	210	690

6.111 At present coir co-operative societies in the State undertake direct production by paying reasonable wages to workers. Prevalance of better wages in the co-operative sector has compelled the private producers to increase the wages of labourers in

the private sector. About 93 per cent of the members in the co-operative societies are workers. The activities of the primary manufacturing and marketing societies are given in Table 6.18

TABLE 6.18

Activities of coir co-operative Societies

(a) Primary Coir Co-operative Societies

Year	No. of Societies	No. of Members ('000)	Husk Purchased		Yarn produced		Wages Paid	
			No. (lakhs)	Value (Rs. lakhs)	Quantity (tonnes)	Value (Rs. lakhs)	Workers ('000)	Amount (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1978-79	401	158	1498	116	19,024	355	65	226
1979-80	409	196	1570	148	15,087	651	66	274
1980-81	415	196	906	87	9,660	372	73	231

(b) *Manufacturing Societies*

Year	No. of societies	No. of members	Value of production (Rs. lakhs)	Workers benefited (Nos.)	Wages Paid (Rs. lakhs)	Value of Export (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1978-79	13	1869	149	1367	27	140
1979-80	13	1869	199	1567	31	61

(c) *Central Marketing Societies/Marketing Federation*

Year	No. of societies	No. of members	Value of purchases made (Rs. lakhs)		Sales effected (Rs. lakhs)		Total
			Fibre	Yarn	Inland	Export	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1978-79	4	514	326	352	636	..	636
1979-80	1*	514	..	443	265	11	276
1980-81	1	514	..	546	..	..	422

* The four central societies have been amalgamated to form the Marketing Federation on 27-10-1979.

6.112 The coir co-operative societies are not getting adequate quantities of raw husks at reasonable price to sustain the workforce throughout the year. At the same time only about 50 per cent of the total production of coconut husk is used for industrial purposes. The rest, produced in interior villages, is utilised for fuel and other non-industrial purposes. The Coconut Husk Control Order, 1973 has been invoked to facilitate the availability of husk at reasonable price to the societies. Government have also introduced a system of procurement of husks for the co-operative sector.

6.113 Marketing of coir products is another major problem facing the industry. Government have sanctioned interest free loan of Rs. 85 lakhs and margin money of Rs. 25 lakhs to Kerala State Coir Marketing Federation for distress purchase of coir products. The Marketing Federation has also availed bank loan of Rs. 250 lakhs under Government guarantee for the purpose. The Kerala State Coir Corporation has also entered into the field of distress purchase of coir products availing interest free loan of Rs. 50 lakhs from Government.

6.114 Coir and coir products are mainly export oriented products. Private exporters still dominate in

this sector and many of the ills of the industry are mainly attributed to unhealthy trade practices of exporters. Most of the exporters do not have any manufacturing activity and they obtain their products from about 3600 small scale units engaged in the manufacturing of coir and coir products. Even after implementing the 'Floor Price Scheme' under which exporters are permitted to export coir mats and mattings only if the prices of the items exported conform to the minimum export prices fixed by the concerned authorities, the small scale manufactueres are not getting reasonable prices for the products which they supply to the exporters. The export of coir and coir products during the year 1980-81 was 28,610 tonnes valued at Rs. 25.55 crores as against 47,224 tonnes valued at Rs. 37.21 crores exported during 1979-80. The quantity of coir and coir products exported during 1980-81 was the lowest since 1970-71. During the half year ending September 1982, 14,157 tonnes of coir and coir products valued at Rs. 12.62 crores were exported. This was only marginally higher than 14070 tonnes vaued at Rs. 12.61 crores exported during the corresponding period in the previous year. Item-wise details of quantity and value of coir products exported are given in Table 6.19.

TABLE 6.19
Export of Coir and Coir Products

(Q—Quantity in tonnes)
(V—Value in Rs. lakhs)

Items	1979-80		1980-81		Half year (April-September)			
	Q	V	Q	V	1980-81		1981-82	
					Q	V	Q	V
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Coir Yarn	25,873	1,556	13,486	873	5,747	366	6,968	449
2. Coir Mats	11,715	1,191	7,403	823	3,784	416	4,489	499
3. Coir Matting	7,942	828	7,045	805	4,097	452	2,251	263
4. Coir Rugs and Carpets	1,320	132	274	37	132	16	413	48
5. Other Items	374	14	401	17	310	11	36	3
Total	47,224	3,721	28,609	2,555	14,070	1,261	14,157	1,262

6.115 The problems of export of coir and coir products should be studied in detail and suitable measures evolved to expand the export market. In order to improve the export market, Government have issued directions to manufacturers to improve the quality of export items of coir products. Steps have also been taken to establish large number of selling outlets throughout the country supported by proper sales promotion measures to exploit the expanding internal as well as external markets. By ensuring steady supply of raw husks in adequate quantities at reasonable prices and by taking effective steps to increase the export as well as internal sales the coir industry can be saved to a considerable extent from the present crisis.

(ii) Kerala State Coir Corporation

6.116 Kerala State Coir Corporation, incorporated in 1969, is mainly engaged in the export of coir and coir products. The paid up share capital of the Corporation as on 31-3-1981 was Rs. 107 lakhs, consisting of Rs. 99 lakhs by the Government of Kerala and the balance of Rs. 8 lakhs by Financial Institutions and Nationalised Banks. Total sales of coir and coir products by the Corporation during 1980-81 was of the order of Rs. 147.93 lakhs, of which export consisted of Rs. 106.47 lakhs. There was thus a marginal decrease in the export of coir and coir products by the Corporation during this year, compared to the previous year when the export amounted to Rs. 114 lakhs. The Corporation is making all efforts to explore new markets, both external and internal. Showrooms have been set up at New Delhi, Ahmedabad, Calcutta, Simla, Bangalore and Madras. More sales outlets are proposed to be established in different parts of the country. The total sales turn over of the Corporation during 1981-82 is estimated to be of the order

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of Rs. 160 lakhs and that for 1982-83 Rs. 180 lakhs. The Corporation has 142 regular employees as at the end of 1980-81 including 12 persons newly employed during the year. It has provided casual/contract labour equivalent to 3479 mandays during the year.

6.117 The Corporation has taken over a Model Training Institute at Beypore and it is proposed to establish 'curled fibre' manufacturing unit there in order to provide employment to the trained persons. A modern dye house has been started at Alleppey and it is proposed to establish a four metre 'Matting Project' at Alleppey, for which Government sanction has been obtained. Three manufacturing units at Alleppey, Muhamma and Kanjikuzhy have been proposed to be set up shortly. The Corporation makes available finance and raw materials like dyes and chemicals to small scale producers, under the scheme of distress purchase of coir and coir products, launched by the Government.

E. Cashew Industry

(i) General

6.118 Cashew industry dominated the factory sector in Kerala employing about 45 per cent of the total factory workers. About 90 per cent of the cashew factories are located in Quilon District. Scarcity of raw nuts, indigenous as well as imported, has resulted in unemployment to the labourers for the major part of the year. In the private factories as well as in those run by the state owned Kerala State Cashew Development Corporation the labourers could be provided employment only for about two months during 1980-81. The position was more or less the same during the current year also. Indigenous raw nuts are procured

and distributed by the Kerala State Co-operative Marketing Federation which has been appointed as the monopoly agent of the Government of Kerala for this purpose from 1977 onwards. During 1980-81, as in the previous years, procurement price was fixed by the Government during the cashew season. The procurement price of raw nuts in 1981 cashew season ranged from Rs. 720 to Rs. 750 per quintal upto 3-4-1981 and from Rs. 770 to Rs. 800 per quintal with effect from 4-4-1981. Allotment of raw nuts to the factories is done by the special officer for Cashew Industry, Quilon. The details regarding district-wise procurement and distribution of raw nuts during 1981 cashew season are given in Table 6.20

TABLE 6.20

District-wise Procurement and Distribution of raw nuts by the Kerala State Co-operative Marketing Federation during 1980-81

District	Quantity in Tonnes	
	Raw Nuts Procured during 1981 upto 30-6-1981	Procured Raw nuts Distributed upto 30-6-1981
Trivandrum	4,348	3240
Quilon	6,281	5460
Alleppey	1,421	1190
Kottayam	658	520
Ernakulam and Idukki	3,679	2700
Trichur	5,388	4450
Palghat	1,928	1520
Malappuram	8,935	7390
Kozhikode	5,210	4650
Cannanore	21,958	19040
Total	59,806	50160

6.119 In view of the acute shortage of indigenous production of raw nuts in relation to the number of labourers employed, there has been regular imports of raw nuts by the Cashew Corporation of India. During recent years the quantity imported has considerably decreased as the African Countries from where raw nuts were used to be imported, have started processing of the nuts in those countries itself. In 1980-81, 25,625 tonnes of raw nuts costing Rs. 19.48 crores have been imported from countries like Tanzania, Madagascar, and Kenya. Quantity of raw nuts imported during 1980-81 was only 15 per cent of what was imported a decade back. Quantity and value of raw nuts imported during the last few years are given in Table 6.21.

TABLE 6.21
Import and Raw Cashewnuts

Year	Quantity in tonnes	Index	Value (Rs.lakhs)	Index
1970-71	169,359	100	2940.76	100
1971-72	169,985	100	2790.60	95
1972-73	197,938	117	3180.93	108
1973-74	150,249	89	2979.86	98
1974-75	160,358	95	3660.43	124
1975-76	137,196	81	3355.78	114
1976-77	75,122	44	1832.99	62
1977-78	60,194	36	1871.99	64
1978-79	20,576	12	915.41	31
1979-80	24,326	14	1162.55	40
1980-81	25,625	15	1948.12	66

6.120 Export of cashew products during 1980-81 was considerably low compared to the previous year. In 1980-81 India exported 32,762 tonnes of cashew kernel valued at Rs. 140.85 crores and 9,006 tonnes of cashew shell liquid valued at Rs. 6.84 crores. The comparative figures for the previous year were 37,848 tonnes of kernels valued at Rs. 117.91 crores and 12,928 tonnes of cashewnut shell liquid valued at Rs. 14.46 crores. In terms of quantity the export of kernel as well as cashew shell liquid registered a fall during 1980-81. But owing to the higher unit price of the products, the export value realised was higher. After deducting the cost of the import of raw nuts the net foreign exchange earned from cashew industry during 1980-81 was to the tune of Rs. 128.21 crores. The foreign exchange earnings from cashew industry during the last six years is given in Table 6.22.

TABLE 6.22

Foreign Exchange Earnings of India from Cashew Industry
(Rs. crores)

Year	Export value of		Total (2)+(3)	Import Value of raw Nuts	Net Foreign Exchange Earned
	Cashew Kernels	Cashew-Shell Liquid			
(1)	(2)	(3)	(4)	(5)	(6)
1975-76	96.13	1.49	97.62	33.56	64.06
1976-77	105.99	1.08	107.07	18.33	88.74
1977-78	149.54	1.07	150.61	17.98	132.63
1978-79	80.02	4.90	84.92	9.16	75.76
1979-80	117.91	14.46	123.37	11.62	120.75
1980-81	140.85	6.84	147.69	19.48	128.21

(ii) *The Kerala State Cashew Development Corporation*

6.121 The Kerala State Cashew Development Corporation was organised by the State Government in 1970 for running the cashew factories taken over by Government. The cashew industry is beset with several problems, the most serious among them being the acute scarcity of raw nuts. The labourers cannot, therefore, be provided employment throughout the year. The private cashew processors resort to several unhealthy practices mainly to deny the statutory benefits sanctioned to the labourers by the State Government. The State Government had to take over certain cashew factories and for the management of these factories the Cashew Development Corporation has been formed. The corporation has 34 factories under its management with a total employment of 33,979 of which 32,218 are workers. It started functioning, with a share capital of Rs. 29 lakhs. As on 31-3-1981 the paid up capital of the corporation is Rs. 154 lakhs and the outstanding loan liability of the corporation towards the State Government is Rs. 1,833 lakhs.

6.122 During 1980-81, 17,029 tonnes of raw nuts (13793 tonnes of local nuts and 3,236 tonnes of imported nuts) valued at Rs. 2041.54 lakhs have been processed and 4,107.27 tonnes of Cashew kernels, 1318.75 tonnes of cashewnut shell liquid and 172.91 tonnes of cashtan were produced. Total sales of the Corporation consisted of 4,367 tonnes of cashew kernels, 710 tonnes of shell liquid and 228 tonnes of cashtan.

6.123 During 1980-81, the Corporation could give employment to its labourers only for 61 days. During the year the Corporation's total turnover was of the order of Rs. 27 crores. It continues to maintain its status as export house under Import Control Trade Policy. It is expected that during 1981-82 the Corporation could give employment for 80 days. In the ensuing year it is hoped that the position regarding availability of raw nuts would improve considerably and consequently employment prospects could be brightened.

F Khadi and Village Industries

6.124 Kerala Khadi and Village Industries Board constituted as per Act IX of 1957 is engaged in the organisation and development of Khadi and Village Industries in the State. The Board extends financial assistance to co-operative societies, registered institutions and individuals for implementing the schemes sponsored by the Board. All the same, co-operative societies are the main agencies for the implementation of schemes under khadi and village industries. As on 31-3-1981 the Board has extended financial assistance to 1512 co-operative societies, 434 registered institutions and about 5,000 individuals. Total disbursement

of financial assistance by the Khadi and Village Industries Board during 1980-81 was Rs. 457.99 lakhs, including Rs. 30 lakhs received from the state Government, as against Rs. 364.71 lakhs (including State Government assistance of Rs. 25 lakhs) during 1979-80.

6.125 There was substantial increase in production under khadi and village Industries during 1980-81 over the previous year. The value of production of khadi during 1980-81 was Rs. 100.30 lakhs and that of village industries products Rs. 1,594.51 lakhs, showing an increase of about 25 per cent and 28 per cent respectively over the previous year's production. The total sales turnover of khadi and village Industries products evinced an increase of 24 per cent at Rs. 1,808 lakhs over the previous year's Rs. 1,456 lakhs. The total employment under khadi and village industries during 1980-81 was 1.23 lakhs, including casual labourers and this shows an increase of 21 per cent over the previous year's level of employment of 1.01 lakhs. Total wages paid during the year was Rs. 882.89 lakhs, which was 51 per cent higher than the previous year's wage bill of Rs. 583.31 lakhs. Details of production, sales, employment generated, etc. during 1979-80 and 1980-81 are given in Appendix 6.12.

6.126 In 1979-80 the Board has initiated a special employment programme in all the panchayats in the State, in order to provide employment to at least one lakh persons within three years under khadi and village industries—50,000 under khadi and the remaining 50,000 under eight selected village industries. By the end of 1980-81, employment opportunities have been created for 41,000 persons, of which the number of job opportunities newly created during 1980-81 was 21,100. Worksheds for starting khadi and village industries production centres in the Panchayats are being constructed utilising plan funds provided by the State Government. Out of 225 sheds, the construction of which has been entrusted with various construction agencies, 111 sheds have been constructed as on 31-3-1981 and the remaining are under various stages of construction.

G Bamboo Industry

6.127 Bamboo and reeds industry provides employment to about 3 lakh persons, including indirect employment. Most of the people engaged in collection of bamboo and reeds from the forests and in mat weaving are Harijans and others belonging to the economically and socially weaker sections of the Society. They often depend on the middlemen for raw-materials and for marketing of finished products, with the result, a portion of the fruits of their labour is being appropriated by the middlemen.

6.128 Kerala State Bamboo Corporation was established mainly to better the living conditions of these workers by supplying raw-materials and by making arrangements for the marketing of finished products. About 15,000 weaver families are directly attached to the Corporation. There are also about 3,500 persons engaged in the collection of reeds from forests, transportation loading and unloading etc. under the Corporation. During 1980-81 the Corporation has produced 80 lakh sq. m. of bamboo mats valued Rs. 69.39 lakhs. The Food Corporation of India, Central and State Warehousing Corporations, Sugar mills and private merchants are the purchasers of bamboo mats from the Corporation. During 1980-81 the Corporation has effected sales of bamboo mats for Rs. 141.68 lakhs, of which Rs. 41.07 was the cost of mats sold within the State and the rest outside the State. The production of the Corporation during 1981-82 is expected to be 90 lakh sq. m. and the targeted production during 1982-83 is 100 lakhs sq.m.

6.129 The Corporation has taken up an expansion programme costing Rs. 105.74 lakhs for the conversion of bamboo mats into resin bonded bamboo boards. The bamboo board will be a competitive substitute for plywood as panelling/partition material. The scheme has been approved by Government and would be taken up for implementation during 1982-83.

II Beedi Industry

6.130 The Dinesh Beedi Central Co-operative Society, Cannanore with twenty primary beedi societies under it, was organised by the State Government in 1968, with a view to provide employment to 12,000 and odd beedi workers thrown out of employment, consequent on the closing down of private beedi companies. This Central Society and the primary societies, together provide employment to about 25,000 workers at present. The labourers in the co-operative sector are provided with the maximum wage rates in the industry and all sorts of social security benefits such as national and festival holidays with wages, bonus, death relief fund, sunday wages, annual leave wages, maternity benefit, provident fund, gratuity, etc. The Central Society extends assistance to the primary societies under it by way of supplying raw materials, providing working capital and marketing finished products.

6.131 The Central Society has a paid up capital of Rs. 34.75 lakhs, including Rs. 19.10 lakhs by State Government, as on 30-6-1981. Total value of production during 1980-81 was to the tune of Rs. 12.13 crores and sales Rs. 12.55 crores. The turnover during 1981-82 is expected to be of the order of Rs. 14.5 crores and an increase of 15 per cent in turnover is anticipated during 1982-83. The society earned a net profit of

Rs. 0.93 lakh before taxation and Rs. 0.65 lakh after taxation, during the year 1980-81.

6.132 Unprecedented hike in the price of raw materials, viz. beedi leaves, shortage of wagons for transporting beedi leaves from other states like Madhya Pradesh, etc., introduction of spurious beedies in the same brand name of 'dinesh beedi' etc. are some of the major problems faced by the society. At present there are about 300 work centres in Cannanore district, in a dispersed manner. Buildings have to be constructed for these work centres and this would involve an expenditure of Rs. 300 lakhs. Since Government of India have introduced central excise on branded beedies, the society is paying about Rs. 260 lakhs per year. The clandestine trade in spurious beedies in the same brand name has increased manifold since the levying of central excise and this has affected the working of the central society and its subsidiaries quite adversely.

Mining

(i) Department of Mining and Geology

6.133 The responsibility of mineral development and exploration of mineral deposits is vested with the State Department of Mining and Geology. The Department is divided into two divisions viz. Mineral Development and Mining Leases Division and Exploratory and Prospecting Division, the former attending to the administration and implementation of Mines and Minerals Regulation and Development Act 1967 and the latter carrying out investigations for mineral deposits.

6.134 Two district offices of the Department have been established during 1980-81 one at Quilon and another Palghat, in addition to the existing four Regional offices at Alleppey, Ernakulam, Kozhikode and Cannanore, for the effective implementation of the Act and rules. The Mineral Development and Mining Leases Division, during the year, has conducted 122 site inspections for issuing N.O.C. and inspections in 144 mines of major minerals and in 337 quarries for minor minerals. 54 certificates of approval, 2 mining leases, 5 quarrying leases, 25 quarrying permits and 101 dealer's licences were issued during the year. The revenue realised by the Department from different minerals during the year amounted to Rs. 24.70 lakhs.

6.135 Exploratory and Prospecting Division of the Department carried out investigations mainly for minerals such as refractory and kaolinite clays, glass sand, limshell and mica in the following places in the State:

- (i) Kalluvathukkal area, Quilon district for refractory and Kaolinitic clays.
- (ii) Pudukai area, Cannanore district for ceramic clays.

- (iii) Attingal area, Trivandrum district for industrial Minerals.
- (iv) Pallippuram area, Alleppey district for glass sand.
- (v) Kozhikode district for building and dimension stones.
- (vi) Chalakudy area, Trichur district for economic minerals like mica etc.
- (vii) Vattiyoorkavu, Trivandrum district for mica pegmatite
- (viii) Kadalundi, Ariyallur, Vallikunnu areas in Kozhikode district for limes shell.
- (ix) Melur, Parapuram areas in Cannanore district for limeshell.

(x) Veli, Attipra areas in Trivandrum district for graphite.

(xi) Salayur, Palghat district for magnesite.

Arrangements have been made for conducting detailed feasibility study on bauxite in Nileswar area by HINDALCO. The Department of Mining and Geology, during the year, conducted geological investigation along the foot hills of Western Ghats in Trivandrum district to delineate the land-slide-prone area. The investigation revealed that areas like Bonacaud—Katamalai, Ponnudi,—Kallar, Kallikad—Kalanmalai are susceptible to landslides, requiring detailed investigation.

6.136 Details of production and sale of major minerals and mineral sands during the year 1979-80 and 1980-81 are given in Table 6.23 and 6.24 respectively

TABLE 6.23

Production and Sales of Major Minerals

('000 tonnes)

Item (1)	1979-80				1980-81			
	Production		Sales		Production		Sales	
	Raw	Processed	Raw	Processed	Raw	Processed	Raw	Processed
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<i>i. Major Minerals</i>								
1. Glass and White Quartz Sand	68.38	19.26	62.33	17.50	69.48	14.64	69.17	14.85
2. China Clay	113.13	39.44	42.20	25.67	121.76	55.10	51.47	35.02
3. Fire Clay	..	6.70	..	4.25	..	0.88	..	0.77
4. Ball Clay	..	0.89	..	0.29	..	0.17	..	0.17
5. Limeshell	100.39	..	11.28	..	112.10	..	119.32	..

TABLE 6.24

Production and Sales of Mineral Sand ('000 tonnes)

Item (1)	1979-80		1980-81	
	Production	Sales	Production	Sales
	(2)	(3)	(4)	(5)
1. Ilminite	106.90	151.97	126.26	126.50
2. Rutile	4.97	5.80	5.57	5.42
3. Monozite	0.122	0.25	..	..
4. Zircon	1.45	1.51	1.49	1.07
5. Sillimanite	..	1.08	0.81	0.70

(ii) Kerala Mineral Exploration and Development (UNDP) Project

6.137 In 1977 a project for the development of known and partially developed minerals was established in the State with the assistance of UNDP. The project envisaged integrated survey comprising reconnaissance geological exploration with a detailed follow up of selected exploration targets utilising geophysical and geochemical methods and drilling. This technical co-operation was aimed at strengthening the technical capability of the State Department of Mining and Geology.

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6.138 As part of the programme sampling of the project areas has been completed and samples analysed. Reconnaissance surveys have been conducted to examine new and already known occurrence of graphite in Quilon and Kottayam Districts. Though the Project, as originally conceived, was to terminate on 31-12-1980, the term of the project was subsequently extended upto 31-7-1981. The second phase of the U.N. assistance for the project for a period of 18 months is proposed to be commenced from the beginning of 1982.

TRANSPORT AND COMMUNICATIONS

An Overview

Kerala is comparatively better placed than most other States in the matter of transport and communication infrastructure. The total length of roads in Kerala is 94145 Km which works out to 37 Km per 10,000 population. Of the total length of roads in the State 17165 kilometres of roads are maintained by the State Public Works Department. The length of national highways is only 839 km. The motor vehicles registration in the State is showing a steady increase in the past few years. Kerala has 500 vehicles per 100 sq. km of area and 766 vehicles per lakh of population in 1980-81. The passenger transport in the State is mainly in the hands of private operators. The Kerala State Road Transport Corporation which possesses only a third of the total number of passenger vehicles in the State has to considerably expand its activities in order to meet the increasing demand of passenger traffic.

7.2 Rail transport system in Kerala has assumed significance in recent times. At present Kerala has a total railway network of only 916.35 km which works out to only 1.5 per cent of the route kilometrage of Indian railways. The Ernakulam-Alleppey broad-gauge railway line is now under construction. The most important bridge on this link is the one across the Vembanad Kayal connecting Kumbalam island with Aroor. This bridge is approximately one Km in length, the longest broad-gauge bridge in the Southern Railway. If land acquisition work in the Alleppey-Aroor Section is speeded up the project can be completed in all respects by the middle of 1983. The 57 km long Ernakulam Alleppey line is estimated to cost more than Rs. 16 crores. This line is designed for very high speed when compared to the Ernakulam-Quilon section which has a maximum speed of only 90 km per hour. A Rs. 11 crore project to connect Alleppey with Kayamkulam has been prepared. The survey report has been sent to the Railway Board and is awaiting clearance. Important works in progress include the doubling of Shoranur-Ernakulam line. Doubling of the Cochin-Palghat line is expected to be completed by 1982-83. A major repair-cum-maintenance plus housing shed is being constructed at the Ernakulam Junction at a cost of Rs. 87 lakhs.

7.3 Air transport is also gaining importance in Kerala. Air transport services in the State are operated from the two airports of Trivandrum and Cochin. The Public Investment Board has recommended construction of an Aerodrome near Calicut for the convenience

of passengers in the Malabar region. Domestic air services to Bombay, Madras, Bangalore, Madurai and Coimbatore are operated by the Indian air lines from these two airports. International services to Colombo and Male are also operated by them from Trivandrum. Air India now operates direct flights between Trivandrum and the Gulf daily. These services are well patronised in spite of the inadequate infrastructural facilities at the Trivandrum Airport.

7.4 The major port of Cochin continues to play a vital role in both foreign as well as coastal trade. The total volume of traffic handled during the year was 52.33 lakh tonnes which is 4.2 per cent less than the traffic (54.64 lakh tonnes) handled in the previous year. During 1980-81 the general operating conditions at the port were satisfactory. Both the average turn round time and detention to ships decreased indicating an improvement of operational efficiency during the year. The number of container ships and RO-RO ships which called at the port was appreciably higher. Regarding intermediate and minor ports it may be mentioned that only the ports of Neendakara, Calicut and Azhikkal handled cargo of any significance during 1980-81, Neendakara alone accounting for 54 per cent of the total. Neendakara port accounted for 50 per cent of the steamers that called at these ports. The working group constituted by the Government of India to examine and suggest promotional measures required for the development of export import traffic through minor/intermediate ports of Kerala have recommended urgent steps to work out specific programmes for the development of a few selected ports like Neendakara, Bepore and Azhikkal especially in the interest of developing coastal shipping.

7.5 Inland Navigation has an important role in the transport system of Kerala. There is considerable scope for navigation in the 41 West flowing rivers of the State as well as in the West Coast Canal having a length of 555 km. Augmentation of ferry services by providing modern boats is necessary for running water transport services efficiently. More than 218 lakh passengers made use of water transport services during 1980-81.

7.6 Kerala has made rapid strides in the sphere of communication. As on 1-4-1981 each post office in the Kerala circle was serving an area of 8.47 sq.km. and a population of 5544 on an average as against the national average of 28.9 sq.km. and 4000 population. The number of telephone exchanges in Kerala increased

from 442 in April 1980 to 465 in April 1981 with a total equipped capacity of 110700 lines. An important event in the development of telecommunications in the State was the laying of the foundation stone of 5000 lines telephone exchange at Kaithamukku, Trivandrum on November 1981. This new telephone exchange building will have an ultimate capacity to accommodate 20000 lines telephone exchange equipment.

Roads

7.7 Kerala State is served by a fairly extensive road network. However, the topography of land, the high density of population and inadequacy of railway lines in the State indicates the necessity for a qualitatively much better network of roads. Many of the roads in the State suffer from small width, acute bends, steep gradients, weak and narrow bridges and unbridged causeways and these roads require considerable improvement to bring them to proper standards.

7.8 The total length of roads in Kerala stands at about 94,145 Kms. which works out to about 371 Kms per lakh of population and 242 Kms. per 100 Sq.Km. of area as on March 1981. The State Public Works Department is the major organisation responsible for the development of State Sector roads. Other agencies maintaining roads in the State are Panchayats, Municipalities, Corporations, Forest Department etc. The length of roads maintained by each Department is furnished in Table 7.1.

TABLE 7.1
Roads in Kerala under Different Departments as on 1-4-1981

Category of Roads under (1)	Length of Roads Km.
1. National Highways	839
2. Public Works Department	17165
3. Panchayats	65288
4. Corporations	1236
5. Forest Department	1529
6. Municipalities	3822
7. Others*	1266
Total	94,145

* Provisional; includes roads under Irrigation, projects, Railways, Military, K.S.E.B. etc.

7.9 Out of the total length of roads in the State, 17,165 Km. of roads are maintained by the State Public Works Department (Buildings and Roads). The Public Works Department roads are classified as State Highways, Major District Roads, Other District Roads and Village Roads. The total length of roads maintained by Public Works Department increased from 16569 Kms. in 1980 to 17,165 Kms. in 1981. The category-wise length of these roads by type of surface is provided in Table 7.2.

TABLE 7.2
Distribution of Public Works Department Roads by type of surface as on 1-4-1981 (Kms.)

Category (1)	Cement concrete (2)	Black Topped (3)	Water Bound Macadam (4)	Others (5)	Total (6)
1. State Highways	28	2027	..	..	2055
2. Major District Roads	9	5356	227	58	5650
3. Other District Roads	..	4963	1070	1100	7133
4. Village Roads	..	569	567	1191	2327
Total	37	12915	1864	2349	17165

7.10 The District-wise break-up of Public Works Department roads as on 1-4-1981 is indicated in Table 7.3. The category wise length of roads in each district under Public Works Department is furnished in Appendix 7.1. As the condition of many of the roads in the State is very poor, the main emphasis under road development has been on improvement of existing roads rather than on construction of new roads.

TABLE 7.3
District-wise Distribution of Public Works Department Roads

District (1)	Length in Kms. (2)
1. Trivandrum	1488
2. Quilon	2463
3. Alleppey	1257

(1)	(2)
4. Kottayam	1765
5. Idukki	1312
6. Ernakulam	1787
7. Trichur	1419
8. Palghat	1295
9. Malappuram	1153
10. Calicut	972
11. Wynad	517
12. Cannanore	1737
Total	17165

7.11 Rural roads in the State are maintained mainly by the Panchayats. Out of about 75,000 kms of rural roads in the State, 65000 kms are maintained by Panchayats as on March 1981. The condition of these roads is very poor since most of them are earthen Kutchu roads. The Panchayat roads are maintained with the financial grant provided by Government from time to time. During 1980-81, an amount of Rs. 248.56 lakhs was given to Panchayats towards Village Road Maintenance grant. Adequate investment is necessary to develop these rural roads to P.W.D. standards.

Road Transport

7.12 Road transport plays a crucial role in the transport system of Kerala. In spite of the recent developments in rail transport, road transport continues to be the major mode in the State. Passenger transport in the State is carried out by private operators and to a lesser extent by the public sector State Road Transport Corporation. Goods transport industry is mostly confined to the private sector.

Motor Vehicle Registration

7.13 The registration of motor vehicles in Kerala indicates a steady increase over the years. The number of motor vehicles registered in the State rose from 1.75 lakhs in 1979-80 to 1.95 lakhs in 1980-81, an increase of 11.4 percent. The growth of motor vehicles in Kerala for the last five years is shown in Appendix 7.2. The density of motor vehicles in Kerala is high compared to most of the States in India. Kerala had 500 vehicles per hundred sq.km. of area and 766 vehicles per lakh of population (1980-81). The corresponding figures for all India during 1977-78 were 99 and 508 respectively. Among the districts of Kerala, Trivandrum has the largest number of motor vehicles (35187). Ernakulam district with 34128 vehicles comes next. All other districts except Malappuram, and Idukki have more than 10,000 vehicles. The number of motor vehicles registered by the Kerala State Road Transport Corporation as on 31-3-1981 is 3486.

7.14 Out of 1,94,597 motor vehicles registered in the State as on 31-3-1981, 59531 were scooters/motor cycles, 56,802 cars, 22,896 goods vehicles (4 wheelers and above) and 18,960 taxi cabs. Trivandrum district

leads the other districts in the registration of cars and two wheelers. Number of goods vehicles is highest in Ernakulam district. Distribution of motor vehicles having valid registration in each of the districts as on 31-3-1981 is furnished in Appendix 7.3.

7.15 The number of motor vehicles newly registered in the State has decreased from 17,623 in 1979-80 to 16,256 in 1980-81. This decrease was highest for cars and taxi cabs especially in Trivandrum and Quilon districts of Kerala. The new registration of cars in the State decreased from 3309 in 1979-80 to 1957 in 1980-81 and that of taxi cabs from 885 to 108. Out of 16,256 vehicles newly registered in the State during 1980-81, 8250 are scooters/motor cycles. In the case of new registration of vehicles, Ernakulam leads the other districts with 3548 vehicles followed by Trivandrum (2580 vehicles). Details of vehicles newly registered in the State are furnished in Appendix 7.4.

7.16 The total revenue from motor vehicles taxes and fees collected under the Motor Vehicle Taxes and Taxation of Passengers and Goods Act increased from Rs. 19.25 crores in 1979-80 to 20.06 crores in 1980-81. This works out to 3.4 percent of the total estimated revenue receipts of the State for 1980-81. The total receipts under non motor vehicles taxes have decreased from Rs. 7.63 lakhs in 1979-80 to Rs. 7.49 lakhs in 1980-81.

Passenger Transport

7.17 Passenger transport by road in Kerala is mainly carried out by private operators, particularly in the northern districts of Kerala. Kerala State Road Transport Corporation, owned jointly by the State Government and the Southern Railway, accounts for about a third of the total passenger fleet in the State.

7.18 The total number of stage carriages registered in the State increased from 8705 in 1979-80 to 9159 in 1980-81 which works out to 36 per lakh of population. The number of buses owned by the Kerala State Road Transport Corporation increased from 2935 at the end of March 1980 to 3112 at the end of March 1981. The number of schedules increased from 2500 to 2568 during this period. The gross kms operated by the Corporation increased from 2262 lakhs in 1979-80 to 2267 lakhs in 1980-81 (See Appendix 7.5). It may be noted that the dead kms operated have decreased from 19.22 lakhs to 18.83 lakhs during this period. About 7070 lakh passengers were carried by the Corporation buses during 1980-81.

7.19 The fare structure of the Corporation was revised with effect from 16.12.1981. The basic fare per km and the minimum fare for each type of service run by the Corporation as on 1-4-1981 and 16-12-1981 are furnished in Table 7.4

TABLE 7.4
Fare Structure of Kerala State Road Transport Corporation

Type of Service	Basic Fare/km as on (ps)		Minimum Fare as on (ps)	
	1-4-1981	16-12-1981	1-4-1981	16-12-1981
City	6	7	30	40
Ordinary	6	7	40	50
Fast Passenger	7	8	100	100
Express	8	9	200	300
Deluxe Express*	9	..	300	..

*Discontinued from 16-12-1981.

7.20 The total staff employed as at the end of March 1981 in the Corporation was 23,463 consisting of 4663 in the Administrative branch, 16843 in the traffic branch and 6957 in the Maintenance Branch. During 1980-81, 274 buses were commissioned for service as against 253 in the previous year. 260 chassis were received during 1980-81.

7.21 The Capital contribution to the Corporation by the State Government was Rs. 22.88 crores and by Railways Rs. 9.20 crores as on 31-3-1981.

7.22 The magnitude of expansion of the Kerala State Road Transport Corporation during the past 16 years (1965-66 to 1980-81) is depicted in Table 7.5.

TABLE 7.5
Operation of the Kerala State Road Transport Corporation 1965-66 to 1980-81

Item	1965-66	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. No. of Buses Owned (As on 31st March)	921	2244	2480	2622	2822	2935	3112
Index	100	244	269	285	306	319	338
2. No. of Schedules Operated (As on 31st March)	697	1846	2078	2315	2446	2500	2568
Index	100	265	298	332	351	359	368
3. No. of Routes under Operation (As on 31st March)	600	2538	3024	3340	3465	3580	3718
Index	100	423	504	567	578	597	620
4. Total Route Distance (kms) (As on 31st March)	19878	10669	197734	145434	153741	158690	159772
Index	100	543	693	732	773	798	800
5. Gross Kilometres Operated (lakhs)	641.82	1798.93	2039.99	2081.27	2154.19	2261.68	2266.72
Index	100	280	318	324	336	352	353
6. Passengers Carried (lakhs)	1585.30	5183.37	5111.43	5556.45	6328.49	7064.04	7069.52
Index	100	327	322	350	399	446	446
7. Average Distance Travelled by a Passenger	12.5	14.2	14.9	14.7	14.4	14.6	14.6
8. Gross Revenue Earnings (Rs. lakhs)	631.21	3091.21	4042.02	4327.86	4762.71	5264.63	N.A.
9. Passenger Earnings (Rs. lakhs)	586.78	3044.51	4012.61	4310.02	4675.26	5200.42	N.A.
10. Average Earnings per Passenger (Paise)	37.00	57.4	76.0	75.7	70.4	75.3	N.A.
11. Earnings per Kilometre of Buses Operated (Paise)	93.80	173.00	198.00	209.9	220.0	234.8	N.A.
12. Earnings per vehicles on Road per day (Rs.)	229.0	491.0	558.0	569.01	591.0	620.0	N.A.
13. Gross Revenue Expenditure (Rs. lakhs)	590.66	3502.23	4176.39	4573.14	5134.37	6137.62	N.A.

Goods Transport

7.23 Goods transport in the State is mostly carried out through mechanised road transport. The registration of goods vehicles in the State indicates the 4/855/MC.

growing volume of goods traffic by road. The number of goods vehicles (4 wheelers and above) registered in the State has increased from 20,128 in 1979-80 to 22,896 in 1980-81 (see Table 7.6)

TABLE 7.6
Number of Registered Goods Vehicles

Year as on 31st March	No. of vehicles	Index
(1)	(2)	(3)
1968	10957	100
1974	13921	134
1975	15875	153
1976	15882	153
1977	17165	166
1978	17755	171
1979	17907	173
1980	20128	194
1981	22896	221

7.24 A scheme for the grant of National Permits aimed at facilitating free flow of goods traffic throughout the country was introduced in 1975-76. A total of 424 permits were issued under this scheme as on March 1981. This was in addition to the existing inter State and Zonal permit system.

Railways

7.25 The railway network in Kerala consists of 803.64 km of broadgauge lines and 112.71 km of metre-gauge lines. This works out to one of the lowest route length per capita among States. The Statewise route length of Indian Railways is furnished in Appendix 7.7.

7.26 The Ernakulam-Alleppey broadgauge railway line is under construction. The original proposal to take the line from Ernakulam through Wellington Island had to be changed due to the postponement of the reclamation programme of the Cochin Port Trust, the extension of the Airport runway at the Wellington island, and the expansion of naval facilities at Cochin. The line from Ernakulam junction to Ezhupunna was therefore re-surveyed and a new alignment was drawn through Konthuruthy, Nettur, Kumbalam and Aroor, connecting Ezhupunna at the point originally proposed. The new alignment was finally approved by the State Government in early 1980 and the actual construction works started in October 1980.

7.27 One of the main features of this railway line is the extremely difficult terrain in the initial 10 km distance from Ernakulam to Aroor. In view of the navigational facilities to be provided for many of the waterways in this area, construction of high banks and long bridges was found necessary. Similarly, very deep foundation of either wells or piles were to be provided for major bridges. The most

important bridge on this alignment is the one across the Vembanad Kayal connecting Kumbalam island with Aroor. This bridge is approximately 1 km in length, the longest broadgauge bridge in the Southern Railway. The bridge will have well foundations on 19 locations and deep pile foundations on 10 locations. The work on this bridge is in full swing. In the construction of this bridge welded girders and tensile steel have been used. A footpath is also being provided along the bridge for the pedestrians. The laying of the well foundations is nearing completion. It is for the first time that wells with a depth of 110 ft. and a diameter of 20 ft. have been adopted as foundations for bridges in the Southern Railway. For deeper locations, large diabored piles extending upto a depth of 45 m are being adopted. Here also, it is for the first time in the Southern Railway that such pile foundations are being adopted in such clay type soil conditions. The delay in land acquisition impedes the progress of work in the Aroor-Alleppey section. Efforts are being taken by the Revenue authorities to speed up land acquisition work. If this work is speeded up the project can be completed in all respects by the middle of 1983. The 57 km long Ernakulam-Alleppey line is estimated to cost Rs. 16.46 crores though the original estimated outlay was only Rs. 7 crores. This line is designed for very high speed when compared to the present Ernakulam-Quilon section which has a maximum speed of only 90 km per hour.

7.28 A Rs.11 crores project to connect Alleppey with Kayamkulam, a length of 45 km, on the Trivandrum Ernakulam sector has been prepared. The survey report has been sent to the Railway Board and is awaiting clearance. A project for the 56 km Guruvayur-Kuttipuram railway line has also been prepared. The project is estimated to cost Rs. 16 crores.

7.29 There is a proposal to electrify the Madras-Trivandrum railway line. The idea is to implement electrification scheme in stages within a period of six or seven years. The electrification scheme was prepared in view of the worsening fuel problem and the difficulties in bringing coal to the southern parts of the country. The electrification of the Arkonam-Jolarpet line has already been completed. It is proposed to take up the Jolarpet-Coimbatore line for electrification soon.

7.30 Important railway works in progress in Kerala include the doubling of the Shoranur-Ernakulam line. This work would be completed by July 1982, except for three patches totalling a length of 25 kms. Doubling of Cochin-Palghat line would be completed by 1982-83. Two new rail bridges, across the Bharathapuzha river near Shoranur and the Periyar at Alwaye, would be constructed at a cost of Rs. 1 crore each as part of the doubling scheme. The railway line between Madras and Palghat is already doubled. The only

remaining section is between Palghat and Ernakulam. The work on the Alwaye-Ankamali, Chalakudi-Irinjalakkuda and Trichur-Mulamkunnathukavu has just commenced. The approximate cost of the entire doubling programme is Rs. 16 crores.

7.31 With the conversion of Ernakulam-Quilon-Trivandrum section from metre gauge to broad gauge the number of wagons dealt with at Ernakulam marshalling yard has considerably increased. A wagon repair shed has therefore been proposed in Ernakulam for attending to heavy and light repairs. With the completion of this shed, the present practice of sending sick wagons to Jolarpettai or Tondiarpet for repairs could be stopped. The approximate cost of this project works out to Rs. 25 lakhs. The major portion of the work has already been completed.

7.32 Diesel shunters are being introduced in the Ernakulam complex replacing the conventional steam locomotives. A major repair-cum-maintenance plus homing shed is being constructed at the Ernakulam junction at a cost of Rs. 87 lakhs. This work is expected to be completed by the end of 1981-82. With this the steam traction in Kerala will be dispensed with.

7.33 Among other works, mention may be made of the remodelling of railway station buildings of Chengannur and Kottayam in the Quilon-Kottayam section. Facilities provided at the remodelled building at Kottayam, costing Rs. 12 lakhs, include separate current and advance booking offices, an information centre, large waiting halls and additional retiring rooms. In view of the diversion of some of the Trivandrum bound Mail/Express trains via Ernakulam Town and the inadequacy of facilities there, a new station building is proposed to be constructed at this station. The approximate cost of the building is estimated at Rs. 15 lakhs. This work has been awarded for execution and the building is expected to be ready by December 1982.

Air Transport

7.34 Air Transport services in the State are operated from the two airports of Trivandrum and Cochin. The State Government has been urging the Government of India to open an airport at Calicut for the convenience of passengers in the Malabar region. The Public Investment Board has recommended construction of an Aerodrome near Calicut.

7.35 Domestic Air Services to Bombay, Madras, Bangalore, Madurai and Coimbatore are operated by the Indian Airlines from these two airports. International services to Colombo and Male are also operated by them from Trivandrum. During 1980-81 a total of about 3.8 lakh passengers were carried on these flights from the two airports compared to about 3.6 lakhs during 1979-80. Trivandrum airport accounts

for little over one half of this. While the traffic at Trivandrum has decreased from 2.4 lakhs in 1979-80 to 2.1 lakhs in 1980-81, this decline is more than compensated by the increase in traffic at Cochin during this period from 1.2 lakhs to 1.8 lakhs. Similar trend is noticed in freight traffic also. The shift in traffic is largely due to the introduction of new services from Cochin. Direct flights to the Gulf by Air India have also contributed to the decline in traffic in the domestic sector between Trivandrum and Bombay. In general, air traffic from Kerala indicates a trend towards stabilization after an initial boom observed during the previous years. Data on passenger and freight traffic from Trivandrum and Cochin is given in Appendix 7.8.

7.36 Air India now operates direct flights between Trivandrum and the Gulf daily, operating Trivandrum-Dubai and Trivandrum-Abu Dhabi thrice a week, Trivandrum-Sharjah twice a week and Trivandrum-Kuwait once a week. The present capacity is 144 seats per flight and 4 tonnes cargo capacity with full passengers. These services are well patronised in spite of the inadequate infrastructure facilities at Trivandrum. Lot more has to be done to bring this airport to international standards. Steps are under way to construct Air India's own building at Vellayambalam at an estimated cost of Rs. 40 lakhs for which 85 cents of land has already been acquired.

Inland Navigation

7.37 Inland navigation has an important role in the transport system of Kerala. The inland waterways of the State have considerable potential for both passenger and goods transport. The State has a length of about 1900 kms. of navigable waterways. The main canal, the West Coast Canal, has a length of 555 kms. It is formed by linking a series of lakes and backwaters by canals. There is also considerable scope for navigation by the 41 west flowing rivers of the State. But these canals and rivers need constant dredging for regular use by water transport. Four agencies namely the Public Works Department, the State Water Transport Department, Kerala Inland Navigation Corporation and the Kerala State Road Transport Corporation are responsible for the execution of Plan schemes under water transport.

7.38 During 1980-81, the State Water Transport Department operated boat services, in 68 routes covering a gross route distance of 7,400 km, more or less at the same level as in the previous year. The number of passengers carried on these services however increased marginally from about 98.7 lakhs in 1979-80 to about 99.9 lakhs in 1980-81. Out of the 76 boats owned by the Department, 48 boats were in operation during the year showing an improvement both in the number of boats owned and the actual number in operation. The Department continues to possess a

large number of overaged boats as about 40 per cent of the boats owned are over 20 years old.

7.39 Total revenue of the Department was about Rs. 83 lakhs against a total expenditure of Rs. 112 lakhs during 1980-81. The earnings per passenger increased from 75 paise in 1979-80 to 82 paise in 1980-81., the increase in expenditure per passenger during the same period was however more, i.e., from 91 paise to 112 paise. The gap between the earnings and expenditure thus increased further indicating deteriorating financial results. The salient features of the State Water Transport operation are indicated below:

	1979-80	1980-81
Boats owned	68	76
Boats over 20 years	30	30
Boats in operation	42	48
Passengers carried (lakhs)	98.7	99.9
Revenue receipts (Rs. lakhs)	74.5	82.8
Expenditure (Rs. lakhs)	89.6	111.7
Loss (Rs. lakhs)	15.1	28.9
Number of persons employed	956	985

7.40 Under the Plan schemes, 'Augmentation of Ferry Services', provision for the construction of eleven boats was provided during 1980-81. One boat was launched during the year and seven boats were constructed and launched during 1981-82.

7.41 The Kerala State Road Transport Corporation possesses 11 boats for operating their ferry services in the Cochin Harbour area. The seating capacity of these ferry boats is 1691. About 107 lakhs passengers made use of the service in 1980-81. The Corporation operated ferry services in 6 routes during the period and the average earnings per passenger came to 29 paise. The revenue receipts from the operation of the ferry services during the period 1980-81 amounted to Rs. 30.5 lakhs.

Kerala Inland Navigation Corporation

7.42 Kerala Inland Navigation Corporation Ltd., was set up in December 1975. With the introduction of passenger service boats in August 1977, the Corporation entered the commercial field. At present the Corporation operates both passenger and cargo transport services. During 1980-81 two more passenger boats were added to the fleet raising the fleet strength to five. The Corporation has placed orders for three more boats which are expected to be delivered by the end of 1981-82. The Corporation operates ferry services between the mainland and various islands located in the backwaters of Cochin. The routes of operation of the Corporation include (i) Ernakulam-Murukkumpadam, (2) Ernakulam-Panambukada (3)

Ernakulam-Ponnarimangalam and (4) Ernakulam (Thevara)—Mundempally. A total of 11.98 lakhs passengers were carried on these routes during the year 1980-81. Passenger services of the Corporation could be consolidated further if the proposed take over of the ferry services, now run by K. S. R. T. C. in Cochin area comes through. The Corporation has plans to modernise the workshop and dockyard to undertake building and repairing of all types of medium sized crafts. During the year the Corporation entered into a three year contract with the F. A. C. T. (Cochin Division) to carry industrial raw materials from Cochin Port to Ambalamedu. For this purpose, the Corporation purchased a 200 tonnes second hand self propelled barge from Goa at a cost of Rs. 6.02 lakhs which was commissioned on 26th February 1981. The contract envisages transportation of 1200 tonnes of materials per day in the first year and 2000 tonnes in the subsequent years. In order to increase the capacity, the two dumb barges available with the Corporation were converted into self-propelled barges. These two barges were commissioned during 1981-82. For augmenting the capacity, the Corporation has also placed orders for the purchase of a 300 tonne second hand barge and the construction of a new barge of 300 tonne capacity during this period.

7.43 Regular cargo transportation was started only from the beginning of this financial year. Cargo transported include rock phosphate, breeze coke and coal and sulphur. Rock phosphate transported for FACT during the period from 26-2-1981 to 31-3-1981 was 6103 tonnes. Breeze coke and coal (224 tonnes) was transported for Pallathara Bricks and Tiles Ltd. and sulphur (1512 tonnes) for F.A.C.T.

7.44 The paid up capital of the Corporation at the end of 1980-81 was Rs. 32 lakhs inclusive of the Government contribution of Rs. 10 lakhs towards share capital during 1980-81. The total revenue of the Corporation during 1980-81 was Rs. 8.31 lakhs compared to Rs. 4 lakhs during 1979-80, while total working expenses amounted to Rs. 7.93 lakhs, thus earning an operational margin of Rs. 0.38 lakh. The capital expenditure of the Corporation during 1980-81 was Rs. 10.92 lakhs. The Corporation is now concentrating on infrastructure development the benefits from which should start flowing after a few years. The operational revenue for 1981-82 itself is however expected to be at least three times the revenue for the last year and the Corporation is expecting to make a net profit of Rs. 2 lakhs during the year 1981-82.

Ports and Harbours

7.45 Kerala has a major port at Cochin, three intermediate ports at Calicut, Alleppey and Neendakara and eleven minor ports at Vizhinjam, Trivandrum,

Quilon, Azhikode, Ponnani, Beypore, Badagara, Telli-cherry, Cannanore, Azhikkal and Kasaragod. All the intermediate and minor ports in the State are lighterage ports. Many of these ports have fallen into disuse mainly due to inadequate infrastructure facilities to handle modern vessels efficiently and economically. It may be mentioned that diversion of cargo traffic through rail and road for want of coastal steamers has also contributed to the fall in traffic. The decline in traffic through the intermediate and minor ports of the country has been substantial. The share of these ports in the total traffic handled by all ports in the country declined from 10.7 per cent in 1970-71 to about 7.7 per cent in 1978-79. However, minor ports have an important role to play in the development of the regions which they are best suited to serve. These ports have sizeable potential for development for deep water fishing and for the export of some categories of general and bulk cargo. Hence it has now been recognised that measures should be taken to diversify and develop export/import traffic through minor ports to meet the requirements of the growing maritime trade of the country. The working group constituted by the Government of India, to examine and suggest promotional measures required for the development of export/import traffic through minor/intermediate ports of Kerala have recommended urgent steps to work out specific programmes for the development of a few selected minor ports like Neendakara, Beypore and Azhikkal especially in the context of developing coastal shipping. Out of the 14 minor and intermediate ports only 5 ports viz. Neendakara, Alleppey, Beypore, Calicut and Azhikkal handled any significant traffic during the past few years. During 1980-81, 1.91 lakh tonnes of cargo was handled at the intermediate and minor ports of Kerala, as against 2.62 lakh tonnes in 1979-80 (Appendix—7.10). During 1980-81 also only the ports at Neendakara, Calicut and Azhikkal handled cargo of any significance, Neendakara alone accounting for 54 per cent of the total. Twenty-four steamers having a tonnage of 68,820 tonnes called at the intermediate and minor ports of Kerala during 1980-81 as against thirty steamers having a tonnage of 1,01,234 tonnes in the previous year (Appendix 7.11). Again Neendakara port accounted for 50 per cent of the steamers. In addition 582 sailing vessels of 71,522 tonnes also called at these ports during 1980-81 as against 536 sailing vessels of 60,780 tonnes during 1979-80. These vessels called at the ports of Calicut (Beypore) and Azhikkal only. The revenue earned during 1980-81 from the various ports in the State was Rs. 16.45 lakhs compared to Rs. 16.78 lakhs during the previous year.

7.46 The State Hydrographic Survey Wing is responsible for carrying out dredging work and field surveys. This Wing consists of a Headquarters Unit at Trivandrum and two Field Unit Offices at Quilon and Beypore respectively. They are engaged in the

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collection of investigation data for developing the various minor ports, fishing harbours and fish landing centres. On the basis of the collected data, the Harbour Engineering Wing initiates the designing of cargo and fishing harbours in consultation with Central Water Power and Research Station at Poona, U.N.D.P., Pre-investment Survey of Fishing Harbours at Bangalore, Peechi Engineering Research Institute etc. Hydrographic surveys have been undertaken by this Wing during 1980-81 at Beypore, Ponnani, Kasargode, Neendakara, Azhikode, Azhikkal and Thalai.

7.47 The dredging unit has a fleet of 3 dredgers viz. (1) a gram dredger, (2) a 12" cutter suction dredger 'Neendakara' and (3) a 22" cutter suction dredger 'Meena'. There is also a tug and an auxiliary craft called 'Dredge Tender' in the unit. For making the vessels operational, urgent and elaborate repairs have been carried out during 1980-81. Dredging was carried out at Neendakara, Kasaragod and Beypore ports. Dredging was also carried out on payment basis in front of Cochin Ship Building Yard. Steel pipes and HDPE pipelines were purchased for the dredgers under a phased programme for replacement of equipment.

7.48 The Harbour Engineering Wing of the Ports Department is carrying out the development works of Ports and Fisheries Departments. This Wing is in charge of investigation, design and construction of fishing harbours, mini fishing harbours, fish landing centres, cargo harbours and capital repairs and maintenance of all structures of the cargo and fishery harbours. Government have accepted in principle the development of seven fishing harbours, nine mini fishing harbours, five cargo harbours and twenty two fish landing centres.

7.49 Regarding the development of Vizhinjam Harbour, the first stage of the Project consisting of construction of main breakwater for a length of 305 metres is completed. The second stage of the project envisages extension of main breakwater for 100 metres, construction of leeward breakwater for 340 meters, land acquisition, water supply etc. Of the above, the extension of main breakwater by 100 metres and the construction of leeward breakwater by 120 metres have been completed. The remaining works of the second stage are expected to be completed during the current year (1981-82). The project reports for the second and third stages development, namely, construction of wharf and auction hall have been submitted to the Government of India. For the development of Neendakara fishing harbour, an estimate for Rs. 370 lakhs has been sanctioned by the Government of India. Development work which commenced during 1980-81 is in good progress. The State Government have sanctioned an estimate of Rs. 180 lakhs for the construction of two breakwaters at Beypore

which has since been revised to Rs. 270 lakhs. Technical sanction was issued and the work is tendered. Government of India have also sanctioned construction of fish landing centres at Kasaragod, Neeleswaram, Munakkakadavu and Cheruvathur for a total amount of Rs. 57.50 lakhs.

7.50 The investigation works for cargo harbours at Neeleswaram and Beypore have been completed and proposal for the first stage of development have been finalised. Investigation works in respect of Azhikkal and Ponnani are completed. Besides, the Harbour Engineering Wing is taking up the construction of staff quarters and capital repairs to piers and other structures.

Cochin Port

7.51 During 1980-81 the general operating conditions at the port were satisfactory. Except during the period of strike by port employees and by the steamer supervisors, traffic and shipping operations were carried out smoothly. The number of ships which called at the port during the year recorded a fall of 9.1 per cent from 867 in 1979-80 to 788 in 1980-81. Consequently the total N.R.T. declined by 7.0 per cent from 52.5 lakh tonnes to 48 lakh tonnes. The fall in the shipping activity during the year was due to the substantial fall in the number of conventional general cargo ships despite the increase recorded in the number of all other categories of vessels during the year. However compared to the preceding year, both the average turn round time and detention to ships decreased indicating an improvement of operational efficiency during the year. It may be specially noted that the number of container ships and Ro-Ro ships which called at the port was appreciably higher. While the general cargo ships came down to 462 from 573, containerised ships increased from 57 to 65 during the year. A category wise analysis of ships that called at the port is given in Appendix 7.14. Mention may also be made of the increase of 25 per cent in the number of sailing vessels which entered the port during the year.

7.52 The total volume of traffic handled during the year was 52.33 lakh tonnes which is 4.2 per cent less than the traffic (54.64 lakh tonnes) handled in the previous year. Bulk cargo handled at the port recorded a slight increase while the break bulk cargo recorded a decline. The volume of foreign traffic handled registered a decline by 11.4 per cent compared to the previous year mainly on account of the fall in the import of crude oil from abroad. Coastal traffic recorded an increase by 22.4 per cent due to the increase in the export of POL products to coastal ports. With this increase in coastal traffic, its share to the total traffic rose to 27.3 per cent during the year

from 21.3 in the previous year. The tonnage of containerised cargo handled during the year recorded an increase of 19.0 per cent from 1.16 lakh tonnes in 1979-80 to 1.38 lakh tonnes in 1980-81.

7.53 During the year both coastal imports and exports recorded substantial increase while both foreign imports and exports recorded decline. The total volume of imports during the year recorded a fall by 5.6 per cent to 41.12 lakhs tonnes from the peak import traffic of 43.56 lakh tonnes handled in the preceding year. Coastal imports during the year came to 14.5 per cent of the total imports as against 10.9 per cent in the preceding year as a result of the substantial increase in coastal imports by 25.3 per cent. This was mainly due to the increase in import of Bombay High Crude during the year. The total volume of exports handled during the year recorded an increase by 1.2 per cent to 11.21 lakh tonnes from 11.08 lakh tonnes during 1979-80. While coastal exports recorded an increase by 20.4 per cent foreign exports recorded a fall by 30.6 per cent. This was mainly due to the substantial increase in coastal exports of POL products and the fall in the foreign exports of many of the important items of general cargo. Despite the fall in traffic, the total value of trade handled at the port during the year recorded an increase by 9.4 per cent to Rs. 1340.75 crores from Rs. 1225.99 crores in the preceding year. The increase in the value of foreign imports and the fall in the value of foreign exports resulted in increasing the adverse balance of trade by about four times to Rs. 248.27 crores during the year from Rs. 63.03 crores in the previous year.

7.54 The financial transactions of the Cochin Port Trust during the year closed with a net deficit of Rs. 71.85 lakhs during 1980-81 as against a surplus of Rs. 1.49 lakhs in the preceding year. The gross income of the port during the year was Rs. 1943.41 lakhs compared to Rs. 1779.59 lakhs in the preceding year. The gross expenditure was Rs. 2015.26 lakhs as against Rs. 1778.10 lakhs in 1979-80. Owing to the increase in operating expenditure, the operating surplus recorded a decrease from Rs. 486.45 lakhs in the previous year to Rs. 336.61 lakhs during the current year. Consequently the operating ratio has registered an increase to 78.8 per cent during the year from 69.2 per cent in the preceding year.

7.55 The capital expenditure (Plan and non Plan) during 1980-81 as per accounts amounted to Rs. 452.34 lakhs. During the year an amount of Rs. 366 lakhs was sanctioned as loan by the Government. The balance was met from internal resources. The total capital debt stood at Rs. 2061.63 lakhs as on 31-3-1981. A sum of Rs. 50 lakhs was received from Government during the year towards grant-in-aid

work of Fisheries Harbour. The value of the capital assets of the Port Trust at original cost increased from Rs. 3489.52 lakhs to Rs. 3764.38 lakhs as at 31-3-1981 including Fisheries Harbour (grant-in-aid work sanctioned by Government of India.)

Tourism

Kerala Tourism Development Corporation

7.56 The Corporation is mainly engaged in the establishment and running of hotels which form one of the basic infrastructure for the development of tourism. It also undertakes running of tourist reception centres and conducted tours. The main schemes taken up for development by the Kerala Tourism Development Corporation are given below:

1. *Cochin Project*

7.57 The project is for the construction of a multi storied hotel in the Marine Drive at Cochin. The estimated cost of the project is Rs. 156 lakhs. It has two blocks, a hotel block and a shopping block. The shopping block has already been commissioned. By March 1981 the civil works of the nine-storied hotel block has reached the 5th floor level.

2. *Kovalam Project* The Scheme is for the construction of a 50 roomed hotel at Kovalam which consists of 10 cottages and 40 double rooms with a conference hall, a drive-in-restaurant and a restaurant to the main hotel block. The Hotel (Hotel Samudra) has since been commissioned.

3. *Kumarakom Project* The Scheme is for the development of the Baker's Estate at Kumarakom into a tourist complex. The estimated cost of the first phase of the project is Rs. 82 lakhs. The land was purchased and necessary improvements to the existing bungalow have been made and it is being run as a small hotel.

4. *Thampanoor Project* The scheme is for the construction of a middle class hotel at Thampanoor, Trivandrum. The pile foundation work of the building has been completed and the pile cap work is in progress.

5. *Cannanore Project* The project envisages the construction of a middle class hotel at Cannanore. Land was transferred by Government to the Corporation. The architectural designs and drawings have been prepared. The construction of the compound wall has also been completed.

6. *Bolghatty Project* In 1976, the Bolgatty Palace with its premises was taken over by the K.T.D.C. for developing the area into a tourist complex. A comprehensive plan for the development of the island has been prepared as a part of the scheme. Construction of

two honey moon and two twin type tourist cottages have been taken up. The structural work has almost been completed.

7. *Purchase of Boats and Coaches* The Corporation has decided to strengthen its Transport Division with more boats, coaches, cars etc. The Corporation has purchased four Leyland chassis for constructing luxury coaches and coach bodies are under construction. Steps have been taken for the purchase of four boats and a sail boat.

8. *Tourist Reception Centre* The K.T.D.C. has established tourist reception centres at Cochin and Trivandrum. These centres operate conducted tours by coaches and cars from the two centres and by boats from Cochin.

Communications

7.58 Kerala has at present 23 postal divisions, 3 railway mail service divisions, 2 postal stores depot units, one mail motor service division unit and one central stamp depot at Ernakulam. As on 1-4-1981 4576 post offices were functioning in the State, consisting of 51 head post offices, 1275 sub offices, 804 extra departmental sub offices, and 2446 branch offices. During 1980-81, sixty-four new post offices were opened.

7.59 The details relating to expansion of postal net work since 1963 is furnished in Appendix 7.15. The average area served by a post office is 8.47 sq. kms. against the all India figure of 24.46 sq. kms. and the population served by a post office on an average is 5544. (See Appendix—7.16). Division-wise data relating to post offices in the State are furnished in Appendix 7.17.

7.60 In respect of tele-communication facilities also, Kerala enjoys an enviable position among the various States of the Indian Union. The number of telephone exchanges in Kerala increased from 442 in April 1980 to 465 in April 1981 with a total equipped capacity of 110700 lines as shown in Appendix-7.18. There were 2294 public call offices in the State as on April, 1981. In spite of the rapid growth of tele-communications, the backlog of pending connections is also increasing simultaneously. There were 22,717 connections which are pending as on April 1981.

7.61 During September 1981 Calicut Telephone District was newly formed and Telegraphs Engineering Divisions were set up at Thiruvalla, Kasaragod and Thodupuzha in the month of June 1981. An automatic telephone exchange has been recently opened at Quilon. An important event in the development of communications in the State was the laying of the foundation stone of 5000 lines telephone exchange at Kaithamukku,

Trivandrum on 9-11-1981. This new telephone exchange building will have an ultimate capacity to accommodate 20,000 lines telephone exchange equipment and associated external and internal offices. The first 5000 lines of imported exchange equipment will be installed during 1983-84 and the next 5000 lines programmed for 1985-86. The anticipated cost of the multi-storeyed building which will have a total

carpet area of 27,520 sq. feet and plinth area of 35,000 sq. ft. is Rs. 71 lakhs including electrical installations. With the commissioning of initial 5000 lines in the new exchange building, 1600 lines of the existing stragger lines will be derated and the current waiting list will be cleared. With the commissioning of the next 5000 lines by 1985 all the demands till the date of cut over are expected to be cleared.

EXPORT IMPORT TRADE

India's Foreign Trade

India's trade deficit in recent years has been growing fast owing to a substantial rise in imports and deceleration in the growth of exports. The import bill since 1973, has been mounting on account of the steep rise in the prices of POL and allied products. The tardy growth in exports may, however, be attributed to external as well as internal factors. The recessionary situation in the global economy adversely affect our exports also. Rising prices, increased domestic demand, shortage of essential inputs such as power, coal, and other materials like steel and aluminium, industrial unrest, transport bottlenecks etc., have an indirect adverse impact on our export performance.

8.2 Based on provisional figures, India's trade deficit in 1980-81 reached a record level of Rs. 5205 crores from Rs. 2233 crores in 1979-80. The aggregate export earnings is placed at Rs. 6578.41 crores. The import bill, on the other hand, reached a record level of Rs. 11783.29 crores as against Rs. 8231 crores in 1979-80. While exports registered a mere 11 per cent rise in 1980-81, over the previous year, the import bill shot up by 43 per cent. The phenomenal rise in import bill is wholly due to the significant rise in the prices of crude oil and fertilizers. Data relating to India's foreign trade during the last five years are presented in Table 8.1.

TABLE 8.1

Year	Export (Rs. Crores)	Import (Rs. Crores)	Surplus/ Deficit (Rs. Crores)
(1)	(2)	(3)	(4)
1976-77	5142.25	5073.79	(+) 68.46
1977-78	5404.26	6025.29	(-) 621.03
1978-79	5726.30	6814.30	(-) 1088.00
1979-80	5998.64	8231.32	(-) 2232.68
1980-81*	6578.41	11783.29	(-) 5204.88

*Provisional

Kerala's Exports

8.3 Kerala contributes a sizeable share to India's foreign export earnings. But a precise estimate of the value of total foreign exports exclusively from Kerala

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is difficult to obtain for many reasons. Though major portion of exportable commodities produced within Kerala are exported abroad through Cochin Port, a sizeable portion of commodities are canalised through ports outside Kerala like Bombay, Calcutta, Madras. Moreover, many exportable commodities produced outside Kerala are exported through Cochin Port. For instance, though Kerala contributes nearly 90 per cent of Cardamom exported from India about 80 per cent of it is exported through Bombay port. Hence the export data supplied by the Commodity Boards may not fully tally with the Cochin Port Trust's export data, in respect of certain commodities.

8.4 The exports from Kerala are mainly traditional commodities which include pepper, cashew kernels, tea, coffee, ginger, marine products, turmeric, cardamom, coir products etc. In recent years the value as well as quantity of almost all the commodities exported from Kerala is showing a downward trend. The increased unit price of the commodities in the importing countries, sluggish demand in the foreign markets and competition from other nations, are the major causes cited for the downward trend. The value of foreign exports from Kerala through the Cochin port which stood at Rs. 554.22 crores in 1979-80 declined to Rs. 511.17 crores in 1980-81, registering a decrease of nearly 8 per cent. If we consider foreign exports through Cochin port as a crude measure of Kerala's foreign exports, we find that Kerala's share in India's total export earnings came down marginally from 9.24 per cent in 1979-80 to 7.77 per cent in 1980-81. Table 8.2 gives the commodity-wise value of foreign exports from Cochin Port for the last two years.

TABLE 8.2

Commodities	Year	
	1979-80	1980-81
(1)	(2)	(3)
1. Tea	83.28	79.74
2. Pepper	32.33	36.97
3. Cardamom	7.06	6.50
4. Cashew Kernels	113.85	110.70
5. Coffee	60.17	43.27
6. Ginger	4.48	2.44
7. Sea Foods	97.38	89.62
8. Coir Products	36.26	25.74
9. Others	119.41	116.19
Total	554.22	511.17

Source: Administration Report — Cochin Port.

8.5 The total volume of foreign exports in 1980-81 through Cochin Port was 2.90 lakh tonnes against 4.18 lakh tonnes in 1979-80. During the same period the volume of coastal exports rose from 6.90 lakh tonnes to 8.31 lakh tonnes. The total volume of foreign and coastal exports together, marginally increased from 11.08 lakh tonnes in 1979-80 to 11.21 lakh tonnes in 1980-81. (See Table 8.3) While the quantity of foreign exports declined by 30.6 per cent compared to the previous year, coastal exports went up by 20.4 per cent.

TABLE 8.3

Trends in Exports through Cochin Port

Year	Foreign (Quantity) lakh tonnes	Coastal (Quantity) lakh tonnes	Total (Quantity) lakh tonnes
(1)	(2)	(3)	(4)
1979-80	4.18	6.90	11.08
1980-81	2.90	8.31	11.21

8.6 POL constituted 73.4 per cent of the total quantity exported through Cochin Port during 1980-81 against 61.9 per cent the previous year. Export of tea and cashew Kernels formed 5.5 per cent and 2.6 per cent respectively. Marine products accounted for about 3.2 per cent of total exports. Table 8.4 shows the commodity-wise analysis of exports through Cochin Port. Important export items such as coir products, cashew kernels, tea, sea foods etc., registered substantial decline in quantity during 1980-81 compared to the previous year.

TABLE 8.4

Commodity-wise Analysis of exports from Kerala through Cochin Port

Commodities	1979-80		1980-81	
	Quantity (tonnes)	% to total	Quantity (tonnes)	% to total
(1)	(3)	(3)	(4)	(5)
POL	685919	61.9	822986	73.4
Coir Products	57299	5.2	29987	2.6
Cashew Kernels	44114	4.0	29865	2.6
Tea	67289	6.1	61242	5.3
Rubber	124	..	240	..
Sea foods	43916	3.9	35507	3.2
Miscellaneous	209391	18.9	142415	12.7
Total	1108052	100.00	1121142	100.00

8.7 The share of coir products which was 5.2 per cent in 1979-80 decreased to 2.6 per cent in 1980-81 registering a fifty per cent fall. Similarly, the percentage shares of tea and cashew which stood at 6.1 and 4.0 respectively in 1979-80 fell to 5.5 and 2.6 respectively. But in respect of sea foods the decline in the quantity exported during 1980-81 was only marginal (see Appendix 8.1 for principal exports through Cochin port).

8.8 Export and import trade effected through Cochin Port accounted for Rs. 1340 crores in 1980-81 as against Rs. 1226 crores in 1979-80. (See Table 8.5) Though the trade decreased by 4.2 per cent in terms of quantity compared to the preceding year the value of trade increased by 9.4 per cent. While the total value of export during 1980-81 recorded a decline by 4.2 per cent from that of the previous year, the value of imports recorded. Substantial increase by 21.5 per cent. While the value of foreign exports decreased from Rs. 554 crores in 1979-80 to Rs. 511 crores in 1980-81 the value of foreign imports went up from Rs. 617 crores to Rs. 759 crores. While coastal exports showed an upswing, coastal imports had a downswing during 1980-81 compared to the previous year.

TABLE 8.5

Value of Exports and Imports through Cochin Port

Item	1979-80 (Rs. crores)	1980-81 (Rs. crores)
(1)	(2)	(3)
Foreign Exports	554.22	511.17
Coastal Exports	24.22	43.03
Total Exports	578.44	554.20
Foreign Imports	617.25	759.44
Coastal Imports	30.30	27.11
Total Imports	647.55	786.55
Total Trade	1225.99	1340.75

8.9 Details relating to important export commodities of Kerala are given in the following paragraphs:

Spices

8.10 Sizeable foreign exchange is earned by India through the export of spices. Spices exported consist of pepper, ginger, turmeric, cardamom etc. During 1978-79 spices worth Rs. 154.93 crores were exported from India. The export earnings from spices in 1979-80. amounted to Rs. 155.08 crores registering a marginal increase of about 0.1 per cent over that in the previous year. The provisional figures for the year 1980-81 show that the value of spices exports from India declined to Rs. 106 crores. Kerala contributes a sizeable

share of spices exported from India. Important spices produced in Kerala are pepper, ginger, cardamom and turmeric. Nearly 95 per cent of pepper, 70 per cent of ginger and 90 per cent of cardamom exported from India originate from Kerala. During 1979-80, foreign exchange earnings from the export of spices in Kerala amounted to Rs. 51.98 crores against the all India export earnings of Rs. 155.08 crores. This shows that Kerala accounts for nearly one-third of the all India export earnings from spices.

(a) Cardamom

8.11 A major share of the cardamom exported to foreign countries is produced in Kerala. During the year 1980-81 India exported 2337 tonnes of cardamom valued at Rs. 34.50 crores. Of this Kerala's share was 2017 tonnes valued at Rs. 30.32 crores. In 1979-80 Kerala's share was 2286 tonnes (Rs. 42.47 crores) out of 2636 tonnes (Rs. 48.56 crores) exported from India. Details regarding the quantity and value of cardamom exported from India and Kerala during the last few years are furnished in Table 8.6

TABLE 8.6
Export of Cardamom from Kerala/India

Year	Kerala		India	
	Quantity (Tonnes)	Value (Rs. crores)	Quantity (Tonnes)	Value (Rs. crores)
(1)	(2)	(3)	(4)	(5)
1977-78	2378	42.21	2763	48.44
1978-79	2536	51.81	2876	58.35
1979-80	2286	42.47	2636	48.56
1980-81	2017	30.32	2337	34.50

8.12 There were severe fluctuations in the export of Cardamom over the years. For instance, the export of Cardamom from Kerala increased from 2378 tonnes in 1977-78 to 2536 tonnes in 1978-79 but declined to 2286 tonnes in 1979-80 and to 2017 tonnes in 1980-81. In terms of value also wide fluctuations could be noticed. The exports of cardamom at all India level also indicate similar fluctuations. The export value of cardamom from Kerala registered a decrease from Rs. 51.81 crores in 1978-79 to Rs. 42.47 crores in 1979-80 and to Rs. 30.32 crores in 1980-81.

8.13 Cardamom is graded into five categories for purposes of export, viz., Alleppey Green, Coorg Green, bleached, other mixed and seeds. Alleppey Green constitutes nearly 95 per cent of the quantity exported. Grade-wise quantity and value of cardamom exported is furnished in Table 8.7.

TABLE 8.7
Grade-wise Export of Cardamom (1980-81)

Grade	Quantity (tonnes)	Value (Rs. lakhs)	Unit Value (Rs./kg.)
(1)	(2)	(3)	(4)
1. Alleppey Green	2204	33.05	150
2. Coorg Green	1	0.01	133
3. Bleached	110	0.81	105
4. Other Mixed	7	0.11	151
5. Seeds	15	0.19	126
Total	2337	34.50	148

Source: Cardamom Board.

(b) Ginger

8.14 India exported 5550 tonnes of ginger in 1980-81 against 11486 tonnes in 1979-80. The foreign exchange earnings from the export of ginger in 1980-81 and 1979-80 were Rs. 292 lakhs and Rs. 727 lakhs respectively. This shows a decrease of 52 per cent in terms of quantity and 60 per cent in terms of value. Export of ginger from Cochin port was 4597 tonnes in 1980-81 against 7186 tonnes in 1979-80. The foreign exchange earnings from ginger exported from Cochin port in 1980-81 and 1979-80 were Rs. 238 lakhs and Rs. 446 lakhs respectively. Major share of the ginger exported from Cochin port is produced in Kerala. In terms of both quantity and value the export of ginger is showing a declining trend for the last three years as revealed in Table 8.8.

TABLE 8.8
Export of Ginger from India/Kerala (1979-81)

Year	India		Kerala	
	Quantity (Tonnes)	Value (Rs. lakhs)	Quantity (Tonnes)	Value (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)
1978-79	14514.55	1491.72	8512.95	911.04
1979-80	11485.98	726.96	7186.45	446.42
1980-81*	5550.24	292.31	4597.64	238.00

*Provisional

Source:—Spices Export Promotion Council

(c) Pepper

8.15 In pepper production, Kerala State holds the monopoly contributing nearly 95 per cent of the pepper produced in India. Export data for the year 1980-81 reveal that the State contributed 24377 tonnes of pepper valued at Rs. 3532 lakhs. At the all India level the export of pepper was about 25336 tonnes valued at Rs. 3684 lakhs. Kerala's share in the all India export

of pepper was 96.2 per cent in terms of quantity and 95.9 per cent in terms of value during 1980-81. During the previous year 1979-80 the corresponding percentages were 99.0 and 96.7 respectively. Export data regarding pepper indicate that the quantity and

value of pepper exported from India as well as Kerala have been steadily going up during the last few years. Details of export of pepper from Kerala and India for the last three years are furnished in Table 8.9.

TABLE 8.9
Export of Pepper from India/Kerala

Year	India		Kerala			
	Quantity (Tonnes)	Value (Rs. lakhs)	Quantity (Tonnes)	% Share	Value (Rs. lakhs)	% Share
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1978-79	15719.36	2911.72	14738.81	93.76	2708.33	93.01
1979-80	20898.45	3352.24	20685.61	93.98	3239.97	96.65
1980-81	25336.80	3684.38	24377.63	96.21	3532.20	95.87

Source: Spices Export Promotion Council.

(d) Turmeric

8.16 Export of turmeric from India showed a decline in 1980-81 compared to the previous year. The quantity of turmeric exported during 1980-81 was 11438 tonnes against 26609 tonnes in 1979-80. Export earnings also declined from Rs. 980 lakhs in 1979-80 to Rs. 604 lakhs in 1980-81. The decline was 57 per cent in terms of quantity and 69 per cent in terms of value. Export of turmeric from Cochin port also registered a fall in 1980-81 compared to 1979-80. During 1980-81 only 2315 tonnes of turmeric was exported against 3050 tonnes in 1979-80. Export earnings correspondingly declined from Rs. 252 lakhs in 1979-80 to Rs. 129 lakhs in 1980-81. Details regarding the export of turmeric for the last three years are given in Table 8.10.

TABLE 8.10
Export of Turmeric from India/Kerala

Year	India		Kerala	
	Quantity (Tonnes)	Value (Rs. lakhs)	Quantity (Tonnes)	Value (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)
1978-79	11977.50	1241.24	2056.54	220.05
1979-80	26609.84	1980.61	3050.01	252.72
1980-81	11438.36	603.93	2315.96	129.25

Source: Spices Export Promotion Council

8.17 Other items of spices exported from Cochin Port include chillies, curry powder, oils of spices, cumin seeds, oleoresins of spices etc. Details regarding the export of all items under spices from the Cochin port (see also Appendix 8.3 for a comparison of all India exports and exports through Cochin port in 1979-80) are given in Table 8.11.

TABLE 8.11

Export Value of Spices from Cochin Port

Item	(Rs. lakhs)		
	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)
1. Pepper	2708.33	3239.97	3532.20
2. Cardamom	611.79	711.32	666.51
3. Chillies	95.39	137.54	101.30
4. Ginger	911.04	446.42	238.00
5. Turmeric	220.04	252.72	129.25
6. Curry Powder	73.16	96.13	94.70
7. Cumin Seed	1.36	9.44	24.98
8. Oils of Spices	80.68	64.43	38.89
9. Oleoresins of spices	157.26	234.19	200.78
10. Others	4.55	6.54	4.59
Total	4863.63	5198.75	5031.20

Source: Spices Export Promotion Council.

Coffee

8.18 Export of coffee brings sizeable foreign exchange to the country. In 1980-81, 20839 tonnes of coffee valued at Rs. 43.27 crores was exported from Cochin Port, against 22422 tonnes valued at Rs. 60.17 crores during 1979-80. Kerala produces two types of coffee viz. Arabica and Robusta. Provisional figures for the year 1980-81 show that the State's production of coffee stood at 26975 tonnes, against 30030 tonnes in 1979-80. Of the total coffee produced in the State more than 90 per cent is of the Robusta type. Details regarding the export of coffee from Cochin Port, are given in the Table 8.12.

TABLE 8.12
Export of Coffee from Kerala/India

Year	Kerala		India	
	Quantity (Tonnes)	Value (Rs. Crores)	Quantity (Tonnes)	Value (Rs. Crores)
(1)	(2)	(3)	(4)	(5)
1976-77	13449	33.56	47522	114.05
1977-78	15050	57.68	53827	230.00
1978-79	24006	50.09	66369	158.10
1979-80	22422	60.17	61690	178.00
1980-81	20839	43.27	N.A.	N.A.

Source:—Administration Report, Cochin Port.

Tea

8.19 Among the plantation crops in the State tea occupies a vital position in respect of export earnings. During 1980-81 the export of tea from Cochin port was 61242 tonnes valued at Rs. 79.74 crores as against 67289 tonnes valued at Rs. 83.28 crores in 1979-80. Export of tea has thus declined by 8.99 per cent in terms of quantity and 4.25 per cent in terms of value compared to the previous year. The total tonnage of export from the Cochin Port in 1980-81 was 11,21,142 valued at Rs. 554 crores. Of this export of tea constituted 61242 tonnes valued at Rs. 79.74 crores. Major portion of the tea exported from Cochin port goes to countries like United Kingdom, USSR and USA. Details of export of tea from Cochin Port for the last five years are given in Table 8.13-

TABLE 8.13
Export of Tea from Kerala/India

Year	Kerala		India	
	Quantity (Tonnes)	Value (Rs. crores)	Quantity (Tonnes)	Value (Rs. crores)
(1)	(2)	(3)	(4)	(5)
1976-77	52360	61.05	242418	295.47
1977-78	64322	127.70	221522	565.71

TABLE 8.14
Exports of Marine Products from India/Kerala

Year	India		Kerala		Share of Kerala	
	Quantity (tonnes)	Value (Rs. Crores)	Quantity (tonnes)	Value (Rs. Crores)	Quantity %	Value %
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1977-78	65967	180.95	29819	77.45	45.20	42.80
1978-79	86894	234.62	32301	94.00	37.17	40.06
1979-80	86401	248.82	30334	103.93	35.34	41.77
1980-81	75591	234.84	29148	95.34	38.56	40.00

Source: Marine Products Export Development Authority.

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(1)	(2)	(3)	(4)	(5)
1978-79	43017	63.35	177327	359.11
1979-80	67289	83.28	210571	369.40
1980-81	61242	79.74	NA	NA

Source:—Administration Report, Cochin Port.

Marine Products

8.20 Export earnings from marine products since 1960-61 have been showing an upward trend in India. With an export value of merely Rs. 3.92 crores in 1960-61. India attained a record increase in marine products export to Rs. 248.82 crores in 1979-80. A great jump in the export of marine products was realised in 1975-76 when the export earnings almost doubled compared to the previous year. Thereafter, the annual export earnings has been going up steadily except in 1977-78, when there was a decline of 4 per cent. In 1980-81 also there was a fall in marine products export. It declined by Rs. 13.98 crores in 1980-81 compared to 1979-80. During 1980-81 India exported marine products worth Rs. 234.84 crores as against Rs. 248.82 crores in 1979-80. The quantity exported was 75591 tonnes in 1980-81 and 86401 tonnes in 1979-80. During 1980-81, sea foods exports went down by 12 per cent in terms of quantity and by 5 per cent in terms of export earnings, compared to the previous year.

8.21 Kerala's share in sea foods export is substantially high compared to other States in India. While India exported 75591 tonnes of marine products in 1980-81 Kerala's share was 29148 tonnes. In terms of value Kerala's share amounted to Rs. 95.34 crores against the all India export earnings of Rs. 234.84 crores. On an examination of the export earnings from sea foods for the last four years, it is seen that Kerala has been showing an upward trend in line with the national level except during the year 1980-81. Table 8.14 gives the details of sea food export from India and Kerala during the last four years.

8.22 Sea food export from Kerala, compared to the national level was nearly 39 per cent in terms of quantity and 41 per cent in terms of value in 1980-81. During the previous year, the corresponding percentages were 35 and 42 respectively. More than eleven items of sea foods are exported from India to foreign countries. Among them frozen shrimp and frozen fish together constituted nearly 78 per cent in terms of quantity and 87 per cent in terms of value during 1980-81. The actual quantity of frozen shrimp and frozen fish exported were 51358 tonnes and 8769 tonnes respectively in 1980-81. Of the total foreign exchange earnings of Rs 234.84 crores in 1980-81 frozen shrimp and frozen fish accounted for Rs. 201.78 crores and Rs. 8.24 crores respectively.

8.23 Kerala also exports more than ten items of sea foods of which frozen shrimp and frozen frog legs constitute the major part. Out of the total export of 29148 tonnes of sea foods from Kerala in 1980-81, frozen shrimp and frozen frog legs constituted 24481 tonnes and 2372 tonnes respectively. In terms of value the above two items contributed Rs. 84.27 crores and Rs. 5.88 crores respectively. Item-wise exports of sea foods from Kerala are furnished in Table 8.15 (see also Appendix 8.4).

TABLE 8.15

*Item-wise Export of Marine Products from Kerala**(Rs. in crores)*

Item	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)
1. Frozen Shrimp	81.04	92.37	84.27
2. Frozen Frog Legs	4.50	3.68	5.88
3. Frozen Lobster Tails	3.03	2.02	1.61
4. Frozen Cuttle Fish and Fillets	1.38	2.90	1.16
5. Frozen Squids	2.32	0.94	0.67
6. Fresh and Frozen Fish	0.24	0.20	0.03
7. Canned Shrimp	0.85	1.09	1.02
8. Others	0.66	0.73	0.70
Total	93.99	103.93	95.34

8.24 Poor fish landings, stagnation in the export of frozen shrimp and termination of charter arrangements with Thailand accounted for the poor marine products export performance during 1980-81. During the year, there was a significant fall in the price of marine products in export markets, especially Japan. Apart from the reasons stated above, the selective buying method newly adopted by USA and strengthening of Indian rupee against US dollar (which yielded less number of rupees per U.S. dollar) also contributed to the decline in export earnings of sea foods.

8.25 Region-wise export of marine products from India shows that Japan imported 70 per cent of our marine products followed by USA (11 per cent). In 1980-81, India exported to Japan 39374 tonnes of marine products valued at Rs. 165.76 crores against 37979 tonnes valued at Rs. 169.16 crores in 1979-80. While exports to Japan in terms of quantity went up, the export earnings, went down due to a decline in the unit value of products. The quantity and value of sea foods exported to USA decreased marginally during 1980-81. The decline in quantity of sea foods exported to USA was due to the selective buying adopted by that country while the decline in export earnings was due to the strengthening of Indian rupee against U.S. dollar. The export of sea foods to Thailand declined sharply from 17628 tonnes valued at Rs. 5.53 crores in 1979-80 to mere 2826 tonnes valued at Rs. 40 lakhs in 1980-81. The country-wise export of marine products from India is given in Table 8.16-

TABLE 8.16

Country-wise Export of Marine Products from India

Country	1980-81 Value Rs. Crores)	Share (%)	1979-80 (Value Rs. Crores)	Share (%)
(1)	(2)	(3)	(4)	(5)
Japan	165.76	70.58	169.16	67.98
U.S.A.	25.93	11.04	32.74	13.16
Kuwait	5.56	2.37	6.33	2.54
Sri Lanka	1.58	0.67	1.33	0.53
Netherlands	7.22	3.07	8.74	3.51
United Kingdom	6.89	2.93	6.66	2.68
France	5.34	2.27	7.13	2.87
Belgium	2.62	1.12	1.94	0.78
Australia	1.59	0.68	2.16	0.87
Singapore	2.17	0.92	2.01	0.81
Thailand	0.49	0.22	5.53	2.22
Others	9.69	4.13	5.09	2.05
Total	234.84	100.00	248.82	100.00

Source: The Marine Products Export Development Authority.

Cashew

8.26 Cashew industry in Kerala is mainly export oriented. For its raw material requirements however the industry depends largely on imported cashewnuts. In recent years the import of raw nuts has declined steadily and as a result the industry has been starved of raw materials. India exports two cashew products viz., cashew kernels and cashew shell liquid.

(a) Cashew Kernel

8.27 India earned foreign exchange worth Rs. 141 crores through cashew kernel export during 1980-81. According to the Cashew Export Promotion Council 32,805 tonnes of cashew kernels were exported from India in 1980-81. But during the previous year the export of cashew kernels from India was 37,848 tonnes valued at Rs. 117.91 crores. Thus while the quantity of cashew kernels exported decreased, export earnings went up in 1980-81 compared to the previous year due to the rise in the unit value of cashew kernels. Export of cashew kernels from Kerala was 24,754 tonnes valued at Rs. 110.51 crores during 1980-81 as against 36574 tonnes valued at Rs. 113.96 crores in 1979-80. Details regarding the export of cashew kernels are given in Table 8.17.

TABLE 8.17

Export of Cashew Kernel from India/Kerala

Year	India		Kerala	
	Qty. (tonnes)	Value (Rs. Crores)	Qty. (tonnes)	Value (Rs. Crores)
(1)	(2)	(3)	(4)	(5)
1977-78	40260	149.54	36792	138.69
1978-79	27684	80.37	25817	76.86
1979-80	37848	117.91	36574	113.96
1980-81	32805	141.69	24754	110.51

Sources: Cashew Export Promotion Council.

(b) Cashew Shell Liquid

8.28 India earned foreign exchange worth Rs. 6.84 crores in 1980-81 from the export of 9006 tonnes of cashew shell liquid. During the previous year 12928 tonnes were exported. Compared to the previous year there was a decline both in the quantity and value of cashew shell liquid exported from India. Kerala exported 7,863 tonnes of cashew shell liquid in 1980-81 against 11,472 tonnes in 1979-80. The export earnings also declined from Rs. 12.84 crores to Rs. 5.77 crores during the same period. Details regarding the export of cashew shell liquid for the last four years are given in Table 8.18.

TABLE 8.18

Export of Cashew Shell liquid from India/Kerala

Year	India		Kerala	
	Qty. (tonnes)	Value (Rs. Crores)	Qty. (tonnes)	Value (Rs. crores)
(1)	(2)	(3)	(4)	(5)
1977-78	2588	1.08	2090	0.83
1978-79	5821	4.80	4702	3.11
1979-80	12928	14.46	11472	12.84
1980-81	9006	6.84	7863	5.77

Source: Cashew Export Promotion Council.

8.29 The major countries to which cashew products are exported from India are U.S.A., Canada and Japan. The details of export of cashew products from India to these countries for the year 1978, 1979 and 1980 are given in the Table 8.19.

TABLE 8.19

Exports of Cashew Products from India

Year	Countries		
	U.S.A. (tonnes)	Japan (tonnes)	Canada (tonnes)
(1)	(2)	(3)	(4)
1978	31470	3885	4077
1979	34487	4548	3896
1980	27531*	2786	3276

*January—November, 1980.

Source: Cashew Export Promotion Council.

Raw Cashew Imports

8.30 Internal production of raw cashew can meet only less than one-third of the industry's requirement in Kerala. Raw cashew nuts are imported mainly from traditional South African countries. But with the setting up of factories in those countries the import of raw cashew nuts has been fast declining. Import of raw cashew during 1980-81 was 25,715 tonnes valued at Rs. 1956 lakhs against 24,326 tonnes valued at Rs. 1162 lakhs during the previous year. The details of import of raw cashew into India for the last four years are given in Table 8.20.

TABLE 8.20

Import of raw cashew nuts in India

Year	Quantity imported (tonnes)	Value (Rs. lakhs)
(1)	(2)	(3)
1977-78	56299	1798.17
1978-79	20496	916.33
1979-80	24326	1162.55
1980-81	25715	1956.63

Source: Cashew Export Promotion Council.

8.31 The net foreign exchange earnings from cashew trade through the Cochin Port during 1980-81 amounted to Rs. 96.71 crores against Rs. 115.18 crores in 1979-80. The net earnings include the value of cashew kernels plus cashew shell liquid exported minus the value of imported raw cashew nuts. In 1980-81 the net earnings from cashew trade declined about by 16 per cent, compared to the previous year. This was due to the decrease of export value by 8.30 per cent and

the increase of import value of raw cashew by 68.42 per cent. Details regarding the net earnings from cashew trade through the Cochin Port are furnished in Table 8.21.

TABLE 8.21

Net Earnings from Cashew Trade through Cochin Port

Year	Export Value (Rs. crores)	Import Value (Rs. crores)	Net Earnings (Rs. crores)
(1)	(2)	(3)	(4)
1977-78	139.52	17.98	121.54
1978-79	79.97	9.16	70.81
1979-80	126.80	11.62	115.18
1980-81	116.28	19.57	96.71

Source: Cashew Export Promotion Council.

Coir and Coir Products

8.32 Coir products from India enter the world market in the form of coir fibre, semifinished products like coir yarn, curled coir, etc. and finished products like coir, door mats, mattings, rugs, carpets and coir rope. Though India and Sri Lanka are the chief

exporters of coir goods, India enjoys a virtual monopoly in the supply of spun yarn and manufactured products. India earned foreign exchange worth Rs. 25.55 crores through the export of coir and coir products in 1980-81 as against Rs. 37.21 crores in 1979-80. The export in terms of quantity was only 28,609 tonnes in 1980-81 against 47,224 tonnes during 1979-80.

8.33 Foreign exchange earned through the export of coir and coir products from Kerala declined by Rs. 11.84 crores in 1980-81, compared to the previous year. The State earned only Rs. 25.14 crores from the export of coir and coir goods in 1980-81 against Rs. 36.98 crores during 1979-80, registering a decline of 32 per cent in the earnings of foreign exchange. The quantity of coir goods exported decreased substantially from 46,902 tonnes in 1979-80 to 23,149 tonnes in 1980-81. Despite the decline in export, the state enjoyed virtual monopoly in the export of coir fibre, curled coir rugs and carpets from India. Moreover, state has the monopoly in the export of white coir yarn made from retted fibre. Table 8.22 shows the quantity and value of coir and coir products exported from India/Kerala during 1980-81. It indicates that over 98 per cent of coir and coir products exported from India originates from Kerala. The details for the last three years are presented in Table 8.23.

TABLE 8.22

Export of Coir Products from India/Kerala 1980-81

Items	India		Kerala		Quantity tonnes Value Rs. lakhs Kerala's share	
	Quantity	Value	Quantity	Value	Quantity %	Value %
(1)	(2)	(3)	(4)	(5)	(7)	(7)
Coir Fibre	163.7	5.72	163.7	5.72	100.0	100.0
Coir Yarn	13486.1	873.06	13148.0	848.87	97.5	97.2
Coir Mats	7403.0	823.90	7327.1	813.12	98.8	98.8
Coir Matting	7044.7	805.12	7010.3	800.06	99.5	99.3
Coir Rugs and Carpets	274.4	36.77	274.4	36.77	100.0	100.0
Coir Other Sorts	11.3	1.36	10.4	1.27	92.0	93.4
Coir Rope	77.8	4.72	67.5	3.58	86.8	75.8
Curled Coir	148.0	4.42	148.0	4.42	100.0	100.0
Rubberised Coir	0.5	0.8	..	..	..	..
Total	28609.5	2554.65	28149.4	2513.81	98.4	98.4

TABLE 8.23

Export of Coir Products from India/Kerala

Items	Quantity in tonnes/value in Rs. lakhs					
	1978-79		1979-80		1980-81	
	Kerala	India	Kerala	India	Kerala	India
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Coir Fibres</i>						
(i) Quantity	24.6	35	27.5	36.0	163.7	163.7
(ii) Value	0.91	1.16	0.96	1.20	5.72	5.72

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Coir Yarn</i>						
(i) Quantity	23409	23536	25625	25872	13148.0	13486.1
(ii) Value	1004.70	1012.75	1539.72	1555.47	848.87	873.06
<i>Coir Mats</i>						
(i) Quantity	10876	10954.1	11664	11715.4	7327.1	7403.0
(ii) Value	896.52	904.78	1186.28	1191.26	613.12	823.30
<i>Coir Mattings</i>						
(i) Quantity	6743.1	6821.3	7929.6	7941.6	7010.3	7044.7
(ii) Value	542.29	545.64	826.23	828.08	800.06	805.12
<i>Coir Rugs and Carpets</i>						
(i) Quantity	1198.3	1198.4	1319.8	1319.8	274.4	274.4
(ii) Value	100.31	100.31	132.19	132.19	36.77	36.77
<i>Coir Rope</i>						
(i) Quantity	64.3	71.8	77.9	30.8	67.5	77.8
(ii) Value	2.33	2.64	4.16	4.31	3.58	4.72
<i>Curled Coir</i>						
(i) Quantity	412.0	412.00	240.3	240.3	148.0	148.0
(ii) Value	8.35	8.35	5.46	5.46	4.42	4.42
<i>Others</i>						
(i) Quantity	26.3	37.1	17.5	17.7	10.4	11.8
(ii) Value	1.95	3.67	3.05	3.04	1.27	1.54
Total						
(i) Quantity	42754	43066	46902	47224	28149.4	28609.5
(ii) Value	2557.96	2579.30	3698.05	3721.01	2519.81	2554.65

Source : Coir Board.

8.34 The U.S.A. Japan and Western countries like West Germany, United Kingdom, Netherlands, France and Italy are the countries that import about 80 per cent of Indian coir and coir products. In recent years these countries, except France, imported less quantities of coir goods. The increased competition from synthetic substitutes having a number of enduses is the major single reason for the declining import of coir goods, in the above countries. Many coir importing countries closed their manufacturing units because of the labour intensive nature of the industry and high cost of production. This also accounted for the decline in the export of coir goods to foreign countries. Moreover, many other countries entered the coir industry with modern technology producing better products. Table 8.24 shows the region-wise share of the export earnings of India from coir and coir products.

TABLE 8.24
Region-wise Export of Coir Products from India

Region/Zone	Year			
	1977-78 %	1978-79 %	1979-80 %	1980-81 %
(1)	(2)	(3)	(4)	(5)
Western Europe	63	67	69	56
Eastern Europe	7	6	5	10
America	19	18	17	21
West Asia	4	4	4	3
East Asia	6	5	5	5
Africa	..	..	..	Neg.
South Asia	Neg.	Neg.	Neg.	Neg.

Source : Coir Board.

Keralas Imports

8.35 Imports effected through the Cochin port during the year 1980-81 totalled 41.12 lakh tonnes against 43.56 lakh tonnes in 1979-80. Of the total imports in 1980-81, import from foreign countries constituted 35.17 lakh tonnes against 38.81 lakh tonnes in the previous year. Coastal imports were 5.95 lakh tonnes as against 4.75 lakh tonnes in 1979-80. (See Table 8.25). The total foreign imports through Cochin port registered a fall in 1980-81 by 9.38 per cent compared to the preceding year while coastal imports showed an increase.

TABLE 8.25
Foreign and Coastal Imports

Year	(Lakh tonnes)		
	Coastal	Foreign	Total
(1)	(2)	(3)	(4)
1979-80	4.75	38.81	43.56
1980-81	5.95	35.17	41.12

8.36. During 1980-81 POL constituted 76.4 per cent of total imports effected through Cochin port followed by fertilizers and its rawmaterials (16.1 per cent). Other important commodities imported are iron, steel and machinery, raw cashewnuts etc. Commoditywise details regarding imports are shown in Table 8.26. In 1980-81 almost all items of imports recorded a fall compared to the previous year. Substantial fall was noticed mainly in respect of iron, steel and machinery, crude oil, fertilizer and its raw materials and cashewnuts (See Appendix 8.2)

TABLE 8.26
Commodity-wise Imports through Cochin Port

Commodities	1979-80		1980-81	
	Qty. (tonnes)	% to total	Qty. (tonnes)	% to Total
(1)	(2)	(3)	(4)	(5)
Petroleum, Oil and Lubrication (POL)	3181062	73.0	3141254	76.4
Foodgrains	22331	0.5	14702	0.4

(1)	(2)	(3)	(4)	(5)
Cashewnuts	16797	0.4	6976	3.2
Iron, Steel and Machinery	82922	1.9	25376	0.6
Salt	356	Neg.	1	Neg.
Fertilizer and its Raw Materials	680754	15.6	661913	16.1
Miscellaneous	372277	8.6	262161	6.3
Total	4356499	100.0	4112383	100.0

8.37 Majority of items imported through Cochin Port was from other Asian Countries. The volume of import from Japan, West Germany, USSR, Australia and Newzeland recorded an increase during 1980-81 mainly due to larger imports of iron, steel and machinery, fertilizer etc. Imports from European countries showed a decreasing trend during 1980-81. Total value of foreign imports during the year 1980-81 was Rs. 759.44 crores against Rs. 617.25 crores in 1979-80. The value of foreign imports increased by 23 per cent in 1980-81 compared to preceding year. The commodity-wise value of foreign imports handled by Cochin Port is given in Table 8.27.

TABLE 8.27
Commodity-wise Value of Foreign Imports handled by Cochin Port

Commodity	Year	
	1979-80 (Rs. crores)	1980-81 (Rs. crores)
(1)	(2)	(3)
1. Liquors	0.01	0.02
2. Chemicals	52.67	61.90
3. Iron and Steel	21.91	2.46
4. Raw cashewnuts	7.23	7.14
5. Machinery	12.69	3.50
6. Other metals	2.63	2.10
7. Vegetable oil	2.25	1.54
8. Others	517.86	680.78
Total	617.25	759.44

Source: Administration Report, Cochin Port.

SOCIAL SERVICES

Education

The educational development of Kerala has been rapid and varied. Judged on the basis of indicators such as percentage of literacy, enrolment ratio and the proportion of State income devoted to education, Kerala's achievement in the field of education can be described as unique. The literacy in Kerala has increased from 60.42 per cent in 1971 to 69.17 per cent in 1981. The enrolment ratio in the age-group 6-11 has almost attained 100 per cent. The high proportion of budget outlay on education (33 per cent in 1981-82) is perhaps the most striking index of the educational advancement made by the State. The proportion of public expenditure on education to the State income is 6.2 per cent (1978-79) while the all-India percentage is only about 3.5. During 1980-81 further efforts at increasing the facilities for education was made in the State. In addition to sanctioning 326 schools in the public sector, Government sanctioned 24 new Arts and Science Colleges in the State during 1981-82.

General School Education

9.2 In 1980-81 there were 11,576 schools consisting of 1971 high schools, 2618 upper primary schools and 6887 lower primary schools. Considering the heavy thrust and need for starting new schools in accordance with the rising demand, Government accorded sanction to open 326 schools in the public sector during 1981-82. The newly sanctioned departmental schools consisted of 72 high schools, 137 upper primary schools and 117 lower primary schools.

9.3 The total enrolment in schools rose from 55.95 lakhs in 1980-81 to 56.57 in 1981-82. In actual terms the increase was of 62,545 students, 51,653 in the primary stage and 10,892 in the secondary stage. In the lower primary stage, the enrolment showed a slight fall while in the upper primary stage, the trend was upward. The variation in enrolment in the different stages of school education during 1980-81 and 1981-82 is given in Table 9.1.

TABLE 9.1
Enrolment in Schools—Stage-wise

Education Level	Enrolment		Variation
	1980-81	1981-82	
(1)	(2)	(3)	(4)
Lower Primary	2593030	2583661	(-) 9369
Upper Primary	1690965	1751987	(+) 61022
Secondary	1310671	1321563	(+) 10892
Total	5594666	5657211	(+)62545

9.4 A trend analysis of the enrolment in Standard I reveals a continuing negative change. The enrolment figure which stood at 6.86 lakhs in 1972-73 had gone down to 6.50 lakhs in 1981-82. During 1980-81 the enrolment in Standard I showed a fall of 0.24 lakh. The enrolment, which was only 6.31 lakhs in 1980-81 had gone up to 6.50 lakhs in 1981-82, an increase of 0.19 lakh. The trend in enrolment in Standard I during the last decade is shown in Table 9.2.

TABLE 9.2
Trend in Enrolment in Standard I—1972-73 to 1980-81

Year	Enrolment in Standard I (in lakhs)	Variation (in lakhs)
(1)	(2)	(3)
1972-73	6.86	..
1973-74	6.46	0.40
1974-75	6.59	(-) 0.13
1975-76	6.54	(-) 0.05
1976-77	6.76	(-) 0.22
1977-78	6.94	(-) 0.18
1978-79	6.55	(-) 0.39
1979-80	6.55	..
1980-81	6.31	(-) 0.24
1981-82	6.50	(+) 0.19

9.5 In the case of education of girls, the year 1981-82 could maintain the past trend by keeping the percentage of enrolment of girls in school education at 48.53 in the lower primary, 48.02 in the upper primary and 48.64 in the secondary stage.

Higher Education (General)

9.6 In 1981-82 there was heavy rush for admissions to the various courses under university education. In order to meet the demand for university education, steps were taken for the sanction of new colleges, extension of shift system to more colleges, sanction of more seats and introduction of new courses. During 1981-82 24 new colleges were started, 7 under Government sector and 17 under private management.

9.7 The number of arts and science colleges recorded a rise from 133 in 1980-81 to 157 in 1981-82. Of the 157 colleges, 93 are under the Kerala University of

which 12 are government colleges and 81 private colleges. The Calicut University has to its credit 64 colleges comprising of 24 government colleges and 40 private colleges. There are no affiliated or constituent art and science colleges under the University of Cochin.

9.8 The enrolment in arts and science colleges registered an increase from 0.36 lakh in 1960-61 to 2.42 lakhs in 1980-81. The increase was about seven fold within a period of decades. Between 1979-80 and 1980-81, the increase in enrolment was 0.30 lakh. The total number of students in arts and science colleges consists of 1.49 lakhs in the pre-degree level, 0.87 lakh in the degree level and 0.59 lakh in the post graduate level. The proportion of girl students remained more or less the same. The trend in enrolment at the university level is shown in Table 9.3.

TABLE 9.3
Growth of Enrolment under Higher Education

Year	Enrolment (in lakhs)	Index of Growth
(1)	(2)	(3)
1960-61	0.36	100
1965-66	1.05	292
1970-71	1.53	425
1975-76	1.66	461
1979-80	2.12	589
1980-81	2.42	672

Professional and Special Education

9.9 Constant efforts are being made to expand the field of professional and technical education in the State. A new medical college was started at Trichur. Even though the number of technical institutions remained the same, facilities for technical education were widened by sanctioning additional seats. At present there are 5 medical colleges, 4 ayurveda colleges and 4 law colleges and 19 teacher training colleges in State.

9.10 The number of engineering colleges remained at six with a student strength of 5467 during 1980-81. During 1981-82, 370 additional seats were sanctioned and a new course on Applied Electronics and Instrumentation was introduced in the Engineering College at Trivandrum.

9.11 The number of Industrial Training Institutes which was only 116 during 1979-80 increased to 151 in 1980-81. The enrolment increased from 10,808 in 1979-80 to 14,641 in 1980-81. The number of teachers recorded a rise from 952 in 1979-80 to 1230 in 1980-81.

9.12 There was no change in the number of polytechnics and junior technical schools. The number of polytechnics and junior technical schools remained at 20 and 25 respectively during 1981-82. The polytechnics had a student strength of 8275 in 1980-81. The number of students in the junior technical schools stood at 4120 during the year.

Expenditure on Education

9.13 Expenditure on education has registered an increase from Rs. 213.59 crores in 1980-81 to Rs. 235.48 crores in 1981-82. The per capita expenditure has gone up from Rs. 84.14 to Rs. 92.70 during the same period. Cost per pupil in secondary education was Rs. 461.76 in 1981-82 as against Rs. 400.74 in the previous year. The cost per pupil in primary education stood at Rs. 307.89 in 1981-82 as against Rs. 267.51 in 1980-81. Out of the total expenditure on education, primary education has a share of 57 per cent, secondary education 26 per cent, university education 11 per cent, technical education 4 per cent and other programmes including special education 2 per cent.

Health

Allopathy

9.14 In spite of the general improvement in the medical care system and the consequent well spread out rural health infrastructure of the State, the regional imbalances within the State continue to persist. An amount of Rs. 39.94 crores (both plan and non plan) was spent on institutions under allopathic system of medicine during 1980-81 as against an expenditure of Rs. 35.49 crores during 1979-80. Some of the recommendations of the High Power Committee on Health (Dr. Pai Committee) like posting of paediatricians in P.H. Centres and providing laboratory services therein, posting of RMOs in taluk hospitals and conversion of Medical College Hospital, Trivandrum into a referral hospital have been implemented in the year under review viz. 1980-81.

9.15 As on 1-4-1981 there were 1810 sub centres functioning in the State. There were 55 taluk hospitals, 165 P.H. centres, 593 rural dispensaries and 4 Government and 9 Private ANM Training Schools in the State with an admission capacity of 290. The number of beds in the medical institutions in the State increased from 30,220 in 1979-80 to 32,447 in 1980-81. The bed population ratio per lakh of population increased from 119 during 1979-80 to 128 in 1980-81. The four medical colleges in the State have a total admission capacity of 600 students. The fifth medical college at Trichur has commenced its activities from January 1982. With the conversion of Medical College, Trivandrum into a referral hospital, the quality of service in the hospital has improved significantly.

9.16 Table 9.4 shows the trend in the growth of allopathic institutions in Kerala since 1970-71.

TABLE 9.4
Medical Institutions and Beds in Kerala

Year	No. of Medical Institutions	No. of Beds	No. of beds per lakh of Population
(1)	(2)	(3)	(4)
1970-71	553	21,777	102
1971-72	571	23,386	107
1972-73	783	24,184	108
1973-74	874	24,106	106
1974-75	881	25,312	108
1975-76	885	27,568	115
1976-77	888	27,607	113
1977-78	893	28,862	116
1978-79	898	29,947	119
1979-80	918	30,220	119
1980-81	968*	32,447	128

*Does not include grant-in-aid institutions.

9.17 The regional imbalances in the availability of health facilities continue to persist. The district-wise variations in the number of allopathic institutions and the number of beds can be seen from Table 9.5.

TABLE 9.5
District-wise Number of Institutions and Beds

District	No. of Institutions		No. of beds	
	1979-80	1980-81*	1979-80	1980-81*
(1)	(2)	(3)	(4)	(5)
1. Trivandrum	99	94	5578	5337
2. Quilon	93	94	2132	1997
3. Alleppey	87	86	4011	3478
4. Kottayam	63	64	2809	2730
5. Idukki	43	47	339	395
6. Ernakulam	94	95	3263	2946
7. Trichur	86	99	3512	3473
8. Palghat	77	82	1365	1379
9. Malappuram	70	86	1015	1062
10. Kozhikode	77	62	3631	3720
11. Cannanore	129	130	2565	2597
12. Wynad	..	29	..	385
Kerala	918	968	30220	29499

Source: Directorate of Health Services.

*Does not include grant-in-aid institutions.

4/656/AC.

9.18 Necessary measures have been chalked out in the Sixth Plan to reduce the regional disparities by discouraging concentration of medical institutions in certain areas and opening more institutions in the backward areas. Measures are also being taken to enhance the facilities in primary health centres and taluk hospitals.

Indian Systems of Medicine

Ayurveda

9.19 Remarkable progress has been achieved in the services offered by the Ayurveda system of medicine during the year under review. At the beginning of the financial year 1980-81, there were 68 Ayurveda hospitals (with a total bed strength of 1169) and 412 Ayurveda dispensaries under the administrative control of the Director of Indian Systems of Medicine. The following six new hospitals were opened during 1980-81:

1. Parassala (30 beds)
2. Mannarghat (30 beds)
3. Alwaye (20 beds)
4. Kayamkulam (20 beds)
5. Kottakkal (30 beds)
6. Nature Cure Centre, Varkala (10 beds)

9.20 The status of Government Ayurveda Hospital at Kottayam and Alleppey was raised to that of District Hospitals by increasing the bed strength from 20 to 50. Also five dispensaries were upgraded into hospitals with bed strength as noted below:—

1. Kizhuvilam (20 beds)
2. Kulamuttam (10 beds)
3. Kottarakkara (10 beds)
4. Kidangoor (10 beds)
5. Thiruvally (10 beds)

9.21 One Panchakarma section with 5 beds was sanctioned to the Government Ayurveda Hospital at Payyannur. Also, eleven Ayurveda Dispensaries and one Mobile Dispensary (at Malappuram) were started during 1980-81. The Department of Indian Systems of Medicine spent an amount of Rs. 3.82 crores as Plan and non-plan expenditure during the year. District-wise details of the ayurvedic institutions and number of beds are furnished in Appendix 9.24.

Homoeo

9.22 Under homoeopathic system of medicine, there are altogether 216 institutions in the State. The number of homoeo hospitals increased from 17 in 1979-80 to 24 in 1980-81 and 175 beds were added to the already existing number of 525 during the year. There were 154 homoeo dispensaries in the State during 1979-80. Thirtyeight more dispensaries were opened during

1980-81. The expenditure incurred during the year was of the order of Rs. 0.60 crore both plan and non plan. District-wise details of homoeo institutions are given in Appendix 9.25

9.23 Table 9.6 gives the details relating to registered medical practitioners under the different systems of medicine during the years 1979-80 and 1980-81. It can be seen that there is an increase in the number of 'A' class medical practitioners in all the systems of medicine except 'Unani'.

TABLE 9.6
Medical Practitioners in Kerala

System	Class of Registration	No. of Registered Medical Practitioners	
		1979-80	1980-81
(1)	(2)	(3)	(4)
1. Modern Medicine	A	10,911	11,017
	B	635	635
	Listed	204	204
	Sub Total	11,750	11,856
2. Homoeopathy	A	2,047	2,105
	B	1,486	1,486
	Listed	279	279
	Sub Total	3,812	3,870
3. Ayurveda	A	4,328	4,344
	B	6,100	6,100
	Listed	600	599
	Sub Total	11,028	11,043
4. Sidha	A	47	51
	B	1,218	1,218
	Listed	41	41
	Sub Total	1,306	1,310
5. Unani	A	1	1
	B	51	51
	Listed	5	5
	Sub Total	57	57
Grand Total		27,953	28,136

Source: Registrar, Medical Councils.

Family Welfare Programmes

9.24 The population of Kerala according to 1981 census was 25.40 million recording a growth rate of 19.8 per cent during 1971-81 (as compared to national population growth rate of 24.75 per cent) which is significantly lower than the growth rate of 26.29 per cent recorded by the State during 1961-71. According

to Registrar General's estimates of mid 1971-81, the birth rate in the State was 28.7 and death rate 8.9 per thousand population.

9.25 The Family Welfare Programme covers a number of aspects such as education and motivation for family planning, provision of services, education and training of doctors and other personnel required for the programme, research and the production and distribution of family planning devices. The main objective of the programme is the welfare of the family as a whole through family limitation. Family limitation is attempted through various methods such as sterilisation, I.U.D. insertion, distribution of conventional and oral contraceptives, tubectomy operations etc. The various programmes under family welfare have shown marked progress in 1980-81. As on March 1981, 30.9 per cent of couples in the State were effectively protected by family planning methods as compared to 22.7 per cent for the country as a whole. During 1980-81 the State achieved 113 per cent of the target for sterilization. Only limited achievements could be made as regards IUD, distribution of contraceptives etc. The percentage of achievements have been 70.71 for IUD, 19.8 equivalent cc. users and 4.12 for oral pill users. In order to achieve full targets, in all methods, the performance needs to be further accelerated. The number of tubectomy and vasectomy operations which was 99,026 during 1979-80, increased to 1.30 lakh during 1980-81. The number of I.U.D. insertions increased from the previous year's achievement of 17,017 to 18,000 in 1980-81.

9.26 There are 165 primary health centres (main centres) and 1810 sub centres (maternity and child welfare centres) functioning during the year under review. Immunisation with DPT was provided to 75,000 infants and pre-school children and immunisation in the case of school going children was of the order of 10 lakhs. There were 12 District Family Welfare Bureaus, 1322 rural family sub centres and 28 urban family sub centres, 20 post partum centres and 2 training centres in the State during 1980-81. Expenditure incurred on family welfare programmes since 1974-75 is given in Table 9.7 below

TABLE 9.7
Expenditure on Family Welfare Programmes in Kerala

Year	Amount (Rs. in lakhs)
(1)	(2)
1974-75	277.75
1975-76	394.38
1976-77	632.47
1977-78	431.10
1978-79	462.53
1979-80	523.78
1980-81	584.81*

* Source: Budget in Brief, Kerala 1981-82.

9.27 Table 9.8 shows the expenditure under Health Services for the years 1979-80, 1980-81 and budget estimate for 1981-82.

TABLE 9.8
Expenditure under Health

Item	(Rs. in lakhs)		
	1979-80	1980-81 (R.E.)	1981-82 (B.E.)
(1)	(2)	(3)	(4)
1. Allopathy	3548.90	3994.10	4632.49
2. Ayurveda	309.12	381.89	394.24
3. Homoeopathy	52.26	60.08	63.52
4. Family Welfare	555.55	584.81	730.41
Total	4465.83	5020.88	5820.66

Source: Demands for Grants and Detailed Budget Estimates—1981-82 (Vol. I)

Sewerage and Water Supply.

9.28 As a result of the plan and non-plan efforts of the past we could provide safe drinking water to about 63 per cent of the urban and 29 per cent of the rural population. As regards urban sewerage only two Municipal corporations viz. Trivandrum and Cochin, could be covered so far and that too partially. The coverage is 30 per cent in Trivandrum and 15 per cent in Cochin.

9.29 With the reintroduction of the cent percent centrally sponsored Accelerated Rural Water Supply scheme from 1977-78, the water supply programmes in the State have gained momentum. One hundred and ten rural water supply schemes and four urban water supply schemes (including partially commissioned scheme) have been completed during 1980-81. Thus by the end of the year, 995 rural water supply schemes, 33 urban water supply schemes and 2 urban sewerage schemes were in operation. In addition, 483 rural water supply schemes, 9 urban water supply schemes and 5 urban sewerage drainage schemes were under various stages of execution.

9.30 The loan assistance from the LIC of India is a major source of finance for the sewerage and water supply programmes in the State. Thirty-one out of 33 urban water supply schemes and 186 out of the 995 rural water supply schemes in operation in the State were financed by the LIC of India at one stage or the other. The LIC assistance for urban water supply schemes during the year 1980-81 cost Rs. 187 lakhs (for 5 water supply schemes and 2 sewerage schemes) and rural water supply schemes Rs. 86.7 lakhs (for 64 rural water supply schemes).

9.31 In view of the heavy investment required for the realisation of the targets set for the International

Decade for Water Supply and Sanitation (1981-90), efforts are being made to secure substantial loan assistance from the World Bank (IBRD) and bilateral assistance from foreign countries. Negotiations for assistance are in progress with IBRD for 3 urban and 7 rural water supply schemes. Further, the Netherlands Government has come forward with offer of assistance for piped water supply programmes in the State under bilateral terms. Assistance for 4 rural water supply schemes is already being availed of while negotiations for assistance for three more comprehensive rural water supply schemes are under advanced stages.

9.32 For the maintenance of environmental hygiene and prevention of the spread of contagious and water-borne diseases, the programme of distribution of ESP type latrines in rural areas through the C.D. Blocks continued during 1980-81. The number of ESP type latrines distributed under the programme has increased from 21,767 in 1980-81 to 22,000 in 1981-82 (anticipated). The scheme for the provision of drinking water to rural areas through open dug wells continued during 1980-81. The number of open dug wells constructed during 1980-81 was 993. The anticipated achievement during 1981-82 is 1200 wells. The Kerala State Board for the Prevention and Control of Water Pollution constituted in 1974 to guard against indiscriminate pollution of water resources and to maintain its wholesomeness continued its functions during the year under review.

9.33 The expenditure for sewerage and water supply schemes under plan and non-plan accounts was about Rs. 19.18 crores in 1980-81. It is expected to be of the order of Rs. 24.33 crores in 1981-82.

Housing

9.34 A number of agencies are involved in the housing programmes in the State. The progress of housing schemes implemented by these agencies during 1980-81 is given in the following paragraphs.

1. Board of Revenue

9.35 The major housing schemes implemented by the Board of Revenue are:—

- (i) The low income group housing scheme;
- (ii) The middle income group housing scheme;
- (iii) The village housing project;
- (iv) The housing scheme for rural workers;
- (v) Provision of house sites to rural workers and
- (vi) Settlement of agricultural workers.

9.36 Under the housing schemes implemented by the Board of Revenue 9982 houses were constructed at a cost of Rs. 446.05 lakhs in 1980-81. Under the scheme for the provision of house sites to landless rural workers, an extent of 211.67 acres of land was

purchased at a cost of Rs. 102.73 lakhs for distribution among the landless families during 1980-81.

2. Finance Department

9.37 The State Finance Department has issued house construction advances to the tune of Rs. 400 lakhs to Government servants during 1980-81.

3. Public Works Department (B & R)

9.38 The Public Works Department is responsible for the implementation of the Rental Housing Scheme and the scheme for construction of quarters to Government servants. The expenditure under the rental housing scheme in 1980-81 was Rs. 61.48 lakh. Under the scheme construction of quarters to Government servants, a sum of Rs. 27.42 lakhs was spent during 1980-81.

4. Police Department

9.39 The Police housing scheme implemented by the Inspector General of Police involves the construction of family quarters and barracks for police personnel to achieve a satisfaction level of 58.2 per cent by 1983-84. Funds are provided for the scheme under plan and non-plan accounts. Up to the end of 1980-81, 7042 housing units and 3250 barracks accommodation were provided under the scheme.

5. Housing Board

9.40 As on 30-6-1980, the Housing Board has taken up 51 public housing schemes. These schemes involve the construction of 62,243 houses for different categories of people. These schemes are financed mainly by HUDCO loan assistance and Government provides seed finance by way of public borrowing. As on 1980-81 the Board has incurred an expenditure of Rs. 507.22 lakhs on area development and Rs. 1182.30 lakhs on construction of houses under its public housing schemes. Of the 51 public housing schemes 9 were taken up in 1980-81. The expenditure on area development and house construction during 1980-81

was Rs. 274 lakhs and Rs. 243 lakhs respectively compared to the expenditure of Rs. 18.76 lakhs and Rs. 138.28 lakhs respectively in 1979-80.

9.41 A major step taken by the Board for arresting the present rising trend in urban land value is the advance Registration Schemes for developed plots/plot with house/apartment under its public housing scheme. As on 30-6-1980 about 7,700 persons have registered their names under this scheme.

9.42 Under its housing loan scheme, the Board has sanctioned upto 1980-81 loans for house construction to 13,925 persons and 12,150 houses have been constructed by the end of 1980-81. The number of houses constructed under the scheme in 1979-80 was 3,725. In 1980-81, 6,600 houses were constructed.

6. Co-operative Department

9.43 The Co-operative Department is implementing with LIC and HUECO loan finance two major housing schemes:—

- (i) Co-operative housing scheme; and
- (ii) Co-operative housing scheme for economically weaker sections of the society.

9.44 Under the co-operative housing scheme, the Co-operative Housing Federation and its primaries have sanctioned loans (Rs. 579.73 lakhs) for the construction of 962 houses during 1980-81. Under the Co-operative Housing Scheme for economically weaker sections 7634 houses have been constructed in 1980-81.

7. Housing Programmes of the Development Authorities

(a) Greater Cochin Development Authority (G.C.D.A.)

9.45 Under its various housing schemes the Greater Cochin Development Authority has constructed 1633 houses during 1980-81 for which Rs. 700.76 lakhs was spent. The anticipated achievement during 1981-82 is 7,722 houses spending Rs. 982.74 lakhs. Details are given in Table 9.9.

TABLE 9.9

Details of Housing Schemes under the Greater Cochin Development Authority

Item	Achievement					
	Upto 1979-80		1980-81		1981-82 (Anticipated)	
	Physical (Nos.)	Financial (Rs. lakhs)	Physical (Nos.)	Financial (Rs. lakhs)	Physical (Nos.)	Financial (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. No. of Houses /Flats Constructed						
(a) Slum Houses	..		445		1000	
(b) E.W.S.	..		292		5100	
(c) L. I. C.	..		590		824	
(d) M. I. G.	148		292		520	
(e) H. I. C.	..	65.00	..	700.76	60	982.74
(f) Houses for Working Journalists	..		14		14	
(g) Marine Drive Flats	..		..		204	
Total	148	65.00	1633	700.76	7722	982.74

(b) *Calicut Development Authority*

9.46 The Calicut Development Authority has evolved a massive housing programme by acquiring necessary land and developing all infrastructure facilities in different areas coming under the jurisdiction of the Authority. Altogether 13.87 hectares of land has so far been acquired and an amount of Rs. 34.02 lakhs have been spent so far.

9.47 The Calicut Development Authority has a slum clearance programme for which a survey was conducted to identify the slum areas of the city. The slum areas are mostly located in the beach area and at Puthiappa, Vellayil, Yothi etc. The Authority proposes to acquire 1.2 hectares of land at Kothi and to construct residential flats for the rehabilitation of the slum dwellers. The Government have sanctioned a loan of Rs. 7.5 lakhs to meet the land acquisition cost.

8. *Other Agencies*(a) *Kerala State Financial Enterprises*

9.48 Under its hire purchase scheme started in 1979-80 the Kerala State Financial Enterprises provides

loan finance up to a maximum of Rs. 25,000 to middle and low income group people for the extension and improvement of existing houses. During 1980-81 the Enterprises has sanctioned 127 loans involving Rs. 16.36 lakhs.

(b) *L.I.C. of India*

9.49 Upto 1980-81, the Trivandrum and Kozhikode Divisions of the Life Insurance Corporation of India have financed the construction of 2,146 houses involving an advance of Rs. 561.74 lakhs, under their loan schemes for the benefit of their employees and the general public. During 1980-81, the number of houses constructed under these schemes was 144. Upto 1980-81 the Life Insurance Corporation has also given a loan of Rs. 1879.90 lakhs to State Government (including special loan of Rs. 150 lakhs) and Rs. 1700 lakhs to the Cooperative Housing Federation for their house construction programmes. Details of housing programmes of the various implementing agencies are furnished in Table 9.10.

TABLE 9.10

No. of Houses Constructed—Physical and Financial Achievements

Details of Schemes and Agency	1979-80		1980-81		1981-82*(anticipated)	
	Physical (Nos.)	Financial (Rs. lakhs)	Physical (Nos.)	Financial (Rs. lakhs)	Physical (Nos.)	Financial (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Housing Schemes implemented by the Board of Revenue						
1. Low Income Group Housing Scheme	183	25.61	180	18.16	536	75.00
2. Middle Income Group Housing Scheme	174	41.62	232	62.98	200	61.00
3. Village Housing Project	473	24.39	640	53.53	280	28.50
4. Construction of Houses to Rural Workers	1098	11.25	8065	205.01	3330	107.00
5. Provision of Rural House Sites (Area and amount involved)	178(A) 27(C) .098 Sq. Links (Land)	70.72	211(A) 67(C) (Land)	102.73	..	80.00
6. Settlement of Agricultural Labourers	811	4.16	865	3.64	..	4.99
Sub Total	2739(+) (Land)	177.75	9982(+) (Land)	446.05	4346	356.49
II. Co-operative Housing Schemes						
1. Co-operative Housing Scheme	1364	348.20	962	579.73	1608	518.31
2. Co-operative Housing Scheme for Economically Weaker Sections	18046@ (Upto 1979-80)	670.32@	7634	383.74	6500	489.74
III. Housing Schemes of the Housing Board						
A. Houses/Flats Constructed under Public Housing Schemes	N.A.	..	N.A.	N.A.	N.A.	N.A.
B. Houses Constructed under Loan Schemes	3725	N.A.	6600	N.A.	N.A.	N.A.

@ Up to the concerned financial year
4/855/MC.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
C. Special Schemes (Housing Schemes of the Government Implemented by Housing Board)						
(i) Housing Schemes for Economically Weaker sections in Urban Areas	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
(ii) Housing Schemes for Economically Weaker Sections with G.I.C. Loan	500	"	70	"	"	"
(iii) Chenkalchoola Slum Clearance Scheme	160	"	N.A.	"	"	"
(iv) Housing Loan Scheme with Kerala Toddy Welfare Fund Board Loan	1340	"	1500	"	"	"
(v) Bank Loan Schemes for Construction of Houses	6600	"	4000	"	"	"
(vi) Composite Housing Schemes	1100	"	3000	"	"	"
(vii) Housing Scheme for Flood Victims	170	"	N.A.	"	"	"
(viii) Housing Scheme for Working Journalists	14	"	N.A.	"	"	"
Sub Total III	13609	..	15170	..	..	..
IV. House Construction Advance to Government Servants Sanctioned by the Finance Department	N.A.	298.41	N.A.	400.00	N.A.	200.00
V. Housing Schemes of the Tribal Welfare Department	803	24.24	2092	57.73	718	15.49
VI. Housing Schemes of the Harijan Welfare Department	431	40.62	415	91.43	96	63.74
VII. Housing Schemes of the Development Corporation for the Welfare of S.C. and S.T.	-	..	8894	24.89	..	..
VIII. Housing Schemes of the Fishermen's Welfare Corporation	..	..	9000@ (up to 31-3-1981)	194.00	..	..
IX. Housing Schemes of the Fisheries Department	..	..	5726@ (up to 31-3-1981)	2.75	..	..
X. Rental Housing Scheme (PWD)						
(a) Rental Housing Scheme	..	22.49	10** (works) 9**	61.48 27.42	9** (works 9**)	22.33 15.10
(b) Quarters to Government Servants	..	28.34	(works)		(works)	
XI. Police Housing Scheme						
(a) Barracks for Men	100	65.26	200	56.52	..	60.00
(b) Family Quarters	142		111			
XII. Housing Schemes of Development Authorities						
(a) Greater Cochin Development Authority	148	65.00	1633	700.76	7722	982.74
(b) Calicut Development Authority	..	..	..	..	..	..
Grand Total I to XII	19336(+) 18046@ (Land)+	1070.31+ 670.32@	47093(+) 14726@ 9** (Land)	3026.50	20990+ 18**	2701.61

Note : * Provisional

@ Up to the concerned financial year

** No. of works taken up

Land : Acre, cent, squire links

(+) Plus

Urban Development

9.50 The major agencies concerned with the development programmes of the urban local bodies and development authorities in the State are the Government Departments of Town Planning and Municipal

Administration and the Kerala Urban Development Finance Corporation. These three agencies together incurred an expenditure of Rs. 560.09 lakhs during 1980-81 under plan and non-plan account. (See Table 9.11)

TABLE 9.11

Agency	Plan		Non-Plan		Total	
	1980-81	1981-82	1980-81	1981-82	1980-81	1981-82
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Expenditure of the Town Planning Department	31.68	43.51	28.26	31.54	59.94	75.05
2. Expenditure of the Department of Municipal Administration	203.00	203.00	84.73	122.50	287.73	325.50
3. Amount Disbursed to Urban Local Bodies by the Kerala Urban Development Finance Corporation	213.02	296.49	..	..	213.02	296.49
Total	447.70	543.00	112.99	154.04	560.69	697.04

Town and Country Planning

9.51 The Department of Town Planning with its 7 District Planning Units, 3 Regional Planning Units and 11 special cells/units engaged itself in the preparation of Master Plans, Development Plans and Traffic Operation Plans for urban local bodies in the State during 1980-81. The scheme "Preparation of Master Plan for Angamaly" was taken up in 1981. Government sanctioned the following schemes/units also in 1981.

- (i) Special project division for slum and small towns; and
- (ii) District Planning Unit, Alleppey.

9.52 The Department of Town Planning has drawn up a massive programme for slum clearance/improvement covering major slums in all Municipal Towns and Corporations in the State, with a time bound programme of eradicating slums within a period of 10 years at a total cost of Rs. 20 crores. Under this scheme, the following 15 Town/Corporation areas have been taken up for slum clearance/improvement.

Name of Towns/Corporation	Name of slum
1. Trivandrum	Karimadom
2. Quilon	S.M.V. palace area
3. Kayamkulam	Fish market area
4. Kottayam	Savakottah
5. Idukki	Cheruthoni
6. Tellicherry	Chalil
7. Calicut	Near muslim cemetery
8. Chalakudy	Tramway land
9. Thodupuzha	Town centre
10. Alleppey	Komady
11. Cochin	Pipe line colony
12. Cannanore	Thayyil
13. Irringalakuda	Canal basin
14. Badagara	Pandikasala
15. Thiruvalla	Pannithadom

9.53 The Town Planning Department has identified 24 small and medium towns in the State for Central Assistance under the scheme, "Improvement and Development of Small and Medium Towns". So far project reports were prepared and forwarded to Government of India for consideration for 12 towns viz. Guruvayoor, Kottayam, Trichur, Changanacherry, Kayamkulam, Tellicherry, Tirur, Badagara, Malappuram, Perumbavoor, Alwaye and Parur. Out of these, the Government of India have provided financial assistance to the Guruvayoor and Kottayam towns during 1979-80, and to Trichur, Changanacherry, Kayamkulam, Tellicherry and Tirur towns during 1980-81 and to Badagara during 1981-82.

9.54 A project on site selection methodology for locating industries in rural areas sponsored by the Department of Science and Technology, Government of India is nearing completion.

9.55 Financial assistance under both plan and non-plan provided by the Town Planning Department, Department of Municipal Administration and the Kerala Urban Development Finance Corporation for various schemes is shown in Table 9.12

Urban Development Programmes Under Municipal Administration

9.56 The Director of Municipal Administration provides financial assistance under plan and non-plan schemes to urban local bodies for their non-remunerative development programmes. The total financial achievement under plan and non-plan schemes of the Department of Municipal Administration was Rs. 287.73 lakhs (Rs. 203 lakhs under plan) during 1980-81. The non-plan grant assistance to Urban Local Bodies for general purposes and specific purposes was Rs. 70.16 lakhs during 1980-81. The expenditure under slum clearance/improvement was Rs. 65 lakhs and the number of beneficiary local bodies under the scheme was 13.

TABLE 9.12

Financial Assistance to Urban Local Bodies and Development Authorities for Urban Development (Plan and Non-Plan)

Name of Schemes	C.T.P.		Financial Agency DMA		KUDFC		Total	
	1980-81	1981-82	1980-81	1981-82	1980-81	1981-82	1980-81	1981-82
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Assistantance to Planning and Development Authorities for the implementation of Development Plans (Plan)	10.00	16.00	..	..	..	..	10.00	16.00
2. Assistance to Development Authorities for Urban Environmental Improvement, Land acquisition, Creation of Planning and Development Authorities and Development and Growth Centres (Plan)	13.50	8.00	..	..	..	..	13.50	8.00
3. Assistance for Improvement and Development of Small, Medium and Intermediate Towns (Centrally Sponsored—Plan)	..	..	132.00	132.00	..	..	132.00	132.00
4. Assistance to Urban Local Bodies for Non-Remunerative Works (Plan)	..	..	6.01	6.00	..	..	6.01	6.00
5. Assistance to Urban Local Bodies for Slum Improvement (Plan)	..	..	65.00	75.00	..	..	65.00	75.00
6. Grant Assistance to Urban Local Bodies (Non-Plan)	..	..	70.16	105.22	..	..	70.16	105.22
7. Assistance to Urban Local Bodies for Remunerative Works (Plan)	..	..	..	..	213.02	296.49	213.02	296.49
Total	23.50	24.00	273.17	318.22	213.02	296.49	509.69	638.71

C.T.P=Chief Town Planner.

D.M.A=Director of Municipal Administration.

K.U.D.F.C=Kerala Urban Development Finance Corporation.

Kerala Urban Development Finance Corporation

9.57 Kerala Urban Development Finance Corporation Limited continued its loaning operations during the year under review. More than 51 per cent of shares of the Corporation is held by the Government of Kerala and the rest by the urban local bodies in the State consisting of 42 Municipalities, 3 Municipal Corporations, 3 Development Authorities and the Township at Guruvayoor. As on 31-12-1980 the contribution of the Government towards share capital was Rs. 9,85,100 and that of urban local bodies of Rs. 9,30,500. The Corporation expects a profit of Rs. 3 lakhs during 1981-82 against Rs. 2.93 lakhs during 1980-81. Steps are being taken to increase the paid up capital of the Corporation and to convert the Corporation into a Public Limited Company. The source of working capital of the company is the proceeds of debentures floated every year by the Company. A total loan of Rs. 12.23 crores has been raised by floating debentures. As on 31-3-1981 the Corporation rendered loan assistance amounting to Rs. 15.03 crores to 40 urban local bodies for taking up 277 schemes. By 31st December 1981 the Corporation disbursed total loan of Rs. 2.07 crores. During 1981-82 the Corporation anticipates to give a loan of Rs. 2.96 crores to 33 urban local bodies for 61 schemes.

9.58 The total disbursement by the Corporation to urban local bodies as on 31-3-1981 was Rs. 17.10 crores. Out of the 277 schemes financed by the Corporation till 31-3-1981, 208 schemes have been completed and commissioned. Except for a few, all the remunerative schemes are generating reasonable income ranging from 12 per cent to 50 per cent capital cost.

Greater Cochin Development Authority (G.C.D.A.)

9.59 The Greater Cochin Development Authority was constituted in 1976 under the provisions of Travancore and Madras Town Planning Acts. The town planning schemes of the Authority are implemented through notification of the area under the Madras Town Planning Act 1920 which empowers G.C.D.A. to regulate the development of the area. Essential land is acquired for roads, canals, schools, stadia, parks, markets and planned residential and industrial development. The development plan for the region is gradually implemented through sector wise schemes availing funds from various financial institutions. The Authority has constructed 1633 houses under different schemes during 1980-81. The anticipated achievement in 1981-82 is 7722 houses. The budgeted expenditure of the Authority during the year 1980-81 was Rs. 327.90 lakhs.

Mass Communication

Radio

9.60 Under the scheme for the distribution of community listening sets at subsidised rates/free of cost for installation at harijan predominant areas and tribal centres, 52 community listening sets were distributed during 1980-81.

Films

9.61 In order to encourage production of feature films in Kerala, Government has introduced an incentive scheme of awarding subsidy to Malayalam feature films shot fully in Kerala. This incentive scheme has started yielding results. The number of films awarded subsidy under the scheme was 50 in 1980-81. The Public Relations Department has produced two documentary films during 1980-81 for public exhibition, at a cost of Rs. 1.58 lakhs. With the film prints received from the Films Division of the Government of India the Department organised 1200 film shows during the year. For the promotion of Malayalam film art the State Government has instituted awards for excellence in various fields of Cinema and twenty awards are being given every year at the Annual Film Award Fair. In addition, the Government have introduced a Welfare Fund for Cine Artistes. Under this scheme 81 cine artistes/ their dependents in indigent circumstances are in receipt of monthly pension during 1980-81.

Press

9.62 As a major step aimed at building up a healthy and responsible press in the State, the Government have established a Press Academy at Ernakulam as an autonomous institution. The construction of a building complex for the Academy with library, hostel for trainees and quarters for staff is in progress at Trikkakara. Government have so far sanctioned a grant of Rs. 11.75 lakhs for the construction of the building and for other activities of the Academy. The Academy has started a bilingual monthly digest titled "Media Digest".

9.63 Apart from the arrangements made for inter-state exchange of journalists to project the image of the State and to promote national integration, Press tours have been arranged by the Public Relations Department to areas of developmental and cultural importance in the State with a view to publishing articles and photographs in News papers. The Kerala State Housing Board has taken up a housing scheme exclusively for the benefit of the working journalists. The working journalists and their dependents in distress are granted pension from the welfare fund for working journalists. The number of recipients of pension under the scheme was 101 in 1980-81.

4/655/MC.

Publicity

9.64 The fortnightly press handout 'the Kerala News Letter' continued to feed during the year about 100 news papers published from other states. About 8,000 press handouts were issued during the year. "Janapatham", the Malayalam magazine, and "Kerala Calling", the English Monthly, continued their publications during 1980-81. The Public Relations Department has processed and issued during 1981 advertisements worth Rs. 40 lakhs for the various departments of Government. In addition, display advertisements worth Rs. 5 lakhs have also been issued by the Department. For giving adequate publicity for the various developmental and welfare activities of Government, the Public Relations Department participated in various All-India Exhibitions, apart from organising several rural exhibitions. The Department acted as the co-ordinating agency in putting up the Kerala Pavilion in the Indian International Trade Fair held at New Delhi during November-December, 1981.

9.65 Important physical achievements of the Public Relation Department are given in Appendix 9.46

Welfare of Scheduled Castes Scheduled Tribes and Other Backward Classes

Welfare of Scheduled Castes

9.66 The scheduled castes constitute nearly 8.3 per cent of the State's population. The majority of the scheduled castes belong to the agricultural labour class who live under conditions of economic insecurity and social inequality. Therefore, the welfare activities undertaken to improve their lot are designed in such a way as to raise their social, educational and economic status to the level attained by the forward communities within a reasonable period. As the major portion of the fund allotted for the welfare of backward classes is utilised for educational schemes, they have achieved fairly good progress in the educational front. The enrolment ratio of scheduled castes in primary classes has almost reached the level of forward communities. The number of school going and college going children from scheduled castes and scheduled tribes is shown in Appendices 9.47 and 9.48 respectively.

9.67 At present 10 per cent of the posts under public services are reserved for scheduled castes. Special recruitment is also being made to gazetted and non-gazetted posts in all Government Departments. The number of persons belonging to scheduled castes and scheduled tribe communities in the gazetted and non-gazetted posts in Government Departments as on 1-7-1981 is shown in Appendix 9.49. The number of educated scheduled caste/tribe persons seeking employment (as on 31-10-1981) according to Employment Exchange figures is shown in Appendix 9.50. In order to ensure

full utilisation of 10 per cent of the general sector outlay in the case of plan schemes for the benefit of scheduled castes, special component plans for Sixth Five Year Plan (1980-85) and for annual plans 1980-81, 1981-82 1982-83 have been prepared. As against an expenditure of Rs. 8.71 crores in 1979-80, the expenditure under the Special Component Plan for 1980-81 was Rs. 14.63 crores. The approved Special Component Plan outlay for 1981-82 is Rs. 20.17 crores.

9.68 Upto the end of December 1981, 39147 persons belonging to scheduled castes/tribes were benefited by the programme for distribution of surplus lands involving an area of 23068 hectares. A total area of 25,394 hectares of Government Poramboke lands was distributed to 85799 scheduled castes/tribe families up to the end of September 1981. The State Government have given instruction to the Departments concerned to select beneficiaries of Integrated Rural Development Programmes in such a way that at least 30 per cent beneficiaries belong to scheduled caste/tribe communities.

9.69 During the year 1980-81 pre-matric scholarships were given to 7.39 lakh students and postmatric scholarships to 2.64 lakh students (including 2.04 lakh students of forward communities). Three new welfare hostels were started at Uliyacoil in Quilon district, Elathur in Kozhikode district and Kaviyoor in Alleppey district. In addition to this a new cosmopolitan hostel was also started at Kasargode. Government have accorded sanction for starting 25 balavadi-cum feeding centres. Most of them have been started during the year and 150 balawadi-cum feeding centres are functioning at present. A pre-Examination Training Centre at Trivandrum was started during the period under review. The training centre at Vijayaraghavapuram has been ordered to be converted into a production-cum-training centre. One show room was opened in Trivandrum for the display and sales of articles manufactured in training institutions.

9.70 At present there are 475 colonies under the control of Harijan Welfare Department. About 15,000 families out of a total of 4 lakh families of scheduled castes in the state could be rehabilitated in these colonies. During the year 1980-81 housing grants were given to 3024 families. Out of this 266 houses have been completed. The others are under various stages of construction. Forty-seven persons were given interest free housing loans and 48 persons were given interest-free industrial loans. Out of a provision of Rs. 3 lakhs Rs. 80,700 was distributed as tiling grants upto 31-12-1981 at the rate of Rs. 2,500 and Rs. 1,400 was expended as thatching grants at the rate of Rs. 75, 8 drinking water wells were constructed during 1980-81. Assistance was given to 200 couples who entered into intercaste marriages during 1981. Under the scheme

"improvement to colonies" 3614 houses were electrified, bath-rooms and latrines were constructed to 3603 and 4116 families respectively. A separate police squad was formed in Palghat to deal with the offences under Protection of Civil Rights Act 1955.

Development Corporation for Scheduled Castes and Scheduled Tribes

9.71 The Kerala State Development Corporation for Scheduled Castes and Scheduled Tribes is charged with the responsibility of undertaking the major task of co-ordinating and consolidating harijan development activities in general and undertaking programmes of economic uplift in particular. Of the functions of the Corporation, construction of houses and issue of loans for economic activities stand foremost. In the first series of houses under this scheme, the Corporation constructed 2,200 houses at a unit cost of Rs. 5000. In the second series the Corporation has taken up the construction of 10,000 low cost houses at a unit cost of Rs. 3000 and 9246 houses have been completed so far. In the third series, which is also intended for low cost housing 2749 houses have been completed at a unit cost of Rs. 3700. Loans upto Rs. 7500 at 4 per cent interest were given to 2105 persons for the purchase of land for agricultural purpose. Over 2400 persons were given industrial loans up to a maximum of Rs. 5000 for starting small business, trade or industry. So far 17 scheduled caste persons have availed loan facility for starting industrial units in mini industrial estates. Under hire purchase scheme for autorickshaw 232 persons were benefited. Five persons were given loan for the purchase of machinery for productive purposes (power tillers, flour mills and pumpsets). A loan assistance of Rs. 31.28 lakhs was sanctioned to 13 co-operative societies for the development of traditional cottage industries.

Welfare of Scheduled Tribes

9.72 The tribal population of Kerala according to the socio economic survey of scheduled tribes conducted by the Directorate of Economics and Statistics during 1976-78 was 20,042 in 41,452 households. Community-wise population is shown in Appendix 9.52. Though all the districts account for some tribal population, the largest concentration of tribals are found in the districts of Cannanore, Wynad, Palghat and Idukki. Paniyans constitute the largest community with 23 per cent of the total population and Mala Arayans stand second with 12 per cent. Eventhough the Paniyan community is the largest among the tribals they are backward in the present socio-economic set up compared to other tribal communities. Mala Aryans, Kanikkar, Kurichian, Ulladan and Urali are comparatively advanced while Kattunaickan, Tenkuruman, Paniyan, Kuruman, Hill Pulaya and Naikan Communities are

very backward. Malapandarans, Cholanaickans and Koragas are still on the pre-agricultural stage of development. The Cholanaickans of Malappuram District and Kurumbas of Attappady are recognised as primitive groups; Koragas and Kadars are also found to have primitive characteristics.

9.73 The level of literacy among the tribals is only 26.55 per cent (See Appendix 9.55) against 60.42 per cent for the general population in the State. There is great disparity between the districts in the matter of education. It can be seen that literacy percentage among tribals of Trivandrum and Kottayam districts is higher than that in other districts. The literacy percentage of the tribals in Trivandrum and Kottayam Districts are 63.04 and 75.19 respectively. Kanikars are the predominant tribal community in Trivandrum District who have considerable extent of land in their possession and their exposure to urban areas has considerable influence on their life style. Similarly Mala Arayans of Kottayam, that too Christian converts, constitute the major group in Kottayam. They are also land owning tribals much exposed to modern living style.

9.74 Among the total population of the tribals in Kerala 49.35 per cent are workers, and among the workers 71.73 per cent are agricultural labourers and 10.85 per cent are cultivators. About 70 per cent of the tribal house holds possess land and average size of the holding per family is 0.92 hectare, per capita holding being only 0.13 hectare.

9.75 The flow of funds from various sources to tribal sub plan areas during 1981-82 is shown in Table 9.13.

TABLE 9.13

Item	Amount (Rs. lakhs)
(1)	(2)
1. Special Central Assistance (including programmes for Primitive Tribes)	50.00
2. State Sector Schemes	325.32
3. Assistance from other Central Ministries	134.16
4. Institutional Finance	150.00
Total	659.48

9.76 The expenditure incurred under special central assistance for sub plan programmes for the last few years is shown in Table 9.14.

TABLE 9.14
Special Central Assistance for Sub Plan Schemes
(Rs. lakhs)

Year	Amount Allotted	Amount Spent
(1)	(2)	(3)
1974-75	2.50	1.45
1975-76	15.00	15.00
1976-77	26.00	24.61

(1)	(2)	(3)
1977-78	25.00	21.90
1978-79	26.00	31.89
1979-80	21.24	20.87
1980-81	66.90	64.82*

* Provisional.

9.77 In the past, education of tribal people has been given great importance. Tribal students studying in pre-matric and post matric are being given scholarships and stipends. The Tribal Welfare Department is running 30 welfare hostels and 54 G.R.B. Schools/hostels with a view to providing free accommodation and boarding to tribal students. Four new hostels were started during the year 1980-81. Tutors have been appointed to give special coaching to students in the welfare hostels. Radio sets, books, news papers etc., have been given to 20 hostels. Financial assistance was also given to 161 students who failed in the S.S.L.C. Class to study in tutorial colleges. Fourteen nursery schools and 117 balawadies are functioning under the Department in various settlements to provide pre-primary education and nutritious food to the tribal children in the age group 3-5 years.

9.78 There are 23 industrial training centres and 2 production-cum-training centres for imparting training to tribal youths. A scheme for giving training in forestry operation, such as logging and cutting of trees etc., is also being implemented through the Forest Department. Construction of 1330 houses has been sanctioned during 1980-81 for the benefit of tribals. Five tribal hamlets were taken up for overall development, Forty-five, colonies/settlements were electrified. Twenty-seven colonies have been provided with protected water supply and wells were sunk in internal tribal settlements. During 1980-81 1500 tribal families were given re-thatching grants at the rate of Rs. 75 per family for thatching their huts.

9.79 Eighteen ayurveda dispensaries, 13 allopathic dispensaries 5 midwifery centres and one mobile medical unit are also functioning under the Tribal Welfare Department. Ten medical camps attended by expert doctors were also conducted during 1980-81 in the interior tribal settlements.

9.80 So far 1162 bonded labourers have been indentified in the State. Of the bonded labourers belonging to scheduled tribes 279 have been rehabilitated in three co-operative farms. A collective farm for rehabilitating 60 bonded labourers belonging to scheduled tribes has been established at Kondecherry Village of Kozhikode District during 1980-81. The expenditure during 1980-81 for the tribal development programme is shown in Table. 9.15

TABLE 9.15
Expenditure on Tribal Development Programmes
(Rs. lakhs)

Item	1980-81*
Plan Schemes	54.40
Non-Plan Schemes	129.32
Centrally Sponsored Schemes	10.13
Special Central Assistance	64.82

*Provisional

Social Welfare

9.81 The social welfare programmes in the State fall broadly under four major heads viz., child welfare, women's welfare, welfare of physically handicapped, and Social defence and Social Security.

A. Child Welfare

(i) Supplementary Nutrition

9.82 The number of children (and nursing and expectant mothers) provided with supplementary nutrition under the various nutrition programmes sponsored by Governmental agencies increased from 36.55 lakhs in 1979-80 to 36.85 lakhs in 1980-81.

(ii) Health Care :

9.83 In order to protect the health of the mal-nourished children, prophylaxis against nutritional

anaemia and blindness due to vitamin A deficiency was vigorously carried out by health services Department during 1980-81. The number of beneficiary children under the prophylaxis programme increased from 20.13 lakhs in 1979-80 to 20.29 lakhs in 1980-81. A Comprehensive School health programme was introduced during 1979-80 and the health card scheme for school children in 1980-81. The number of schools covered by the programme was 798 in 1980-81 and the number of children subjected to physical examination was 1.48 lakhs. The number of children advised for referral service increased from 10,118 in 1979-80 to 18,373 in 1980-81.

(iii) Pre-School Education

9.84 Pre-School education is at present mostly managed by voluntary organisations with or without aid from Governmental agencies. The Mahilasamajams play a prominent role in the provision of this facility. Table 1 gives the number of creches and balawadis/nurseries receiving assistance from the Social Welfare Department, Development Department, the Social Welfare Advisory Board and the Kerala State Council for Child Welfare. The number of such institutions that received assistance from these agencies increased from 2660 in 1979-80 to 2925 in 1980-81. The Social Welfare Department is also running 30 day care centres for the benefit of 1500 children of working class women engaged in operations connected with coir, agriculture and hosiery industry.

TABLE 9.16
Pre-School Educational Institutions Receiving Financial Assistance from Government Agencies

Name of Agency	No. of Institutions Assisted					
	1979-80		1980-81		1981-82 (Anticipated)	
	No. of Institutions	No. of Beneficiaries	No. of Institutions	No. of Beneficiaries	No. of Institutions	No. of Beneficiaries
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Creches :						
1. Social Welfare Department	188	7520	275	11000	275	11000
2. Social Welfare Advisory Board	120	3000	119	2975	139	3875
3. Kerala State Council for Child Welfare	22	..	40	..	71	..
Total I	330	10520*	434	13975*	485	14875*
II. Nurseries/Balawadies						
1. Social Welfare Department						
2. Social Welfare Advisory Board	320	9305	271	9005	213	8950
3. Development Department	1951	2,59,630	2161	2,80,990	2361	2,06,990
4. Kerala State Council for Child Welfare	59	..	59	..	59	..
Total II	2330	2,62,935*	2491	2,89,935*	2633	31,15,880*
GRAND TOTAL	2660	2,73,455*	2925	3,03,910*	3118	3,30,755*

* Excludes beneficiaries under State Council for Child Welfare

9.85 The Integrated Child Development Services started during the Fifth Plan period has been extended to seven more Blocks during 1980. The number of ICDS has increased from 18 in 1980-81 to 23 in 1981-82. The number of Anganwadis under the ICDS in the State was 1800 in 1980-81. These Anganwadis provide a package of services to 1.3 lakh children in the State. Of these 0.92 lakh children get the benefit of pre-school education programme of the Anganwadis.

9.86 In order to produce sufficient number of trained teachers for pre-school education, the Kerala State Child Welfare Council is running 3 training centres for multipurpose child welfare workers. During 1980-81, 168 Balasevikas were trained.

9.87 Four Welfare Extension Projects (urban) and a Pre-School Project are now functioning in the State with financial assistance from the Central Social Welfare Advisory Board. The pre-school Project at Trivandrum has benefited 100 children in 1979-80 and 93 in 1980-81. The four Welfare Extension Projects (Urban) at Kottayam, Calicut, Trivandrum and Trichur provide a closely knit programme of creche, balawadi, craft and social education for adult women and youth and maternity and child welfare services. The number of beneficiaries under these programmes in 1980-81 was 258.

(iv) *Recreation*

9.88 The Social Welfare Advisory Board is extending financial assistance to voluntary agencies for Holiday Camps for boys and girls belonging to low income group families at places away from their habitual environment. The number of such camps conducted in 1980-81 was 109 and these benefited 5460 children. The previous years achievements were 96 and 4800 respectively.

B. Women's Welfare

9.89 Organisations like the Mahilasamajams play a vital role in the socio-economic betterment of women. At present there are 2361 such organisations under the patronage of the Development Department.

(i) *Education and Training*

9.90 Under the programme for providing educational facilities to adult women, the Social Welfare Advisory Board has extended financial assistance to 77 organisations in 1979-80 and 153 organisations in 1980-81. The number of adult women of the age group 18-30 benefited under this programme increased from 1818 in 1979-80 to 2950 in 1980-81. Attached to the 9 centrally sponsored ICDS projects in 1980-81, 21,000 adult women of the age group 18 to 35 are provided functional literacy education and training in crafts such as tailoring, mat making, plastic knitting

kitchen garden, book-binding etc. Under the vocational training programme for women, the Central Social Welfare Board has extended financial assistance to 41 women's organisations in 1979-80 and 84 in 1980-81. The number of women benefited under the scheme increased from 913 in 1979-80 to 1743 in 1980-81.

(ii) *Employment*

9.91 Under the scheme for providing self employment to women the State Government extends financial assistance to deserted women, widows etc., for starting small trades or business to eke a living. During 1980-81, 2500 women were benefited under the scheme. Financial assistance is also given to women's organisations for undertaking employment programmes for the benefit of women. Under this scheme non-recurring grant assistance upto a maximum of Rs. 10,000 was given to 47 women's organisations during the year 1980-81.

9.92 Under the scheme for socio-economic programmes for employment to low income groups, the Social Welfare Advisory Board is giving financial assistance to women's organisations for generation of employment and income to women. The number of organisations assisted under the programme was 53 in 1979-80. During the year 1980-81 (up to January 1981) an assistance of Rs. 11.5 lakhs was given to 32 organisations. Up to 1979-80 the Board has assisted 299 projects under the scheme consisting 139 Dairy projects and 128 production units. These projects together have provided employment opportunities to 5070 women in the State up to 1979-80.

9.93 During 1980-81 the Central Social Welfare Department extended assistance to 14 voluntary agencies for running working women's hostels, and the achievement during 1981-82 was also 14. However, the smaller towns (taluk headquarters etc.) are not eligible for grant-in-aid assistance for construction of working women's hostels under the Central schemes. Therefore the State Government has taken up during 1980-81 a scheme for providing financial assistance to voluntary agencies for the construction of working women's hostels in these towns.

9.94 The Social Welfare Department is giving financial grant not exceeding Rs. 2000 to couples who are placed under hard circumstances, consequent on their contracting inter caste marriages. During 1980-81, 75 couples were benefited by this scheme.

C. Welfare of the Physically Handicapped.

(i) *Education*

9.95 As special incentives for the education of the handicapped children, Government of India awards scholarships to the blind, deaf and orthopaedically handicapped students for general education and technical

professional training from Standards IX onwards. The number of recipients of this scholarships was 742 in 1980-81. As a complementary to this scheme, the State Government has introduced a pre-matric scholarship scheme to the handicapped students from Standard I to VII. The number of beneficiaries under the scheme increased from 1066 in 1979-80 to 3461 in 1980-81.

9.96 Charitable agencies in the State are running a few institutions for the education and training of the mentally handicapped children. These institutions collect fees for the admission of children. The State Government extends financial assistance to children from poor families admitted to such institutions. Such assistance was given to 29 children in 1979-80 and to 46 children in 1980-81.

(ii) *Training and Rehabilitation*

9.97 The Social Welfare Department is running two vocational training centres for the benefit of the handicapped at Trivandrum and Kozhikode. In these centres training facilities are offered to 100 physically handicapped persons.

9.98 Under the scheme "Production Centres for the Handicapped" the Social Welfare Department extends financial assistance to voluntary organisation for running/starting production units where physically handicapped persons could be given employment. Under the scheme non-recurring grant assistance has been given to four organisations during 1979-80 for the purchase of equipments, machinery, tools etc., upto a maximum of Rs. 10,000 per organisations. During 1980-81 assistance was given to 2 organisations under the scheme. In addition, the Social Welfare Department has recommended 17 projects in 1980-81 for assistance under the Central scheme of assistance to

voluntary organisations for providing employment to the handicapped.

9.99 For providing self-employment to the handicapped the State Government has initiated a scheme under which financial assistance by way grants not exceeding Rs. 500 is given to disabled persons for starting simple trades or business suited to their residual capacities. The number of beneficiaries under the scheme has increased from 200 in 1979-80 to 600 in 1980-81.

9.100 The Kerala State Corporation for the Welfare of the Handicapped has started a Departmental Store for the sale of consumer goods at Trivandrum during 1980-81. A mobile sales van and a sales cabin in front of the M.L.A. hostel were also started during 1980-81. In addition as part of its programme for the distribution of 100 sales cabins 600 cabins have already been distributed during the year. It is anticipated to distribute 1000 cabins during the year. These projects will provide direct employment to about 1000 handicapped persons.

9.101 In order to promote employment opportunities to the handicapped in public service, Government have introduced grace marks to the handicapped candidates appearing for selection tests of the Public Service Commission. Further to give special attention to special employment exchange for physically handicapped is now functioning at Trivandrum. During December 1981 Government have sanctioned four special units for promoting the placement of the physically handicapped candidates in four Districts where the live register of physically handicapped persons are 600 or more. These Districts are Kozhikode, Quilon, Kottayam and Trichur. Details regarding the placement of the handicapped candidates during the last few years are given in Table. 9.17

TABLE 9.17

Details of Placements of the Physically Handicapped

Live Register as on	Blind	Deaf & Dumb	Orthopaedically handicapped	Total	Submission	Placement
(1)	(2)	(3)	(4)	(5)	(6)	(7)
31-3-1979	48	77	1570	1695	3855	230
31-3-1980	52	85	1741	1878	4617	273
31-3-1981	70	93	2066	2229	4137	373

9.102 During the year under review which is the International Year of the Handicapped, the State Government ordered the continuance in service of all physically handicapped provisional employees in service as on 31-12-1981. For minimising the physical disabilities of the handicapped, Government

have introduced a scheme for extending financial assistance to deserving handicapped persons for the purchase of orthotic and prosthetic aids. The number of beneficiaries under the scheme has increased from 136 in 1979-80 to 463 in 1980-81. Artificial limb fitting facilities are now available at the Medical College

Hospital, Trivandrum and Kottayam. The Kottayam Centre was being manned by the Corporation for the welfare of Physically Handicapped. A total of 348 handicapped persons have been benefited by this programme of the Corporation.

D. Social Defence

9.103 Table 9.18 gives the number of key Social defence institutions with the number of inmates, in the State, during 1979-80 and 1980-81.

TABLE 9.18
Key Social Defence Institutions in the State

Details	1979-80		1980-81		1981-82 (Anticipated)	
	No. of Institution	No. of Inmates	No. of Institution	No. of Inmates	No. of Institution	No. of Inmates
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. After Care Homes	6	226	6	213	6	224
2. After Care Hostel for Women	1	12	1	9	1	15
3. Rescue Homes	3	163	3	174	3	168
4. Beggar Homes (run by Voluntary agencies)	4	400	4	400	4	400
5. Borstal Schools	1	200	2	205	2	210
6. Balamandirs (Government Children's Homes and Special Schools]	5	550	5	550	5	550
7. Children's Courts	1	..	10	..	10	..

9.104 The Childrens' Act, 1972 and the Kerala Children's Rules, 1976 provide for necessary machinery such as Juvenile Courts, Children courts, remand/observation homes and children homes and special schools for the prevention and treatment of juvenile delinquency. The 5 Balamandirs meant for the detention, education and training of juvenile delinquents continued during the year with 550 inmates. The number of industrial training units in the institutions has increased from 5 in 1979-80, to 7 in 1980-81, and the number of juvenile delinquents trained has increased from 148 in 1979-80 to 210 in 1980-81.

9.105 The 10 children's courts established under the scheme for the implementation of the Children's Act continued to function during the year under report. The number of inmates in the 2 Borstal schools in the State has increased from 205 in 1980-81 to 210 in 1981-82

9.106 Under the scheme for welfare of prisoners Welfare Officers are appointed in the prisons in the State to serve as counsellors to the prisoners. The number of Welfare Officers in Prisons has increased from 4 in 1979-80 to 6 in 1980-81. These Welfare Officers look after the individual problems of prisoners and assist in solving them in liaison with the respective families of the prisoners.

E. Social Security

9.107 Kerala ranks first among the States in India in the provision of social security. The social security

programmes in the [State fall under three categories viz.

- (a) Residential care and protection;
- (b) Pensions
- (c) Other financial relief.

9.108 Table 9.19 gives a picture of the achievements under the major social security programmes in the State. The number of beneficiaries under these major social security programmes comes to 5.99 lakhs during 1980-81 involving an expenditure of Rs. 44.5 crores.

(a) Residential Care and Protection

9.109 For the care and protection of orphans and destitutes the Social Welfare Department is running 10 abalamandirs, 2 shelter homes for waifs and strays, 1 childrens' home and a custodial care home. During 1979-80 these homes together have provided care and protection to 515 destitutes. During 1980-81 Government raised the per capita maintenance charges for the inmates of these social welfare institutions from Rs. 75 to Rs. 85 per month. Also 248 orphanages, 39 homes for aged and infirm, 5 foundling homes and 4 beggar homes are run by voluntary agencies and charitable organisations in the State. These institutions are given recurring grant-in-aid by Government by way of monthly per capita maintenance allowance to inmates of these institutions. The number of beneficiaries of such assistance in these institutions has increased from 25,569

in 1979-80 to 25,977 in 1980-81. During 1980-81 government revised the per capita maintenance grants to inmates of orphanages, beggar homes, homes for aged and infirm and foundling homes as follows:

- (i) Orphanages: from Rs. 35 to Rs. 45 p.m.
- (ii) Beggar homes: from Rs. 25 to Rs. 35 p.m.
- (iii) Homes for the aged and infirm: from Rs. 35 to Rs. 45 p.m.
- (iv) Foundling homes from Rs. 20 to Rs. 30 p.m.

(b) *Pensions*

9.110 In order to ensure care and protection in their old age, various pension schemes for the benefit of destitutes, agricultural workers, artisans, journalists, sportsmen, men of arts and letters, cine artistes and circus artistes have been introduced by the Government. The destitute pension scheme and the agricultural workers pension scheme alone have benefited 3.11 lakhs persons during 1980.

9.111 The Agricultural workers pension scheme introduced during 1980-81 is a major step taken by Government in the discharge of the social obligations to this segment of the people. During 1980-81 pension at the rate of Rs. 45 per month was sanctioned and disbursed to 2,93,778 farm workers above the age of 60 and having an annual income below Rs. 1500.

The scheme for the payment of pension to old age destitutes, physically disabled and handicapped destitutes and widowed/divorced destitutes continued during 1980-81 with larger coverage. The number of pensioners under the schemes as at the end of December 1981 was 1,64,789 against 1,52,500 at the end of 1980. The total expenditure under the scheme which stood at Rs. 487.89 lakhs in 1978-79 and Rs. 546.37 lakhs in 1979-80 increased to Rs. 810.10 lakhs in 1980-81 consequent on the enhancement of the monthly rate of pension from Rs. 45 to Rs. 55 with effect from 1-4-1980. The expenditure under the scheme for the last four years is as follows.

9.112 Another scheme is the scheme for the grant of old age pension to artisans. Under this scheme pension at the rate of Rs. 100 p.m. is granted to poor artisans above the age of 60.

9.113 The pension scheme introduced for the benefit of sportsmen continued during the year 1980-81. Under this scheme a monthly pension ranging from Rs. 100 p.m. to Rs. 200 p.m. is granted to sportsmen whose annual income is below Rs. 3,600. The number of pensioners under the scheme was 98 in 1980-81.

9.114 Incapacitated circus stars who were in service in a circus company for 15 years and whose annual income is below Rs. 3,600 are given pension under the

Government scheme. During 1980-81 pension at the rate of Rs. 180 p.m. was sanctioned to 55 artistes.

9.115 Journalists or their dependants in indigent circumstances and whose annual income was below Rs. 3600 are granted pension at the monthly rate ranging from Rs. 150 to Rs. 300. During 1980-81 the number of beneficiaries under the scheme was 108.

9.116 In 1979-80 monthly pension ranging from Rs. 100 to Rs. 300 was granted to 76 cine artistes and technicians in distress whose annual income was below Rs. 3600. In 1980-81 the number of beneficiaries under the scheme increased to 83.

(c) *Other Financial relief*

(i) *Assistance to widows for the Marriage of their daughters*

9.117 In 1979-80, 10591 widows whose annual family income was below Rs. 5000 were given financial assistance at the rate of Rs. 1000 for the marriage of their daughters. In 1980-81 the number of beneficiaries under the scheme was about 17,000.

(ii) *Accident Relief to Coconut, Palmyrah and Areacanut Tree Climbers*

9.118 This scheme was introduced with effect from 1-4-1980. The scheme envisages payment of exgratia financial assistance at the rate of Rs. 5000 to coconut, palmyrah and areacanut tree climbers/their dependants in the event of the employees permanent and total disablement as a result of accident in the course of employment. During the year (up to December 1980) exgratia financial assistance was sanctioned to 33 workers or their dependants involving an expenditure of Rs. 1.65 lakhs.

(iii) *Toddy workers' Welfare Fund*

9.119 The following are some of the major welfare schemes formulated and implemented by the Board of Directors of the Toddy Workers' Welfare Funds

1. Financial assistance at Rs. 1000 per incident to the family in the case of death of a worker. During 1980-81, Rs. 36,000 was given by way of assistance against Rs. 8000 given during 1979-80.
2. The financial institutions, where the funds of the Board are invested, give educational scholarships, to the children of workers. During 1980-81 Rs. 1,03,240 was disbursed as scholarship by these institutions. The scholarship amount has been enhanced from Rs. 5000 to Rs. 6000 during 1981-82.
3. The Board has constituted merit scholarships to the children of toddy workers. Durin

1980-81 though a sum of Rs. one lakh was set apart for this purpose a sum of Rs. 55,600 was only spent on this account due to non-availability of eligible applicants.

4. The Board, in collaboration with the Housing Board, has evolved a housing scheme to construct houses for the workers who does not possess a house of their own; but possess land. Initially the Board proposes to construct 1000 such houses.

(iv) *The Fishermen's Welfare Fund*

9.120 The Fishermen's Welfare Fund is for payment of old age benefits expenses connected with death and marriage ceremonies, off season expenses etc. of the poor fishermen. The fund is operated by the Kerala Fishermen Welfare Corporation. During 1980-81 Rs. 10 lakhs was provided for this purpose.

(v) *Relief to T.B. Patients*

9.121 The scheme envisages payment of financial assistance at the rate of Rs. 50 per month to poor T.B. patients for a continuous period of one year for their sustenance and treatment. In case the patient is not cured within the next three years, financial assistance will be given for a further period of one year. During 1980-81 a sum of Rs. 24.92 lakhs was disbursed to T.B. patients under the scheme.

(vi) *Unemployment Relief*

9.122 The scheme was introduced during 1980-81 for the benefit of the unemployed persons on the live register of the employment exchanges for three years as on 31-12-1979 and whose annual family income were below Rs. 4000. During 1980-81 unemployment assistance at the rate of Rs. 50 per month was sanctioned to 2,40,913 eligible applicants for the whole year. The number of applications sanctioned during 1981-82 (as on 16-10-1981) was 1,95,937.

TABLE 9.19

Number of Beneficiaries and Expenditure under the Major Social Security Programmes in Kerala

(Rs. lakhs)

Name of Schemes	1979-80		1980-81		1981-82 (Anticipated)	
	No. of beneficiaries	Amount disbursed	No. of beneficiaries	Amount disbursed	No. of beneficiaries	Expenditure—Amount disbursed
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Assistance to voluntary organisations for running:						
(i) Orphanages	19759	84.84	23721	110.98	23725	N.A.
(ii) Homes for the aged and infirm	2301	7.51	2301	10.00	..	..
(iii) Foundling homes	390	0.53	440	1.58	440	N.A.
(iv) Beggar Homes	400	0.46	400	1.19	N.A.	N.A.
2. Destitute pension scheme	N.A.	546.37	1,52,500	810.10	N.A.	N.A.
3. Financial assistance to widows for the marriage of their daughters	10591	105.90	11,490	114.90	N.A.	N.A.
4. Pension to sportsmen	99	1.38	98	1.32	190	1.61
5. Pension to Circus stars	..	..	55	0.93	N.A.	1.44
6. Relief to T. B. patients	..	..	N.A.	29.92	N.A.	N.A.
7. Agricultural workers pension	..	..	2,93,778	1092.28*	1,82,586@	1500.00
8. Relief to coconut climbers/their dependents for permanent disablement/death due to accidents	..	..	37	1.84	34 (Upto 31-1-1982)	13.73
9. Unemployment assistance	..	..	2,40,833	1498.66	146831 (as on 16-10-1981)	270.74

* Placed at the disposal of the State Co-operative Bank

@ Number found eligible after verification

- Sources : 1. Social Welfare Director
2 & 3. Board of Revenue
4. Secretary, Kerala Sports Council
5. General Administration, Services 'F' Department.
6. Director of Health Services
7 & 8. Labour Commissioner
9. Director of Employment

Nutrition

9.123 The applied nutrition programme launched in the State as early as in 1963-64 and the other supplementary nutrition programmes subsequently implemented for combating malnutrition and under nourishment among children and nursing and expectant mothers continued during the year 1980-81 with a marginal increase in the number of feeding centres and slight decline in the number of beneficiaries. While the total number of feeding centres under the

supplementary feeding programmes increased from 27377 in 1980-81 to 27893 in 1981-82 the total number of beneficiaries declined from 36.85 lakhs to 36.06 lakhs. The marginal fall noted in the number of beneficiaries is contributed by the decline in the number of beneficiaries (effective strength) under the school-mid-day meals programme which in turn is the result of the declining trend in the enrolment in primary standards. The number of feeding centres and the beneficiaries under the various nutrition programmes in the State are given in Table 9.20

TABLE 9.20
Feeding Centres and Beneficiaries under the Supplementary Feeding Programmes

Name of Programmes (1)	1979-80		1980-81		1981-82 (anticipated)	
	No. of feeding centres (2)	No. of beneficiaries (lakhs) (3)	No. of feeding centres (4)	No. of beneficiaries (lakhs) (5)	No. of feeding centres (6)	No. of beneficiaries (lakhs) (7)
A. For Pre-School Children						
1. Special Nutrition Programme						
(a) Special Nutrition Programme	1720	2.94	2000	3.19	2000	3.19
(b) Special Nutrition programme under ICDS	1154	0.93	1354	1.11	2029	1.93
(c) Special Nutrition Programme in Tribal Sub Plan Area	30	0.06	30	0.06	30	0.06
2. World Food Programme	2300	2.30	2300	2.30	2300	2.30
3. Applied Nutrition Programme	5960	6.00	6060	6.10	6260	6.30
4. One Meal-a-Day Programme						
(a) Rural Segment	4205	4.00	4205	4.00	4205	4.00
(b) Urban Segment	620	0.62	620	0.62	620	0.62
5. Health Based Nutrition Programme	1621	1.58	1691	1.69	1695	1.70
Total A (Pre-School Children)	17610	18.43	18260	19.07	19139	20.10
B. For School Children						
6. School Mid-Day-Meal Programme	8998	**18.72	9117	17.78**	8754	15.96**
Grand total A + B	26608	36.55	27377	36.85	27893	36.06

**Effective Feeding Strength

9.124 The number of Blocks under the applied nutrition programme has increased from 95 in 1980-81, to 105 in 1981-82. Physical achievements under the production component of the ANP are given in Appendix 9.61.

9.125 The health component of the nutrition programmes includes prophylaxis against nutrition anaemia and blindness due to deficiency of Vitamin A. The number of beneficiaries under the prophylaxis programmes has increased from 23.7 lakhs in 1979-80 to 24.76 in 1980-81. (see Table 9.21)

TABLE 9.21
Prophylaxis against Nutritional Anaemia and Blindness

Item (1)	No. of Beneficiaries (Lakhs)		
	1979-80 (2)	1980-81 (3)	1981-82* (4)
1. Prophylaxis against Nutritional Anaemia			
(a) Mothers	3.57	4.47	3.96
(b) Children	6.01	7.29	3.37
2. Prophylaxis against Blindness in Children due to Vitamin A deficiency			
1st dose	14.12	13.00	N.A.
Total	23.70	24.76	7.33

*Provisional.

Source: Director of Health Services.

APPENDIX
STATISTICAL TABLES

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APPENDIX 1.1

Decadal Change—Selected Indicators, Kerala—1970-71 and 1980-81

Item	Unit	1970-71	1980-81	Percentage Increase
(1)	(2)	(3)	(4)	(5)
I. Population				
1. Population	Lakhs	213.47 (1971 Census)	254.03 (1981 Census)	(+)19.00
2. Growth Rate Over Previous Decade	%	+26.29	+19.00	
3. Birth Rate	No./Thousand	31.6 (1970)	25.5 (1980)	(-)19.30
4. Death Rate	No./Thousand	9.2 (1970)	6.4 (1980)	(-)30.43
II. State Income				
1. State Income at Constant (1970-71) Prices	Rs. lakhs	116993	139739 (1979-80)	(+)19.44
2. Per Capita Income	Rs.	557.2	554.8 (1979-80)	(-)0.43
III. Unemployment				
1. Total Works Seekers Registered in Employment Exchanges	In lakhs	2.94 (31-12-1970)	15.79 (31-12-1980)	(+)437.07
2. S. S. L. C. and Above	"	1.78	8.14	(+)357.30
3. Professional and Technical Work Seekers	"	0.14	0.39	(+)178.57
IV. Agriculture				
1. Area				
(a) Net Area Sown	'000 ha.	2172.48	2199.91	(+)1.26
(b) Gross Cropped Area	"	2932.54	2860.42	(-)2.46
(c) Area under rice	"	874.93	801.70	(-)8.37
(d) Coconut	"	719.14	666.22	(-)7.36
(e) Tapioca	"	293.55	244.18	(-)16.82
(f) Tea	"	37.59	36.13	(-)3.88
(g) Coffee	"	31.56	57.95	(+)83.62
(h) Rubber	"	179.26	219.87	(+)22.65
(i) Cardamom	"	47.49	56.38	(+) 18.72
(j) Pepper	"	117.54	105.77	(-)10.01
(k) Cashewnut	"	102.71	142.20	(+)38.45
(l) Arecanut	"	85.82	60.92	(-)29.01
2. Production				
(a) Rice	'000 tonnes	1298.01	1271.96	(-)2.01
(b) Coconut	Million nuts	3981.00	3036.00	(-)23.74
(c) Tapioca	'000 tonnes	4617.19	4109.70	(-)10.99
(d) Tea	"	41.45	52.55	(+)26.78
(e) Coffee	"	12.57	30.18	(+)140.10
(f) Rubber	"	78.73	140.52	(+)78.48
(g) Cardamom	"	1.25	9.10	(+)148.00
(h) Pepper	"	25.03	28.60	(+)14.26
(i) Cashewnut	"	115.24	83.11	(-)27.88
(j) Arecanut	Million nuts	12738.00	10834.00	(-)14.95

APPENDIX 1.1—(Contd.)

Item	Unit	1970-71	1980-81	Percentage Increase	
(1)	(2)	(3)	(4)	(5)	
3. Productivity					
(a) Rice	Kg/ha.	1483	1587	(+)7.01	
(b) Coconut	No. of Nuts/ha.	5536	4557	(-)17.68	
(c) Tapioca	Kg/ha.	15729	16830	(+)7.00	
(d) Tea	"	1103	1455	(+)31.91	
(e) Coffee	"	430	521	(+)21.16	
(f) Rubber	"	439	639	(+)45.56	
(g) Cardamom	"	26	55	(+)111.54	
(h) Pepper	"	213	270	(+)26.76	
(i) Cashewnut	"	1122	584	(-)47.95	
(j) Arecanut	No. of Nuts/ha.	148430	177828	(+)19.81	
V. Livestock					
1. Total Livestock	No. lakhs	49.36 (1972 Census)	53.19 (1977 Census)	(+)7.76	
2. Cows-in-milk	"	6.06 (1972 Census)	7.05 (1977 Census)	(+)16.34	
3. Buffaloes-in-milk	"	0.83 (1972 Census)	0.87 (1977 Census)	(+)4.82	
4. Artificial Inseminations Conducted	"	3.34	9.58	(+)186.83	
5. Veterinary Hospitals and Dispensaries	No.	331	559	(+)68.88	
VI. Fisheries					
1. Marine Fish Landings	Lakh tonnes	3.93 (1970)	2.79 (1980)	(-)29.01	
2. Mechanised Boats	No.	1294 (1972-73)	2988 (1977)	(+)130.91	
3. Export of Fish and Fish Products—Quantity tonnes		23896	29148	(+)21.98	
	Value	Rs. Crores	27.57	95.34	(+)245.81
VII. Forests					
1. Forest Plantations					
(a) Total area	ha.	101875	143849	(+)41.20	
(b) Teak	"	59483	75323	(+)40.84	
(c) Softwood	"	17027	22957	(+)34.83	
(d) Eucalyptus	"	23232	33669	(+)44.93	
2. Revenue from Forests—Net Receipts	Rs. lakhs	915.10	4572.87	(+)399.71	
3. Out-turn of Forest Produce*					
(a) Timber (in round logs)	'000 cu. m.	498.49	435 (1979-80)	(-)12.74	
(b) Timber (in round poles)	'000 Nos.	368.08	1344	(+)265.14	
(c) Sawn and squared timber	cu. m.	5275	10	(-)99.81	
(d) Cardamom	kg.	..	3070	..	
(e) Charcoal	tonnes	..	1260	..	
(f) Honey	kg.	..	15430	..	
(g) Reeds	'000 nos.	..	18459	..	
(h) Bamboos	"	..	1071	..	
(i) Sandal wood	kg.	428	12	(-)97.20	

* Col. 4 corresponds to the year 1979-80

APPENDIX 1.1 (Contd)

Item	Unit	1970-71	1980-81	Percentage Increase
(1)	(2)	(3)	(4)	(5)
VIII. Co-operation				
1. Number of Societies	No.	1936 (as on 30-6-1970)	1581 (as on 30-6-1930)	(-) 13.34
2. Membership	Lakhs	15.32	35.74	(+) 133.29
3. Deposits	Rs. lakhs	877.87	11384.79	(+) 1196.87
4. Loans and Advances	"	2572.60	27241.70	(+) 958.92
IX. Power				
1. Installed generating Capacity	M.W.	546.5	1011.5	(+) 85.09
2. Units Generated	M.U.	2125.99	5254.30	(+) 147.15
3. No. of Consumers	in lakhs	5.43	15.88	(+) 192.38
4. Per capita Consumption	Units/Year	71	95	(+) 33.80
X. Industries				
1. No. of Working Factories	No.	3040 (1970)	8491 (1979)	(+) 179.31
2. Employment	in lakhs	2.05 (1970)	2.955 (1979)	(+) 44.15
XI. Transport & Communications				
1. Road Length				
(a) National Highways	Kms.	448.00	839	(+) 87.28
(b) Public Works Department	"	14287.46	17215	(+) 20.49
(c) Panchayats	"	55346.02 (1970)	65288	(+) 17.96
(d) Corporations	"	856.79 (1971-72)	1236	(+) 44.26
(e) Forest Department	"	949.70 (1971-72)	1529	(+) 61.00
(f) Municipalities	"	1072.69	3822	(+) 256.30
(g) Others	"	742.49	4216	(+) 467.82
2. Motor Vehicle Registration				
(a) Goods Vehicles	No.	13162	24682	(+) 87.52
(b) Stage Carriages	"	6563	10200	(+) 55.42
(c) Taxi Cabs and Motor Cars	"	42142	75998	(+) 80.34
(d) Motor Cycles	"	15117	59601	(+) 294.26
(e) Others	"	9250	24116	(+) 160.71
Total	"	86234	194597	(+) 125.66
3. K. S. R. T. C.				
(a) No. of Schedules	No.	1257	2568	(+) 104.30
(b) No. of Routes	"	1262	3718	(+) 194.61
(c) Route Length	Km.	48113	159772	(+) 232.08
(d) No. of Passengers Carried	in lakhs	3106	7069.52	(+) 127.61
4. Communications				
(a) Post Offices	No.	3859	4576	(+) 18.58
(b) Telegraph Offices	"	681	4236 (1979-80)	(+) 522.03
(c) Telephone Exchanges	"	234	465 (1980-81)	(+) 98.72
(d) Telephone Connections	"	37989	101979	(+) 168.44

APPENDIX 1.1 (Contd.)

Item	Unit	1970-71	1980-81	Percentage increase
(1)	(2)	(3)	(4)	(5)
XII. Education				
1. Literacy Rate	Per cent	60.42 (1971 Census)	69.17 (1981 Census)	(+)14.48
2. No. of Institutions				
(a) L. P. Schools	No.	6895	6887	(-)0.12
(b) U. P. Schools	"	2543	2718	(+)6.88
(c) High Schools	"	1384	1971	(+)42.41
Total Schools	"	10822	11576	(+)6.97
(d) Arts and Science Colleges	"	117	133	(+)13.68
(e) I. T. Is.	"	36	151	(+)319.44
(f) Polytechnics	"	14	20	(+)42.86
3. Enrolment				
(a) L. P. Schools	No. of lakhs	28.09	25.93	(-)7.69
(b) U. P. Schools	"	12.66	16.91	(+)33.57
(c) High Schools	"	7.25	13.11	(+)80.83
Total Schools	"	48.00	55.95	(+)16.56
(d) Arts and Science Colleges	"	1.14	2.42	(+)112.28
(e) I. T. Is.	"	8240	23020	(+)179.37
(f) Polytechnics	"	1982	6867	(+)246.47
4. Expenditure on Education Per capita Expenditure	Rs.	28.25	84.14	(+)197.84
XIII. Health				
1. Modern Medicine				
(a) Hospitals—Institutions	No.	112	144	(+)28.57
Beds	"	17640	24543	(+)39.13
(b) P. H. Centres and Medical College Units—Institutions	"	163	168	(+)3.07
Beds	"	1460	2641	(+)80.89
(c) Dispensaries—Institutions	"	241	572	(+)137.34
Beds	"	1122	1490	(+)32.80
(d) M. C. H. Centres—Institutions	"	1	5	(+)400.00
Beds	"	20	34	(+)70.00
(c) T. B. Centres and Clinics—Institutions	"	20	24	(+)20.00
Beds	"	302	1608	(+)432.45
(f) Grant-in-aid Institutions	"	15	11	(-)26.67
Beds	"	1233	2018	(+)63.67
(g) Total including Others—Institutions	"	553	968	(+)75.05
Beds	"	21777	32447	(+)49.00
(h) No. of Beds per Lakh of Population	"	102	128	(+)25.49
2. Indigenous Medicine—Ayurveda				
(a) Hospitals	"	53	85	(+)60.38
(b) Beds	"	1182	1818	(+)53.81
(c) Dispensaries	"	309	149	(+)35.60

APPENDIX I.1—(Contd.)

Item	Unit	1970-71	1980-81	Percentage increase
(1)	(2)	(3)	(4)	(5)
3. Homoeopathy				
(a) Hospitals	No.	2	17	(+)750.00
(b) Beds	"	45	535	(+)1088.89
(c) Dispensaries	"	45	158	(+)251.11
4. Family Palnning Programmes				
(a) Vasectomy	"	46621	130000	..
(b) P. P. S.	"	21390		
Total	"	68017	130000	(+)91.12
(c) Induced Abortions	"	..	32597 (1979-80)	..
(d) I. U. D.	"	30584	18000 (1980-81)	(-)41.15
5. Per capita Expenditure on Health	Rs.	7.61	20.63 (1978-79)	(+)171.09
XIV. Water Supply				
1. Urban Water Supply				
(a) Schemes in Operation	No.	15 (1972-73)	32	(+)113.33
(b) Of which L. I. C. Aided	"	10 (1972-73)	30	(+)200.00
(c) Percentage of Population Covered	%	NA	62.5	..
2. Rural Water Supply				
(a) Schemes in Operation	No.	360 (1972-73)	883	(+)145.28
(b) Of which L. I. C. Aided	"	33 (1972-73)	183	(+)454.55
(c) Percentage of Population Covered	"	NA	29	
XV. Price Trends				
1. Wholesale Price Index of Agricultural Commodities				
(a) Foodgrains	Base 1952-53 = 100	209 (1970)	319 (1980)	(+)52.63
(b) Molasses	"	172	629	(+)265.70
(c) Condiments and Spices	"	234	403	(+) 72.22
(d) Fruits and Vegetables	"	217	589	(+)171.43
(e) Other Food Crops	"	213	388	(+)82.16
(f) Oil Seeds	"	369	822	(+)122.76
(g) Plantation Crops	"	141	331	(+)134.75
(h) Non-food Crops	"	300	673	(+)124.33
(i) All Crops	"	245	492	(+)100.82
2. Retail Prices of Essential Commodities				
(a) Rice (Open Market)	Rs./kg.	1.45 (Dec. 1970)	2.58 (Dec. 1980)	(+)77.93
(b) Dhall	"	2.06	6.11	(+)196.60
(c) Redgram	"	1.34	4.04	(+)201.49
(d) Green Gram	"	1.54	5.42	(+)251.95
(e) Black Gram	"	1.51	3.95	(+)161.59

APPENDIX I.1—(Contd.)

Items	Unit	1970-71	1980-81	Percentage increase
(1)	(2)	(3)	(4)	(5)
(f) Coconut Oil	Rs./kg.	9.23	18.91	(+)104.87
(g) Corriander	"	3.85	6.46	(+)67.79
(h) Chillies	"	6.35	8.25	(+)29.92
(i) Onion	"	0.50	1.25	(+)150.00
(j) Tamarind	"	2.43	8.40	(+)245.68
(k) Coconut (without husk)	Rs./100 Nos.	71.91	159.50	(+)121.81
(l) Tapioca	Rs.kg/	0.32	0.66	(+)106.25
(m) Tea	"	8.69	21.42	(+)146.49
(n) Coffee Powder	"	11.34	18.74	(+)65.26
(o) Milk (Cow's)	Rs./litre	1.48	2.79	(+)88.51
(p) Firewood	Rs./Tonne	56.11	362.00	(+)545.16
3. Index Number of Prices received and paid by Farmers				
(a) Prices Received by Farmers	Base 1952-53=100	250 (1970)	480 (1980)	(+)92.00
(b) Farm Cultivation Cost	"	270	603	(+)123.33
(c) Domestic Expenditure	"	217	439	(+)102.30
(d) Prices Paid by Farmers	"	242	514	(+)12.40
(e) Parity	"	103	93	(-)-9.71
XVI. Exports and imports				
1. Export from the Ports of Kerala				
(a) Marine Products—Quantity	Tonnes	23896	29148	(+)21.98
Value	Rs. crores	27.57	95.34	(+)245.81
(b) Spices				
(i) Pepper—Quantity	Tonnes	16704	24378	(+)45.94
Value	Rs. crores	13.93	35.32	(+)153.55
(ii) Cardamom—Quantity	Tonnes	515	2017	(+)201.65
Value	Rs. crores	3.13	30.32	(+)868.69
(iii) Ginger—Quantity	Tonnes	1829	4598	(+)151.39
Value	Rs. crores	1.29	2.38	(+)84.50
(iv) Turmeric—Quantity	Tonnes	1347	2316	(+)71.94
Value	Rs. crores	0.37	1.29	(+)248.65
(e) Cashew Kernels—Quantity	Tonnes	47961	24754	(-)-48.39
Value	Rs. crores	49.58	110.51	(+)122.89
(d) Cashew Shell liquid—Quantity	Tonnes	5618	7863	(+)39.96
Value	Rs. crores	0.65	5.77	(+)787.69
(e) Coir and Coir Products—Quantity	Tonnes	44850	28149	(-)-37.24
Value	Rs. crores	11.77	25.14	(+)113.59
(f) Tea—Quantity	Tonnes	33531	61242	(+)82.64
Value	Rs. crores	23.39	79.74	(+)240.91
(g) Coffee—Quantity	Tonnes	17631	20839	(+)18.20
Value	Rs. crores	13.47	43.27	(+)221.23
(h) Total including Others—Quantity	Tonnes	..	..	..
Value	Rs. crores	161.01	..	..
2. Export/Import at Cochin Port				
1. Export—Quantity	Lakh Tonnes	..	11.21	..
Value	Rs. crores	158.02	554.20	(+)250.72
2. Import—Quantity	Lakh tonnes	..	41.12	..
Value	Rs. crores	97.15	786.55	(+)709.62

N. A: Not Available.

APPENDIX 2.1

Growth of Net Domestic Product (Sector-wise)—Kerala and India

(Rs. in crores)

Industry/Sector	Kerala			India		
	1978-79	1979-80	Rate of Growth over Previous year (Per cent)	1978-79	1979-80	Rate of Growth over Previous year (Per cent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(a) <i>At Current Prices</i>						
1. Primary Sector	1201	1287	7.2	33195	33869	2.0
2. Secondary Sector	534	603	12.9	19145	21238	10.9
3. Transport, Communication and Trade	417	422	1.2	15736	17517	11.3
4. Finance and Real Estate	138	154	11.6	4657	5094	9.4
5. Community and Personal Services	403	408	1.2	8415	9466	12.5
6. Tertiary Sector (3+4+5)	958	984	2.7	28808	32077	11.3
7. Total Net Domestic Product	2693	2874	6.7	81148	87184	7.4
8. Per Capita Income (Rs.)	1086	1141	5.1	1250	1316	5.3
(b) <i>At Constant (1970-71) Prices</i>						
1. Primary Sector	620	592	-4.5	20499	17865	(-)-12.8
2. Secondary Sector	284	291	2.5	10100	9819	(-)-2.8
3. Transport, Communication and Trade	192	189	(-)-1.6	8338	8251	(-)-1.0
4. Finance and Real Estate	84	100	19.0	2626	2645	0.7
5. Community and Personal Services	218	225	3.2	4803	5224	8.8
6. Tertiary Sector (3+4+5)	494	514	4.0	15767	16120	2.2
7. Total Net Domestic Product	1398	1397	(-)-0.1	46366	43804	(-)-5.5
8. Per Capita Income (Rs.)	564	555	(-)-1.6	715	661	(-)-7.5

Source: 1. Directorate of Economics and Statistics, Trivandrum

2. Central Statistical Organisation, New Delhi.

APPENDIX 2.2

Net State Domestic Product at Factor Cost by Industry of Origin—Kerala (at Current Prices)

(Rs. in lakhs)

Industry/Sector	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Primary Sector	59820	55237	65668	88509	97556	97721	102696	108693	120051	128736
2. Secondary Sector	19802	22941	25324	28480	32705	37338	40880	45286	53396	60278
3. Transport, Communication and Trade	16362	17951	20393	23047	28552	33078	36720	39145	41730	42247
4. Finance and Real Estate	4403	5062	5522	6699	7428	8862	10115	11955	13796	15422
5. Community and Personal Services	16606	17849	19481	22562	27975	32800	34661	37172	40292	40751
6. Tertiary Sector (3+4+5)	37371	40862	45396	52248	63955	74740	81496	88272	95818	98420
7. Total—Net State Domestic Product	116993	119040	136388	169237	194216	209799	225072	242251	269265	287434
Index (1970-71—100)	100.0	101.7	116.6	144.7	166.0	179.3	192.4	207.1	230.2	245.7
8. Per Capita Income (Rs.)	557	554	620	753	845	893	940	994	1086	1141
Index (1970-71—100)	100.0	99.5	111.3	135.2	151.7	160.3	168.8	178.5	195.0	204.8

Source: Directorate of Economics and Statistics, Trivandrum

APPENDIX 2.3

Net State Domestic Product at Factor Cost by Industry of Origin—Kerala (at 1970-71 Prices)

(Rs. in lakhs)

Industry/Sector	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Primary Sector	59820	61450	61714	60875	62296	64219	60760	61598	62019	59209
2. Secondary Sector	19802	22203	23107	22739	22238	23727	24628	25599	28379	29149
3. Transport, Communication and Trade	16362	17147	17422	17254	18133	18600	18324	18781	19233	18914
4. Finance and Real Estate	4403	4864	5119	5217	4982	5329	5950	7285	8378	10013
5. Community and Personal Services	16606	16950	17864	18865	19184	20231	20520	21206	21845	22454
6. Tertiary Sector (3+4+5)	37371	38961	40405	41336	42299	44160	44794	47272	49456	51381
7. Total: Net State Domestic Product	116993	122614	125226	124950	126833	132106	130182	134469	139854	139739
Index (1970-71=100)	100.0	104.8	107.0	106.8	108.4	112.9	111.3	114.9	119.5	119.4
8. Per Capita Income (Rs.)	557	571	570	556	552	562	544	552	564	555
Index (1970-71=100)	100.0	102.5	102.3	99.8	99.1	100.9	97.7	99.1	101.3	99.6

Source: Directorate of Economics and Statistics, Trivandrum.

APPENDIX 2.4

Net Domestic Product at Factor Cost by Industry of Origin—India (at Current Prices)

(Rs. Crores)

Industry/Sector	1970-71	1975-76	1976-77	1977-78	1978-79**	1979-80**	1980-81*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Primary Sector	17307	27861	29076	33235	33195	33869	41479
2. Secondary Sector	6790	13159	15068	16898	19145	21238	24421
3. Transport, Communication and Trade	5454	11858	12784	14496	15736	17517	21580
4. Finance and Real Estate	1683	3269	3813	4225	4657	5094	5618
5. Community and Personal Services	3285	6247	6856	7476	8415	9466	11034
6. Tertiary Sector (3+4+5)	10422	21374	23453	26197	28808	32077	38232
7. Total: Net domestic product at factor cost	34519	62394	67597	76330	81148	87184	104132
8. Net National Product at factor cost	34235	62139	67362	76109	80992	87253	104201
Index (1970-71=100)	100.0	181.5	196.8	222.3	236.6	254.9	304.4
9. Per Capita Income (Rs.)	633	1029	1094	1210	1250	1316	1537
Index (1970-71=100)	100.0	162.6	172.8	191.2	197.5	207.9	242.8

*Quick Estimates.

**Provisional Estimates.

Source: Central Statistical Organisation, New Delhi.

APPENDIX 2.5

*Net Domestic Product at Factor Cost by Industry of Origin—India (at 1970-71 Prices)**(Rs. crores)*

Industry/Sector	1970-71	1975-76	1976-77	1977-78	1978-79@	1979-80@	1980-81*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Primary Sector	17307	19215	18179	20156	20499	17865	20065
2. Secondary Sector	6790	7926	8745	9348	10100	9819	10035
3. Transport, Communication and Trade	5454	6897	7261	7784	8338	8251	8654
4. Finance and Real Estate	1683	2025	2235	2395	2626	2645	2708
5. Community and Personal Services	3285	4107	4271	4496	4803	5224	5701
6. Tertiary Sector (3+4+5)	10422	13029	13767	14675	15767	16120	17093
7. Total: Net Domestic Product at Factor Cost	34519	40170	40691	44179	46366	43804	47193
8. Net National Product at Factor Cost	34255	40079	40606	44090	46306	43822	47211
Index (1970-71 = 100)	100.0	117.1	118.6	128.8	135.3	128.0	137.9
9. Per Capita Income (Rs.)	633	664	659	701	715	661	696
Index (1970-71 = 100)	100.0	104.9	104.1	110.7	112.9	104.4	109.9

@ Provisional Estimate

* Quick Estimates

Source: Central Statistical Organisation, New Delhi

APPENDIX 2.6

*Estimates of District Income of Kerala at Current Prices**(Rs. in lakhs)*

District	1970-71	%	1971-72	%	1972-73	%	1973-74	%	1974-75	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Trivandrum	11873	10.1	12455	10.4	13893	10.2	17295	10.2	20878	10.7
2. Quilon	14668	12.5	14751	12.4	17709	13.0	22032	13.0	26562	13.7
3. Alleppey	11529	9.9	11282	9.5	13050	9.5	16056	9.5	17809	9.2
4. Kottayam	9444	8.1	9722	8.2	11013	8.1	13891	8.2	17273	8.9
5. Idukki	4436	3.8	4391	3.7	4946	3.6	6220	3.7	8772	4.5
6. Ernakulam	13609	11.6	14359	12.0	15916	11.7	19086	11.3	22541	11.6
7. Trichur	10964	9.4	11032	9.3	12472	9.1	14647	8.6	15911	8.2
8. Palghat	8900	7.6	9886	8.3	11551	8.5	14661	8.7	13657	7.0
9. Malappuram	7700	6.6	7965	6.7	9158	6.7	11161	6.6	11584	6.0
10. Kozhikode	11949	10.2	11525	9.7	13205	9.7	17317	10.2	19452	10.0
11. Cannanore	11921	10.2	11672	9.8	13475	9.9	16871	10.0	19777	10.2
State	116993	100.0	119040	100.0	136388	100.0	169237	100.0	194216	100.0

District	1975-76	%	1976-77	%	1977-78	%	1978-79	%	1979-80	%
(1)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1. Trivandrum	22682	10.8	23427	10.4	23569	9.7	26870	10.0	28220	9.8
2. Quilon	29151	13.9	26469	11.7	27612	11.4	30227	11.2	32863	11.4
3. Alleppey	18829	9.0	19970	8.9	20520	8.5	22891	8.5	24311	8.5
4. Kottayam	17747	8.5	18007	8.0	18670	7.7	20100	7.5	21815	7.6
5. Idukki	9559	4.5	10776	4.8	10454	4.3	13895	5.2	13475	4.7
6. Ernakulam	24563	11.7	28194	12.5	32376	13.4	35602	13.2	37845	13.2
7. Trichur	17607	8.4	19782	8.8	22048	9.1	23937	8.9	25451	8.9
8. Palghat	15446	7.4	15342	6.8	17638	7.3	20011	7.4	21859	7.6
9. Malappuram	12656	6.0	15669	7.0	16575	6.8	17213	6.4	19086	6.6
10. Kozhikode	20593	9.8	22696	10.1	25583	10.6	28498	10.6	30162	10.5
11. Cannanore	20966	10.0	24740	11.0	27206	11.2	30021	11.1	32347	11.2
State	209799	100.0	223072	100.0	242251	100.0	269265	100.0	287434	100.0

Source: Directorate of Economics and Statistics, Trivandrum

APPENDIX 2.7

Estimates of District Income of Kerala at Constant (1970-71) Prices

(Rs. in Lakhs)

District	1970-71	%	1971-72	%	1972-73	%	1973-74	%	1974-75	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Trivandrum	11873	10.1	13056	10.7	12785	10.2	13108	10.5	13738	10.8
2. Quilon	14668	12.5	15467	12.6	16726	13.3	16400	13.1	16672	13.1
3. Alleppey	11529	9.9	11471	9.4	11600	9.3	11567	9.3	11789	9.3
4. Kottayam	9444	8.1	10347	8.4	10467	8.4	10717	8.6	10755	8.5
5. Idukki	4436	3.8	4679	3.8	4605	3.7	4866	3.9	5304	4.2
6. Ernakulam	13609	11.6	14636	11.9	14697	11.7	14147	11.3	14720	11.6
7. Trichur	10964	9.4	11176	9.1	11361	9.1	10914	8.7	10965	8.7
8. Palghat	8900	7.6	9228	7.5	9577	7.6	9681	7.7	9802	7.7
9. Malappuram	7700	6.6	8240	6.7	8483	6.8	7965	6.4	7848	6.2
10. Kozhikode	11949	10.2	12348	10.1	12642	10.1	12937	10.4	12737	10.0
11. Cannanore	11921	10.2	11966	9.8	12283	9.8	12648	10.1	12503	9.9
State	116993	100.0	122614	100.0	125226	100.0	124950	100.0	126833	100.0

District	1975-76	%	1976-77	%	1977-78	%	1978-79	%	1979-80	%
(1)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1. Trivandrum	14138	10.7	14010	10.8	13499	10.0	14575	10.4	14440	10.3
2. Quilon	17393	13.2	15264	11.7	15234	11.3	15617	11.2	15599	11.2
3. Alleppey	12267	9.3	11819	9.1	11899	8.9	12355	8.8	12462	8.9
4. Kottayam	11240	8.5	10653	8.2	10600	7.9	10545	7.5	10635	7.6
5. Idukki	5634	4.3	5250	4.0	5118	3.8	6178	4.4	5614	4.0
6. Ernakulam	15270	11.5	16127	12.4	17775	13.2	18861	13.5	19008	13.6
7. Trichur	11638	8.8	11634	8.9	12369	9.2	12696	9.1	12803	9.2
8. Palghat	10111	7.7	9452	7.2	10470	7.8	10745	7.7	10857	7.8
9. Malappuram	8205	6.2	8968	6.9	9186	6.8	8890	6.4	9328	6.7
10. Kozhikode	13287	10.0	13238	10.2	13805	10.3	14684	10.5	14315	10.2
11. Cannanore	12923	9.8	13767	10.6	14514	10.8	14708	10.5	14678	10.5
State	132106	100.0	130182	100.0	134469	100.0	139854	100.0	139739	100.0

Source: Directorate of Economics and Statistics, Trivandrum

APPENDIX—2.8

Sectoral Contribution of District Income (Per cent)

District	1970-71 at Current Prices				1979-80 (1970-71 Prices)				1979-80 (at Current Prices)			
	Primary	Secondary	Tertiary	Total	Primary	Secondary	Tertiary	Total	Primary	Secondary	Tertiary	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Trivandrum	45.8	16.0	38.2	100.0	32.7	22.8	44.5	100.0	34.6	24.1	41.3	100.0
2. Quilon	60.6	15.2	24.2	100.0	45.8	22.3	31.9	100.0	48.3	22.0	29.7	100.0
3. Alleppey	52.6	14.4	33.0	100.0	39.8	18.9	41.3	100.0	40.3	19.9	39.8	100.0
4. Kottayam	56.7	13.0	30.3	100.0	48.6	16.1	35.3	100.0	49.4	16.2	34.4	100.0
5. Idukki	64.0	15.0	21.0	100.0	55.1	24.2	20.7	100.0	58.2	20.8	21.0	100.0
6. Ernakulam	36.1	29.7	34.2	100.0	30.8	33.0	36.2	100.0	32.0	34.6	33.4	100.0
7. Trichur	45.4	19.1	35.5	100.0	39.3	18.9	41.8	100.0	40.5	19.6	39.9	100.0
8. Palghat	54.0	16.0	30.0	100.0	47.4	18.1	34.5	100.0	45.7	18.5	35.8	100.0
9. Malappuram	59.6	7.9	32.5	100.0	52.0	9.1	38.9	100.0	56.2	9.0	34.8	100.0
10. Kozhikode	47.4	17.7	34.9	100.0	42.4	20.3	37.3	100.0	47.0	19.8	33.2	100.0
11. Cannanore	52.6	15.4	32.0	100.0	48.8	17.3	33.9	100.0	53.7	16.2	30.1	100.0
State	51.1	16.9	32.0	100.0	42.4	20.8	36.8	100.0	44.8	21.0	34.2	100.0

Source: Directorate of Economics and Statistics, Trivandrum.

APPENDIX 2.9

Estimates of District-wise Per Capita Income of Kerala at Current Prices

(Rupees)

District	1970-71	Rank	1971-72	Rank	1972-73	Rank	1973-74	Rank	1974-75	Rank	1975-76
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Trivandrum	549.2	7	562.8	5	614.2	6	750.0	7	885.8	5	941.6
2. Quilon	618.4	3	608.5	3	715.5	1	875.0	2	1033.5	3	1113.1
3. Alleppey	551.4	6	530.9	8	603.9	7	734.5	8	802.6	7	836.8
4. Kottayam	623.8	2	632.1	2	705.5	3	879.7	1	1078.2	1	1091.5
5. Idukki	588.3	4	567.3	4	622.9	5	766.0	6	1050.5	2	1118.0
6. Ernakulam	639.8	1	659.0	1	713.4	2	837.8	3	967.0	4	1030.3
7. Trichur	523.6	9	515.0	9	569.0	9	636.0	10	675.9	10	732.1
8. Palghat	537.1	8	584.6	6	669.2	4	834.9	4	762.5	9	847.3
9. Malappuram	421.5	11	423.7	11	474.0	11	562.8	11	568.1	11	604.1
10. Kozhikode	576.4	5	541.3	7	603.0	8	771.7	5	844.3	6	870.7
11. Cannanore	512.3	10	488.0	10	547.8	10	669.2	9	763.9	8	788.5
State	557.2		554.0		620.4		752.6		844.7		893.1

District	Rank	1976-77	Rank	1977-78	Rank	1978-79	Rank	1979-80	Rank
(1)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1. Trivandrum	5	954.6	5	944.6	7	1059.1	6	1095.1	8
2. Quilon	2	992.8	4	1019.6	5	1100.0	5	1179.6	4
3. Alleppey	8	876.6	8	891.8	9	984.6	9	1036.7	9
4. Kottayam	3	1094.7	3	1124.7	3	1199.3	3	1290.8	3
5. Idukki	1	1228.7	1	1168.0	2	1523.6	1	1445.8	2
6. Ernakulam	4	1159.8	2	1307.6	1	1412.2	2	1476.0	1
7. Trichur	10	806.4	10	884.4	10	943.9	10	988.8	10
8. Palghat	7	827.5	9	937.2	8	1048.2	8	1130.2	6
9. Malappuram	11	730.1	11	753.8	11	766.4	11	832.0	11
10. Kozhikode	6	936.3	6	1032.0	4	1126.0	4	1167.3	5
11. Cannanore	9	908.6	7	976.5	6	1055.2	7	1113.1	7
State		937.7		993.9		1086.4		1141.2	

Source: Directorate of Economics and Statistics, Trivandrum.
4/655/1MC.

APPENDIX 2.10

Estimates of District-wise Per Capita Income of Kerala at Constant (1970-71) Prices

(Rupees)

District	1970-71	Rank	1971-72	Rank	1972-73	Rank	1973-74	Rank	1974-75	Rank
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Trivandrum	549.2	7	590.0	5	565.2	6	568.4	6	582.9	5
2. Quilon	618.4	3	638.1	3	675.8	1	651.3	2	648.7	2
3. Alleppey	551.4	6	539.8	8	536.8	8	529.1	8	531.3	8
4. Kottayam	623.8	2	672.8	1	670.5	2	678.7	1	671.3	1
5. Idukki	588.3	4	604.5	4	580.0	4	599.3	4	635.2	3
6. Ernakulam	639.8	1	671.7	2	658.8	3	621.0	3	631.5	4
7. Trichur	523.6	9	521.8	9	518.3	9	473.9	10	465.8	10
8. Palghat	537.1	8	545.7	7	554.9	7	551.3	7	547.3	7
9. Malappuram	421.5	11	438.3	11	439.1	11	401.7	11	384.9	11
10. Kozhikode	576.4	5	580.0	6	577.3	5	576.5	5	552.8	6
11. Cannanore	512.3	10	500.3	10	499.3	10	501.7	9	482.9	9
State	557.2		570.6		569.6		555.7		551.7	

District	1975-76	Rank	1976-77	Rank	1977-78	Rank	1978-79	Rank	1979-80	Rank
(1)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1. Trivandrum	586.9	5	570.9	5	541.0	7	574.5	5	560.3	5
2. Quilon	664.1	2	572.5	4	562.6	4	568.3	6	559.9	6
3. Alleppey	545.2	8	518.8	7	517.1	9	531.4	8	531.4	8
4. Kottayam	691.3	1	647.6	2	638.6	2	629.2	3	629.3	2
5. Idukki	658.9	3	598.6	3	571.8	3	677.4	2	602.4	3
6. Ernakulam	640.5	4	663.4	1	717.9	1	748.2	1	741.3	1
7. Trichur	483.9	10	474.3	10	496.1	10	500.6	10	497.4	10
8. Palghat	554.6	7	509.8	8	556.3	6	562.9	7	561.4	4
9. Malappuram	391.6	11	417.9	11	417.7	11	395.8	11	406.6	11
10. Kozhikode	561.8	6	546.1	6	556.9	5	580.2	4	554.0	7
11. Cannanore	486.0	9	505.6	9	521.0	8	517.0	9	505.1	9
State	562.4		543.5		551.7		564.2		554.8	

Source: Directorate of Economics and Statistics, Trivandrum.

APPENDIX 2.11

Ranking of Districts in Kerala Based on Per Capita Income at Current Prices

(Rs.)

District	Average PerCapita Income for 3 years 1970-71 to 1972-73	Percentage to State Average PerCapita Income	Rank	Average PerCapita Income for 3 years 1977-78 to 1979-80	Percentage to State Average Per Capita Income	Rank
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	575.4	99.7	6	1032.9	96.2	8
2. Quilon	647.5	112.2	3	1099.7	102.4	5
3. Alleppey	562.1	97.4	8	971.0	90.4	9
4. Kottayam	653.8	113.3	2	1204.9	112.2	3
5. Idukki	592.8	102.7	5	1379.1	128.4	2
6. Ernakulam	670.7	116.2	1	1398.6	130.2	1
7. Trichur	535.9	92.8	9	939.0	87.4	10
8. Palghat	597.0	103.4	4	1038.5	96.7	7
9. Malappuram	439.7	76.2	11	784.1	73.0	11
10. Kozhikode	573.6	99.4	7	1108.4	103.2	4
11. Cannanore	516.0	89.4	10	1048.3	97.6	6
State	577.2	100.0		1073.8	100.0	

Source: Directorate of Economics and Statistics, Trivandrum.

APPENDIX 2.12

Ranking of Districts in Kerala Based on Per Capita Income at Constant (1970-71) Prices

(Rs.)

District	Average Per Capita Income for 3 years 1970-71 to 1972-73	Percentage to State average per capita Income	Rank	Average per Capita income for 3 years 1977-78 to 1979-80	Percentage to State average per capita income	Rank
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Trivandrum	568.1	100.4	6	558.6	100.3	6
2. Quilon	644.1	113.8	3	563.6	101.2	4
3. Alleppey	542.7	95.9	8	526.6	94.6	7
4. Kottayam	655.7	115.9	2	632.4	113.6	2
5. Idukki	590.9	104.4	4	617.2	110.8	3
6. Ernakulam	656.8	116.1	1	735.8	132.1	1
7. Trichur	521.2	92.1	9	498.0	89.4	9
8. Palghat	545.9	96.5	7	560.2	100.6	5
9. Malappuram	433.0	76.5	11	406.7	73.0	10
10. Kozhikode	577.9	102.1	5	563.7	101.2	4
11. Cannanore	504.0	89.1	10	514.4	92.4	8
State	565.8	100.0		556.9	100.0	

Source: Directorate of Economics and Statistics, Trivandrum.

APPENDIX 2.13

Ranking of States in India based on Per capita Income at Current Prices

State	Triennial Average Per Capita Income 1969-70 to 1971-72 Rs.	Percentage to All India Average Per Capita Income	Rank	Triennial Average Per Capita Income 1976-77 to 1978-79 Rs.	Percentage to All India Average Per Capita Income	Rank
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra Pradesh	578.3	91.7	9	998.7	83.9	11
2. Assam	526.7	83.6	13	903.7	75.9	14
3. Bihar	406.7	64.5	19	733.7	61.6	19
4. Gujarat	784.0	124.4	4	1438.7	120.9	4
5. Haryana	861.3	136.6	2	1555.3	130.7	3
6. Himachal Pradesh	660.0	104.7	7	1167.3	98.1	6
7. Jammu & Kashmir	531.0	84.2	12	1009.3	84.8	9
8. Karnataka	668.3	106.0	6	1088.0	91.4	7
9. Kerala	550.7	87.4	11	1006.7	84.6	10
10. Madhya Pradesh	499.0	79.2	15	838.0	70.4	16
11. Maharashtra	803.7	127.5	3	1612.0	135.4	2
12. Manipur	428.3	68.0	18	795.7	66.8	17
13. Orissa	484.3	76.8	17	779.7	65.5	18
14. Punjab	1026.3	162.8	1	1955.3	164.3	1
15. Rajasthan	559.3	88.7	10	963.7	81.0	12
16. Tamil Nadu	590.0	93.6	8	1046.3	87.9	8
17. Tripura	519.3	82.4	14	851.3	71.5	15
18. Uttar Pradesh	490.0	77.7	16	916.0	77.0	13
19. West Bengal	742.0	117.7	5	1242.7	104.4	5
20. All India	630.3	100.0		1190.3	100.0	

Source: 1. Reply to Lok Sabha furnished on 2-12-1981 by the Union Minister of Planning.
2. Directorate of Economics and Statistics, Trivandrum (for figures for Kerala in Col. No. 5).

APPENDIX 2.14

Estimate of Per Capita Income of States—at Current Prices (Rs.)

State	1960-61	1965-66	1968-69	1970-71	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Andhra Pradesh	275	387	495	586	863	1020	895	897	1018	1083	1176
2. Assam	315	399	514	539	645	820	781	846	912	953	960
3. Bihar	215	332	376	402	575	687	661	700	728	773	..
4. Gujarat	362	498	605	829	1124	1046	1253	1349	1462	1505	1623
5. Haryana	327	450	635	845	1174	1217	1274	1466	1600	..	..
6. Himachal Pradesh	306	..	576	678	936	1048	1078	1029	1178	1295	1317
7. Jammu & Kashmir	269	317	446	524	721	835	883	897	986	1145	..
8. Karnataka	296	448	588	685	973	1077	1005	999	1129	1136	1267
9. Kerala	259	380	496	557	753	845	893	940	994	1086	1141
10. Madhya Pradesh	260	305	430	488	725	818	768	754	900	860	828
11. Maharashtra	409	534	700	809	1125	1380	1393	1505	1637	1694	1903
12. Manipur	154	268	485	396	688	781	807	765	808	814	822
13. Meghalaya	..	..	..	..	598	..	..	..	..	..	..
14. Orissa	216	329	464	482	697	701	715	659	820	860	843
15. Punjab	366	562	903	1090	1438	1525	1597	1812	1966	2088	2278
16. Rajasthan	284	373	414	620	833	851	857	899	969	1023	913
17. Tamil Nadu	334	403	499	583	808	841	860	972	1051	1116	1350
18. Tripura	249	333	473	502	649	789	813	831	862	861	..
19. Uttar Pradesh	252	373	453	486	673	760	730	834	949	965	981
20. West Bengal	390	532	660	735	946	1088	1120	1212	1263	1253	1330
21. All India	306	426	552	633	871	1006	1029	1094	1210	1267	1379

Source: 1. Reply to Lok Sabha Furnished on 2-12-1981 by the Union Minister of Planning.

2. Figures for Kerala, from 1970-71 onwards, Directorate of Economics and Statistics, Trivandrum.

APPENDIX 2.15

Distribution of Population, Sex Ratio, Density and Growth Rate in States

Sl. No.	India/State	Population 1981			Sex Ratio, i.e. Females per 1000 males		Density of Population per Sq. km.		Decennial Growth Rate of Population	
		Persons	Males	Females	1971	1981	1971	1981	1961-71	1971-81
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	INDIA	683,810,051	353,34,7249	330,462,802	930	935	177	221	+24.80	+24.75
	States									
1.	Andhra Pradesh	53,403,619	27,035,531	26,368,088	977	975	158	194	+20.90	+22.76
2.	Assam	19,902,826	10,472,712	9,430,114	896	900	186	254	+34.95	+36.09
3.	Bihar	69,823,154	35,865,467	33,957,687	954	947	324	402	+21.33	+23.90
4.	Gujarat	33,960,905	17,484,540	16,476,365	934	942	136	173	+29.39	+27.21
5.	Haryana	12,850,902	68,46,153	6,004,749	867	877	227	291	+32.23	+28.04
6.	Himachal Pradesh	4,237,569	2,131,312	2,106,257	958	988	62	76	+23.04	+22.46
7.	Jammu & Kashmir	5,981,600	3,062,200	2,919,400	878	953	N.A.	N.A.	+29.65	+29.57
8.	Karnataka	37,043,451	18,869,494	18,179,957	957	963	153	193	+24.22	+26.43
9.	Kerala	25,403,217	12,487,961	12,915,256	1,016	1034	549	654	+26.29	+19.00
10.	Madhya Pradesh	52,131,717	26,856,752	25,274,965	941	941	94	118	+28.67	+25.15
11.	Maharashtra	62,693,898	32,341,115	352,783	930	939	164	204	+27.45	+24.36
12.	Manipur	1,433,691	727,108	706,583	980	972	48	64	+37.53	+33.65
13.	Meghalaya	1,327,874	678,883	648,991	942	956	45	59	+31.50	+31.25
14.	Nagaland	773,281	414,231	359,050	871	867	31	47	+39.88	+49.73
15.	Orissa	26,272,054	13,253,523	13,018,531	988	982	141	169	+25.05	+19.72
16.	Punjab	16,669,755	8,840,234	7,829,521	865	886	269	331	+21.70	+23.01
17.	Rajasthan	34,102,912	17,749,282	16,353,630	911	921	75	100	+27.83	+32.36
18.	Sikkim	315,682	171,959	143,723	863	836	30	44	+29.38	+50.44
19.	Tamil Nadu	4,82,97,456	24,420,228	23,877,228	978	978	317	371	+22.30	+17.23
20.	Tripura	2,060,189	1,057,714	1,002,475	943	948	148	196	+36.28	+32.37
21.	Uttar Pradesh	110,858,019	58,780,640	52,077,379	879	886	300	377	+19.78	+25.49
22.	West Bengal	54,485,560	28,505,151	25,980,409	891	911	499	614	+26.87	+22.96

Source: Census of India, 1981, Provisional Population Totals, Series—1, India.
N.A.—Not Available.

TABLE 2.16

Urban Content of the Population of States in India (Per cent)

States	Percentage of Urban to total Populaton		Percentage of India's Urban Population	
	1971	1981	1971	1981
(1)	(2)	(3)	(4)	(5)
1. Andhra Pradesh	19.31	23.25	7.85	7.98
2. Assam	N.A.	N.A.	..	..
3. Bihar	10.00	12.46	5.27	5.57
4. Gujarat	28.08	31.08	7.01	6.76
5. Haryana	17.66	21.96	1.66	1.81
6. Himachal Pradesh	6.99	7.72	0.23	0.21
7. Jammu & Kashmir	N.A.	N.A.	..	..
8. Karnataka	24.31	28.91	6.66	6.86
9. Kerala	16.24	18.78	3.24	3.05
10. Madhya Pradesh	16.29	20.31	6.34	6.78
11. Maharashtra	31.17	35.03	14.69	14.06
12. Manipur	13.19	26.44	0.13	0.24
13. Meghalaya	14.55	18.03	0.14	0.15
14. Nagaland	9.95	15.54	0.05	0.08
15. Orissa	8.41	11.82	1.72	1.99
16. Punjab	23.73	27.72	3.01	2.96
17. Rajasthan	17.63	20.93	4.25	4.57
18. Sikkim	9.37	16.23	0.02	0.03
19. Tamil Nadu	30.26	32.98	11.65	10.20
20. Tripura	10.43	10.98	0.15	0.14
21. Uttar Pradesh	14.02	18.01	11.58	12.79
22. West Bengal	24.75	26.49	10.25	9.24
All India	20.22	23.73	100.00	100.00

* Excludes Assam and Jammu and Kashmir.

Source: Census of India, 1981 Provisional Population Totals, Rural-Urban Distribution, Series-1, India.

APPENDIX 3.1

Index Numbers of Wholesale Prices—By Groups and Sub Groups (1970-71=100)

Average months/ Average of weeks ended on Saturdays	1981														% variation over December 1980
	1980														
	Weight	December	January	February	March	April	May	June	July	August	September	October	November	December	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
ALL COMMODITIES	1000.00	256.8	262.8	268.2	269.5	274.6	276.9	278.2	283.7	277.4	284.5	283.6	279.8	277.4	+7.9
<i>Primary Articles</i>	416.67	240.6	247.7	251.8	248.6	249.6	254.6	257.9	267.6	272.5	269.4	267.9	264.8	263.8	+9.0
I. Food Articles	297.99	210.9	214.9	219.7	217.0	217.7	223.7	226.7	238.4	243.9	239.7	238.9	237.1	235.3	+11.6
(i) Foodgrains	129.22	225.8	229.1	234.4	227.0	226.3	229.3	233.6	239.7	247.5	248.8	244.3	238.0	235.1	+4.1
(a) Cereals	107.43	198.6	202.0	208.1	204.0	204.4	207.3	211.9	217.6	223.0	225.0	220.6	215.8	216.6	+9.1
(b) Pulses	21.79	360.0	362.8	364.2	340.3	334.3	337.7	340.3	348.2	368.3	366.1	361.1	347.0	326.1	-9.4
(ii) Fruits and Vegetables	61.92	209.6	209.8	218.1	214.4	222.5	236.9	232.0	273.7	271.1	242.5	243.4	247.4	238.7	+13.9
(iii) Milk and Milk Products	61.50	180.6	184.8	188.3	190.0	188.0	192.7	197.5	200.9	208.0	210.4	214.8	213.5	213.7	+18.3
(iv) Eggs Fish and Meat	18.97	266.4	188.8	281.8	283.4	278.6	282.7	288.2	294.7	309.8	315.0	308.4	312.2	329.4	+23.3
(v) Condiments and Spices	10.94	120.0	122.9	131.0	144.0	151.0	149.9	148.8	153.2	168.5	172.4	175.3	179.1	186.1	+55.1
(vi) Other Food Articles	16.04	212.1	213.4	214.9	219.7	216.6	228.0	242.8	228.8	219.8	223.8	231.3	232.0	228.5	+7.7
2. Non Food Articles	106.21	222.2	231.1	233.7	228.1	230.6	232.9	237.8	243.0	246.9	245.2	241.3	236.7	237.6	+7.0
(i) Fibres	31.73	189.8	196.4	198.2	205.0	208.6	210.9	211.3	214.5	218.0	224.9	218.7	216.3	220.5	+16.2
(ii) Oil Seeds	42.01	235.9	251.3	256.0	240.5	244.2	249.6	260.0	286.6	277.5	269.0	259.2	248.8	246.0	+4.2
(iii) Other Non-Food Articles	32.47	236.0	238.9	239.3	234.7	234.6	233.0	235.2	237.7	235.7	234.4	240.2	241.0	245.9	+4.2
3. Minerals	12.47	1108.0	1171.7	1171.9	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1187.3	1188.1	1167.9	1168.4	+5.4
(i) Petroleum Crude and Natural Gas	6.02	2026.6	2162.3	2162.3	2162.3	2162.3	2162.3	2162.3	2162.3	2162.3	2162.3	2162.3	2119.1	2119.1	+4.1
(ii) Fuel Power, Light and Lubricants	84.59	356.4	374.6	393.7	400.3	400.3	400.5	400.4	420.4	432.2	437.5	437.5	437.5	437.5	+22.8
III. Manufactured Products	498.74	253.5	256.4	260.7	264.8	274.2	274.5	274.5	273.9	275.2	271.2	270.5	265.5	261.4	+3.0
1. Food Products	133.22	288.8	294.1	300.9	308.1	336.7	333.0	335.0	327.4	325.3	307.4	301.9	282.3	265.4	-8.1
(i) Dairy Products	3.88	235.9	243.5	248.7	253.6	260.0	260.0	260.0	260.0	260.0	277.6	283.3	283.8	283.8	+20.3

(ii) Sugar, Khandasari and Gur	72.41	336.8	337.6	343.3	361.7	410.0	401.8	401.4	382.2	374.8	344.8	337.4	306.8	279.7	-16.6
(iii) Edible Oils	37.16	230.3	244.3	255.9	248.5	252.0	254.0	260.2	271.0	279.1	274.0	267.0	256.6	252.3	+ 9.5
2. Beverages, Tobacco and Tobacco Products	27.08	214.1	214.2	214.7	215.1	217.3	218.2	217.7	218.4	218.4	218.8	218.9	218.9	218.9	+2.2
3. Textiles	110.26	213.0	215.2	214.4	218.4	221.1	221.7	221.0	221.8	222.5	223.0	224.0	223.6	222.9	+4.5
4. Paper and Paper products	8.51	261.6	267.5	267.5	268.5	269.2	269.8	269.9	269.9	271.1	271.6	277.5	278.8	287.0	+9.7
5. Leather and Leather Products	3.85	386.0	387.0	384.5	372.9	372.9	372.3	371.3	373.3	372.0	372.4	372.4	367.6	364.1	-5.7
6. Rubber Products	12.07	254.2	255.2	256.7	256.7	260.7	267.8	270.1	271.8	271.2	283.4	286.9	287.0	283.4	+13.5
7. Chemicals and Chemical Products	55.48	247.3	249.9	251.6	251.4	251.6	251.6	252.3	255.2	258.0	258.0	259.5	260.9	261.8	+6.0
(i) Fertilisers	12.52	259.4	259.4	259.5	259.5	259.5	260.6	260.6	273.3	280.7	278.4	278.3	278.4	278.5	+7.4
(ii) Pesticides	1.16	341.6	341.6	341.6	341.6	341.6	341.6	341.6	341.6	341.6	348.2	356.0	361.2	361.2	+5.7
(iii) Drugs and Medicines	9.83	139.4	141.7	141.7	142.5	143.5	143.1	143.1	143.1	143.1	145.0	152.4	153.5	155.5	+11.6
8. Non-Metallic Mineral Products	14.15	186.5	288.4	290.2	290.0	289.4	289.0	289.3	295.2	311.7	312.6	314.0	313.7	313.9	+9.9
9. Basic Metals, Alloys and Metal Products	59.74	269.5	271.3	290.5	298.9	301.0	304.0	302.4	304.5	308.2	309.0	310.3	310.9	311.7	+15.7
0. Machinery and Transport Equipment	67.18	243.4	245.0	245.6	247.3	253.6	257.5	255.1	258.4	261.4	263.4	263.6	264.6	265.7	+9.2
(i) Motor Vehicles and Parts	13.73	284.7	289.8	289.7	290.6	298.3	305.8	303.1	310.1	312.9	313.1	313.1	316.4	317.4	+11.5
11. Miscellaneous Products	7.20	236.7	236.8	237.6	238.4	239.2	240.5	239.4	240.7	240.8	239.0	239.2	240.3	240.7	+1.7

APPENDIX 3.2

Consumer Price Index Numbers for Industrial Workers—All India and Selected Centres (1960=100)

Centre	1980 Decem- ber	January	Febru- ary	March	April	1981 May	June	July	August	Septem- ber	October ber
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
All India	408	411	418	420	427	433	439	447	454	456	460
Ahamedbad	377	385	389	393	406	418	427	438	441	444	..
Alwaye	419	424	433	442	441	453	456	460	464	462	..
Bangalore	423	422	468	460	472	483	485	490	505	508	..
Bombay	408	409	420	423	435	442	450	459	462	458	..
Calcutta	379	379	384	385	397	399	406	408	412	423	..
Coimbatore	435	431	445	459	455	459	462	468	482	480	..
Delhi	430	434	434	438	448	453	461	476	480	480	..
Gwalior	423	428	443	438	455	464	467	481	482	483	..
Hyderabad	414	424	428	433	438	446	453	465	465	473	..
Jamshedpur	379	378	387	395	400	405	415	420	428	429	..
Madras	404	403	409	410	412	420	428	452	457	455	..
Madurai	435	439	452	430	432	446	449	463	468	476	..
Mundakayam	428	437	445	434	435	448	450	460	470	469	..
Nagpur	404	411	421	425	435	440	454	459	466	481	..

APPENDIX 3.3

Consumer Price Index Numbers for Agricultural Labourers

State	1980 Decem- ber	January	Febru- ary	March	April	1981 May	June	July	August	Septem- ber	October
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
All India	408	404	414	419	420	425	429	439	451	457	460
Andhra Pradesh	349	348	356	365	370	379	384	398	408	418	425
Assam including Manipur, Meghalaya and Tripura	409	393	393	398	400	407	413	418	423	424	423
Bihar	428	420	432	440	435	430	434	437	454	468	475
Gujarat	344	348	355	364	372	378	385	401	410	411	413
Jammu and Kashmir	385	381	381	380	387	391	402	409	415	422	425
Karnataka	406	400	404	413	425	442	444	455	464	482	481
Kerala	377	383	390	390	389	393	397	403	400	408	417
Madhya Pradesh	428	426	439	440	441	452	457	473	484	478	474
Maharashtra	402	402	408	413	437	444	446	456	470	475	485
Orissa	414	400	411	418	441	461	471	485	496	501	494
Punjab including Delhi, Haryana, Himachal Pradesh	441	433	439	438	447	446	449	454	461	471	477
Rajasthan	422	425	429	430	426	440	449	458	476	481	489
Tamil Nadu	385	384	415	422	422	425	420	430	446	455	450
Uttar Pradesh	468	481	489	480	542	446	450	457	472	471	473
West Bengal	395	374	377	386	395	403	410	422	436	439	444

APPENDIX 3.4

Consumer price index numbers for Urban non-Manual Employees All India and selected Centres (1960=100)

Centre	1980 December	January	February	March	1981 April	May	June	July	August
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
All India	376	378	382	385	391	396	401	411	417
Bombay	353	352	357	359	372	377	380	387	394
Delhi-New- Delhi	355	359	361	367	372	377	383	397	408
Calcutta	341	339	343	345	348	353	358	364	368
Madras	405	405	411	412	414	420	426	434	440
Hyderabad Secunderabad	400	402	404	406	411	422	426	438	441
Bangalore	390	389	396	399	405	411	414	419	427
Lucknow	366	369	370	372	373	378	386	400	..
Ahmedbad	353	356	358	366	375	383	391	407	410
Jaipur	411	418	421	421	423	455	484	461	481
Patna	368	364	368	370	369	372	379	391	..
Srinagar	419	420	418	420	423	427	428	438	445
Trivandrum	424	428	439	446	452	460	458	462	..
Cuttak-Bhuvanewar	368	362	364	367	373	376	382	394	399
Bhopal	395	397	400	403	414	424	434	448	455
Chandigar	370	373	377	378	389	392	400	415	..
Shillong	371	374	374	370	382	387	387	388	..

APPENDIX 3.5

Wholesale price index of Agricultural Commodities—Kerala 1981
(Base—1952-53=100)

Group	January	February	March	April	May	June	July	August	September	October	November	December
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Rice	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7	318.7
2. Molasses	601.6	643.7	635.2	699.3	739.4	675.6	620.0	603.2	565.5	536.5	502.1	448.7
3. Condiments and Spices	397.6	420.6	421.9	475.5	634.7	649.4	411.3	353.6	401.8	392.8	376.8	365.7
4. Fruits and Vegetables	584.1	695.3	694.4	715.3	740.4	732.1	738.7	750.4	766.8	774.5	777.8	770.6
5. Food Crops	385.5	409.4	409.1	423.5	454.9	453.9	414.4	406.5	415.9	414.8	411.6	406.9
6. Oil Seeds	941.0	935.9	872.0	880.2	819.6	812.3	762.2	799.6	774.8	758.6	738.4	733.0
7. Plantation Crops	346.8	353.1	355.2	362.1	362.9	360.4	349.0	361.6	359.3	357.9	359.6	369.0
8. Non-Food Crops	761.6	759.9	715.9	723.7	681.7	675.8	637.4	667.3	649.3	637.6	624.0	623.1
All Crops	522.8	537.3	521.1	533.1	537.7	534.9	495.8	501.7	501.1	496.1	489.1	485.8

APPENDIX 3.6

Wholesale price index of Agricultural Commodities—Kerala 1972-81
(Base 1952-53=100)

Group	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Food Grains	209	233	297	319	319	319	319	319	319	319
2. Molasses	272	280	282	416	423	368	289	384	629	606
3. Condiments and Spices	139	161	222	218	318	309	324	378	403	442
4. Fruits and Vegetables	234	306	402	385	380	497	564	518	589	728
5. Food Crops	204	235	302	317	332	349	360	364	388	417
6. Oil Seeds	287	466	617	479	525	606	677	648	822	819
7. Plantation Crops	139	154	215	247	236	310	308	306	331	358
8. Non-Food Crops	242	372	496	409	438	516	565	545	673	680
All Crops	218	285	373	350	371	410	435	430	492	513

APPENDIX 3.7

Average Retail Prices of Essential Commodities

1981 (Rs.)

Name of commodity	Unit	Price at the end of the month											
		January	February	March	April	May	June	July	August	September	October	November	December
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1. Rice	Kg.	2.78	3.06	3.12	3.18	3.21	3.29	3.38	3.59	3.43	3.22	3.15	3.08
2. Greengram	"	5.51	5.74	5.77	5.96	6.08	6.10	6.13	5.82	5.25	4.93	4.87	4.83
3. Blackgram	"	3.65	3.92	3.89	3.87	3.93	3.98	4.00	4.02	4.04	4.09	4.09	4.12
4. Redgram	"	4.17	4.19	4.44	4.56	4.76	4.91	5.01	5.00	5.00	4.83	4.69	4.37
5. Dhall	"	5.98	5.91	5.86	5.90	5.94	5.94	5.95	6.10	6.09	6.11	6.10	6.19
6. Coconut Oil	"	17.62	16.32	14.83	15.53	14.83	15.25	15.63	15.45	14.18	14.42	14.10	13.81
7. Groundnut Oil	"	14.63	15.96	14.88	15.11	15.19	15.43	15.99	16.87	16.29	15.56	15.14	14.83
8. Refined Oil	"	18.19	20.07	23.83	23.83	23.80	23.78	24.25	25.22	25.55	25.64	25.09	24.22
9. Gingelly Oil	"	15.23	16.18	15.90	15.93	16.03	16.08	16.17	16.53	16.52	16.42	16.04	16.06
10. Tapioca (raw)	"	0.60	0.68	0.68	0.68	0.65	0.67	0.70	0.74	0.71	0.76	0.73	0.77
11. Cheni	"	0.83	0.82	0.98	0.92	1.17	1.29	1.45	1.24	1.22	1.13	1.05	1.05
12. Banana (Green)	"	2.36	2.51	2.50	2.35	2.93	3.04	3.09	3.06	2.96	3.02	2.69	2.67
13. Milk (cow's)	Litre	2.83	2.83	2.89	2.89	2.93	2.93	2.95	2.95	2.98	3.11	3.11	3.11
14. Eggs (Hen's)	Doz.	5.33	5.20	5.14	4.86	5.21	5.89	6.06	6.09	5.79	5.91	6.93	6.42
15. Mutton	Kg.	19.00	19.00	19.00	19.00	19.00	19.10	19.50	19.70	19.50	19.90	20.10	20.10
16. Potato	"	2.08	1.90	2.12	2.08	2.22	2.12	1.83	1.61	1.64	1.81	2.01	2.17
17. Coriander	"	7.30	7.40	7.77	8.23	8.52	8.95	9.13	9.58	9.51	9.53	9.53	9.31
18. Chillies	"	9.41	9.84	11.45	11.49	11.69	12.69	14.32	17.28	14.43	15.30	16.20	16.25
19. Onion	"	1.03	0.97	1.31	1.30	1.41	1.26	1.33	1.41	1.46	2.16	2.91	2.81
20. Tamarind	"	7.87	6.74	6.94	7.09	7.14	7.14	7.33	7.55	7.60	7.50	7.50	7.80
21. Tea Brooke Bond Al Dust	"	21.75	22.14	22.54	23.03	23.05	23.05	23.23	24.00	23.83	23.60	23.73	23.83
22. Coffee Powder (Brooke Bond) Family Brand	"	19.37	20.15	20.15	20.15	20.18	20.16	20.21	20.25	20.21	20.21	20.16	20.16
23. Sugar	"	7.38	7.48	7.92	8.27	7.63	7.51	6.63	5.74	5.53	5.69	5.51	5.96
24. Coconut (with husk)	100 nos.	156.50	151.00	142.20	141.80	135.00	135.50	135.00	131.50	135.75	123.75	127.50	125.25
25. Tobacco	Kg.	11.80	11.85	11.90	11.85	11.95	11.85	11.35	11.80	11.75	11.60	11.55	11.50
26. Firewood Local Split	Qtl.	36.75	40.20	37.50	37.65	38.70	40.60	40.05	40.35	41.10	40.40	40.90	40.90
27. Mundu (Mull)	each	11.80	11.57	11.97	12.50	12.50	12.63	12.73	13.02	12.76	12.77	13.01	13.05
28. Mundu (Kora)	"	8.79	8.93	8.99	9.06	9.12	9.59	9.53	9.51	9.53	9.63	9.59	9.57
29. Paper	24 sheets	2.32	2.33	2.42	2.44	2.43	2.49	2.40	2.48	2.33	2.36	2.37	2.37
30. Washing Soda	Kg.	4.06	4.05	4.01	3.95	3.35	3.92	3.90	3.90	3.91	3.90	3.86	3.81
31. Washing Soap (Santalight Bar)	each	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
32. Toilet Soap (Lux)	cake	1.91	1.91	1.91	1.93	1.93	1.93	1.79	1.93	2.00	2.00	2.00	2.00
33. Razor Blade	5 nos.	0.84	0.85	0.85	0.83	0.33	0.89	0.39	0.83	0.39	0.89	0.80	0.91
34. Tooth Paste (Colgate 50 gm.)	each	3.99	3.97	3.53	3.56	3.55	3.56	3.49	3.49	3.51	3.52	3.55	3.55
35. Anacin	2 tabs	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.13	0.16	0.15	0.16
36. Electric Bulb (Osram 40 W)	each	3.97	4.00	4.05	4.09	4.18	4.18	4.18	4.21	4.27	4.37	4.37	4.43
37. Aluminium Cooking Pot	Kg.	35.45	35.15	35.85	35.35	39.55	39.55	40.25	40.25	40.25	40.65	40.65	39.75
38. Cement (Ordinary)	Bags	31.61	31.80	32.14	32.14	32.14	32.14	34.13	35.64	36.33	36.72	36.72	36.72
39. Baby Food Amul	Kg.	26.73	27.13	27.62	28.78	28.78	29.48	30.93	31.42	31.87	32.49	32.51	32.71
40. Torch Battery (Eveready) 950	each	2.13	2.13	2.16	2.35	2.38	2.38	2.38	2.44	2.48	2.49	2.49	2.49

APPENDIX 3.8

Consumer Price Index (Cost of Living Index) Numbers for Agricultural and Industrial Workers—Kerala 1981

(Base 1970=100)

Centre	Cost of Living Index											
	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)
Trivandrum	218	222	223	224	229	229	232	234	234	233	232	233
Quilon	221	226	228	229	233	236	239	242	242	242	243	243
Punalur	211	215	215	217	221	223	226	228	228	228	227	228
Alleppey	216	220	221	223	228	231	233	235	235	234	233	233
Kottayam	216	220	221	222	227	230	233	236	237	236	236	237
Mundakayam	211	214	216	218	223	225	228	230	231	230	231	232
Munnar	224	228	229	230	233	234	235	237	237	238	239	241
Ernakulam	211	215	217	219	224	225	227	229	229	228	228	228
Chalakydy	217	222	224	226	231	231	232	235	236	235	235	235
Trichur	223	227	228	230	234	235	236	238	239	238	238	238
Palghat	214	217	218	220	224	226	229	231	231	230	230	232
Malappuram	218	221	222	224	227	229	230	233	234	233	232	231
Kozhikode	216	220	222	224	229	231	233	235	235	234	234	235
Meppady	222	226	227	229	233	233	235	237	238	239	240	241
Cannanore	213	216	218	220	225	228	229	231	232	231	230	231

APPENDIX 3.9

Availability of Food in the State

Particulars	Unit	1975	1976	1977	1978	1979	1980 (Provisional)	1981
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Population of the State as on 1st April	Lakh	234.8	239.8	241.5	246.1	249.9	253.8	254.00
2. Production of Rice in the State	Lakh tonnes	13.34	13.29	12.54	12.95	12.72	13.0	12.72
3. *Availability of Rice for Consumption from Production within the State	"	12.00	11.96	11.29	11.66	11.45	11.70	11.45
4. ** Import of Rice on State Account	"	5.12	9.02	15.03	16.20	5.32	16.20	15.75
5. Import of Wheat on State Account	"	5.18	3.89	2.07	1.20	0.33	1.02	0.48
6. Production of Raw Tapioca	"	56.25	53.90	51.26	51.14	40.44	40.89	41.10
7. † Availability of Tapioca for Consumption	"	42.19	40.43	38.45	38.36	30.33	30.67	30.83
8. Availability of Tapioca for Consumption in Rice Equivalent	"	19.00	18.21	17.32	17.28	13.66	13.82	13.89

* Ten per cent of production is set apart for seed, food and wastage and the rest alone is accounted for consumption.

** Firm data are not available on the import of rice into the State by private trade. Hence availability through this source is not included.

† Twenty-five per cent of 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. 2.22 tonnes of raw tapioca is considered as equivalent to 1 tonne of rice in caloric value.

APPENDIX 4.1

Average Monthly Farm Commodity Prices—Kerala

(in Rupees)

Month	Paddy (per standard Para)		Tapioca per Quintal		Coconut (with husk) per 100 Nos.		Pepper per Quintal		Ginger per Quintal	
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
January	10.01	10.82	44.20	39.23	118.06	143.76	1332.81	1081.27	405.04	689.95
February	9.89	11.91	44.55	38.32	121.23	143.14	1299.15	1068.01	410.64	672.23
March	9.95	12.54	45.37	39.15	119.67	134.45	1257.16	1048.27	389.29	696.15
April	9.90	12.88	46.53	41.06	122.07	137.15	1244.91	1172.15	373.64	805.88
May	9.97	13.45	46.48	42.68	127.69	131.98	1207.50	1251.48	341.81	765.27
June	10.12	13.63	43.71	42.14	131.92	124.67	1219.08	1239.99	322.79	735.31
July	10.62	13.85	40.61	42.09	136.50	118.78	1176.25	1238.42	311.22	720.66
August	10.63	14.27	39.66	42.70	137.42	119.28	1140.34	1280.63	311.31	754.33
September	9.99	13.92	39.53	42.72	140.64	118.24	1206.77	1273.10	363.37	747.37
October	9.85	13.32	39.98	40.32	146.84	114.34	1336.22	1281.00	459.17	729.56
November	10.08	13.15	39.51	41.84	152.79	111.55	1352.50	1297.92	476.67	702.40
December	10.43	N.A.	38.67	N.A.	145.12	N.A.	1248.52	N.A.	534.29	N.A.
Average	10.12	13.07	42.40	41.14	133.33	127.03	1251.77	1202.93	391.60	729.01

APPENDIX 4.1—Contd.

(In Rupees)

Month	Cashew per Quintal		Sugarcane per Tonne		Areca nut per 100 Nos.		Banana per 100 Nos.	
	1980	1981	1980	1981	1980	1981	1980	1981
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
January	350.00	704.00	124.00	175.00	6.03	6.94	36.60	34.12
February	580.83	739.10	126.00	175.00	6.48	7.56	37.30	35.55
March	579.23	732.08	126.00	165.00	7.17	8.09	37.23	35.97
April	578.35	771.25	127.00	165.00	7.83	8.80	36.42	38.41
May	571.74	773.76	128.00	200.00	8.25	11.70	38.29	42.93
June	561.75	777.92	126.81	200.00	7.52	11.73	39.27	43.18
July	580.00	750.00	..	200.00	6.44	8.59	38.85	44.44
August	570.00	750.00	..	200.00	6.08	7.93	40.89	46.37
September	570.00	770.00	..	200.00	6.03	7.33	38.70	45.94
October	570.00	770.00	..	200.00	6.12	7.03	37.98	42.48
November	N.A.	N.A.	165.00	185.00	5.95	6.92	37.28	41.62
December	570.00	N.A.	173.75	N.A.	6.03	N.A.	34.79	N.A.
Average	552.95	753.81	137.07	187.73	6.66	8.42	37.80	41.00

Source: Directorate of Economics and Statistics

N.A.—Not Available

APPENDIX 4.2

Monthly Rainfall

(in m.m.)

Stations	1981											
	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)
Trivandrum	40.5	31.4	35.1	121.1	150.8	479.9	174.4	145.8	361.6	300.9	297.0	29.8
Quilon	0.0	0.0	0.0	70.0	137.0	502.0	480.8	320.1	73.9	280.9	253.2	12.7
Alleppey	31.2	31.8	4.9	91.0	246.9	946.7	294.4	395.6	421.8	332.6	273.1	18.4
Kottayam	0.0	30.4	83.5	122.4	185.3	1117.9	435.5	499.2	586.0	203.4	257.0	31.0
Peermade	0.0	0.0	7.0	53.5	131.0	637.5	997.3	640.6	214.8	599.1	217.0	10.0
Cochin	19.2	4.0	39.2	102.4	87.3	1131.2	456.7	486.3	511.5	357.0	144.4	7.7
Trichur	0.0	0.0	0.0	109.0	103.0	1107.6	1255.9	709.2	580.6	277.3	74.5	4.2
Palghat	0.0	0.0	73.0	49.4	223.2	661.0	411.2	575.0	215.4	273.4	124.4	0.0
Nilambur	0.0	0.0	0.0	59.1	85.3	1144.3	1057.7	441.3	70.4	261.5	9.0	0.0
Kozhikode	0.0	0.0	2.3	99.8	235.7	1252.1	541.1	587.8	338.3	263.3	121.3	0.0
Wynad (Vythiri)	0.0	0.0	34.2	0.0	162.0	1206.7	806.9	1217.6	462.0	331.0	97.1	11.8
Cannanore	0.3	0.0	5.6	5.8	244.6	1855.4	569.2	718.7	369.5	182.3	110.0	45.2

Source: Meteorological Centre, Trivandrum.

APPENDIX 4.3

Land Use Pattern in Kerala 1980-81*

(In hectares)

District	Total Geographical area according to village papers	Forest	Land put to non-agricultural uses	Barren and uncultivable Land	Pastures and grazing land	Land under miscellaneous tree crops not included in net area Sown	Cultivable waste	Fallow land other than current fallow	Current fallow	Net area sown	Area sown more than once	Total cropped area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	218600	49861	17609	1866	39	221	2121	1802	1358	143723	74102	217825
Quilon	474290	236048	25577	2362	36	311	1493	1198	1863	205402	93792	299194
Alleppey	182270	518	28959	686	18	216	2213	1040	2936	145684	69636	215320
Kottayam	219550	8141	19653	2020	104	320	1451	2310	4800	180751	39729	220480
Idukki	515048	260993	13235	17729	2215	16344	38776	1185	1752	162819	3796	166615
Ernakulam	235319	8123	29587	2124	189	1349	5255	2572	3890	182230	75047	257277
Trichur	299390	103619	22376	2666	212	1333	4922	2948	4980	156334	71485	227819
Palghat	438980	136257	28650	13027	497	8821	24187	4931	6753	215857	120323	336180
Malappuram	363230	103417	17460	7748	421	2603	13601	4225	7130	206625	41853	248478
Calicut	371150	90876	22743	3730	284	19770	5328	1823	2735	223861	62590	286151
Cannanore	567670	83656	32722	24229	1615	14488	25668	3575	5090	376627	8153	384780
State	3885497	1081509	258571	78187	5630	65776	125015	27609	43287	2199913	660506	2860419

* Provisional

Source: Directorate of Economics and Statistics

APPENDIX 4.4

District-wise Area, Production and Productivity of High Yielding Varieties of Rice in Kerala 1980-81*

District	Autumn (1980)			Winter (1980)			Summer (1981)			Total		
	Area (ha.)	Production (Tonnes) (Rice)	Productivity (Kg./ha.) (Paddy)	Area (ha.)	Production (Tonnes) (Rice)	Productivity (Kg./ha.) (Paddy)	Area (ha.)	Production (Tonnes) (Rice)	Productivity (Kg./ha.) (Paddy)	Area (ha.)	Production (Tonnes) (Rice)	Productivity (Kg./ha.) (Paddy)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	1694	2668	2397	789	1344	2593	459	401	1330	2942	4413	2283
Quilon	12356	24678	3040	1163	1847	2417	94	117	1895	13613	26642	2979
Alleppey	16062	31685	3002	5007	10235	3111	20674	46147	3397	41743	88067	3211
Kottayam	11558	21112	2780	9799	17176	2668	4565	9788	3263	25922	48076	2823
Idukki	2580	3824	2256	1889	2429	1957	86	88	1558	4555	6341	2119
Ernakulam	13119	20917	2427	4081	6182	2305	5047	7414	2236	22247	34513	2361
Trichur	7301	10882	2269	7779	11177	2187	9906	19322	2969	24986	41381	2521
Palghat	62185	152034	3721	56115	116564	3162	2687	4864	2755	120987	273462	3440
Malappuram	2065	3821	2816	1496	2535	2579	1845	3463	2857	5406	9819	2764
Kozhikode	1773	1788	1535	2172	2625	1839	4358	7832	2735	8303	12245	2245
Cannanore	5543	8661	2378	2101	3124	2263	1377	2505	2769	9021	14290	2411
State	136236	282070	3151	92391	175238	2887	51098	101941	3036	279725	559249	3043

* Provisional

Source: Directorate of Economics and Statistics.

APPENDIX 4.5

Consumption of Fertilizers in Kerala

(In Tonnes)

Year	Nutrients			Total
	Nitrogen	Phosphorous (P2 O2)	Potash (K2O)	
(1)	(2)	(3)	(4)	(5)
1956-57	3425	1052	68	3545
1960-61	5314	4703	2032	12042
1965-66	15251	12773	11305	39329
1969-70	30120	20347	21543	72010
1970-71	26355	14183	16139	56653
1971-72	31257	15670	18044	64971
1972-73	37484	22314	20470	74268
1973-74	31691	22609	24540	78846
1974-75	32143	17187	18032	67362
1975-76	31654	14374	16643	62671
1976-77	33553	15996	20157	69406
1977-78	36995	19069	25336	81400
1978-79	54690	23381	30765	99836
1979-80	46340	25402	33872	105614
1980-81	41697	23402	32432	97531

Source: Department of Agriculture, Kerala
4/65/1MC.

APPENDIX 4.6

Distribution of Coffee Plantations (1979-80) Kerala and India

Size Groups	Kerala		India	
	No. of Units	Area (ha.)	No. of Units	Area (ha.)
(1)	(2)	(3)	(4)	(5)
Below 4 Hectares	51501	N.A.	90052	N.A.
4 to 10 Hectares	585	N.A.	4396	N.A.
Above 10 Hectares	233	N.A.	2037	N.A.
Total	52319	56154	96485	196228

Source: UPASI
N.A. Not Available.

APPENDIX 4.7

Production, Import, Export and Consumption of Rubber —India

Item	(Tonnes)		
	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)
<i>Production</i>			
Natural Rubber	135297	148470	153100
Synthetic Rubber	28054	29524	25293
<i>Import</i>			
Natural Rubber	25850	21199	9250
Synthetic Rubber	10655	15755	15806
<i>Export</i>			
Natural Rubber	..	..	..
<i>Consumption</i>			
Natural Rubber	164524	165245	173630
Synthetic Rubber	37600	40588	45200
Reclaimed Rubber	24330	22460	22475
Total Consumption	226454	228293	241305

Source: Rubber Board.

APPENDIX 4.8

Trend in Planted Area under Rubber—Kerala and India

Year	Kerala					India				
	Holdings		Estates		Total Area (ha.)	Holdings		Estates		Total Area (ha.)
	No. of Units	Area (ha.)	No. of Units	Area (ha.)		No. of Units	Area (ha.)	No. of Units	Area (ha.)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1977-78	136568	159492	510	52779	212271	140193	165173	584	68186	233359
1978-79	140306	161996	504	52419	214415	144014	167770	580	68140	235910
1979-80	143368	163836	490	51638	215474	147138	169687	564	67327	237014
1980-81	150578	168732	470	51134	219866	154446	174659	553	66844	241503

Note: Area refers to registered area.

Source: Rubber Board.

APPENDIX 4.9

Annual Export of Cardamom from Kerala and India

Year	Kerala			India	
	Quantity (Tonnes)	Value (Rs. Crores)	Kerala's Share in Quantity (per cent)	Quantity (Tonnes)	Value (Rs. Crores)
(1)	(2)	(3)	(4)	(5)	(6)
1977-78	2378	42.41	89	2673	48.44
1978-79	2536	51.81	88	2876	58.35
1979-80	2286	42.47	87	2636	48.56
1980-81*	2017	30.32	86	2337	34.50

* Provisional figures.

Source: Cardamom Board.

APPENDIX 4.10

Distribution of Registered Cardamom Estates by Size of Holdings 1980-81 (as on 31-3-1981) Kerala and India

Size Group	Kerala		India	
	No. of Unit	Area (ha.)	No. of Unit	Area (ha.)
Below 2 hectares	12673	12351	19929	18215
2-20 hectares	6067	28644	8918	41700
20-40 hectares	149	3031	255	6527
Above 40 hectares	96	9671	186	20014
Total	18985	34497	29288	86456

Source: Cardamom Board.

APPENDIX 4.11
Distribution of Surplus Land

Item	Unit	As on 30-11-1980	As on 31-12-1981
(1)	(2)	(3)	(4)
1. Total Ceiling Returns Filed	No.	65541	75945
2. Total Ceiling Returns Decided	"	62467	72758
3. Balance to be Decided	"	3074	3187
4. Area Ordered to be Surrendered	Acres	152406	161196
5. Area Reduced on Orders of High Court	"	37989	41522
6. Net Extent of Land ordered for Surrender	"	114417	119674
7. Extent of Land Taken Over	"	79492	83910
8. Area Received on Orders of High Court	"	3494	..
9. Net Extent Taken Over	"	75998	80198
10. Balance Extent to be Taken Over	"	38419	39475
(1) Covered by Stay Against Taking Possession	"	22662	24611
(2) Not to be Taken Over by Gift, Dispute, Vested Forest etc.	"	13515	12682
(3) Extent Available for Taking Over	"	2242	2183
11. Surplus Land Distributed	"	50150	52737
12. Balance Extent Taken Over Pending Distribution	"	25848	27461
(1) Covered by Stay Against Assignment	"	2875	2775
(2) Not Distributed Due to Gift, Vested Forest etc.	"	5669	6515
(3) Reserved for Public Purposes	"	14949	15779
(4) Available for Distribution	"	2355	2392

Source: Land Board, Kerala.

APPENDIX 4.12
Disposal of Cases Relating to Tenancy and Kudikidappu

Item	Tenancy		Kudikidappu	
	As on 30-11-1980	As on 30-11-1981	As on 30-11-1980	As on 30-11-1981
(1)	(2)	(3)	(4)	(5)
1. Total number of Applications Filed	3640978	3675875	438185	444650
2. Disposal of Cases:				
(i) Allowed	2452121	2478168	268063	271956
(ii) Rejected	750265	760710	146991	149021
(iii) Other Disposals	425697	426691	19030	19379
(iv) Total	3628083	3665569	434084	440356
3. Balance of Applications to be Disposed of	12895	10306	4101	4294
4. Number of Certificates of Purchase Issued	2426438	2454948	254237	258227

Source: Land Board, Kerala.

APPENDIX 4.13

Principal Species of Marine Fish Catches in Kerala—1976-80

(Quantity in tonnes)

Species	1976		1977		1978		1979		1980		Average for 1976-80	
	Actual	%	Actual	%	Actual	%	Actual	%	Actual	%	Actual	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Elasmobranchs	7308	2.2	5796	1.7	9302	2.5	6954	2.1	6753	2.4	7222	2.2
2. Catfishes	12743	4.0	7947	2.3	9125	2.4	11328	3.4	13783	5.0	10935	3.3
3. Chirocentrus	807	0.2	547	0.2	1298	0.4	1125	0.3	1002	0.4	955	0.3
4. (a) Oil Sardine	123937	37.4	117356	34.0	119937	32.1	116834	35.4	69667	25.0	109516	33.0
(b) Other Sardine	34305	10.4	20804	6.0	11713	3.1	15914	4.8	11017	4.0	18750	5.7
5. Anchoviella	9937	3.0	10105	2.9	21203	5.7	6552	2.0	7772	2.8	11123	3.4
6. Thrissoleles and other Clupeids	3906	1.2	2160	0.6	2871	0.8	2463	0.7	2815	1.0	2849	0.9
7. Perches	3069	1.0	14121	4.1	24989	6.7	20239	6.1	17806	6.4	16045	4.8
8. Red Mullet	2577	0.8	240	0.1	171	0.0	127	0.0	1	..	623	0.2
9. Sciaenids	6955	2.1	11965	3.5	13045	3.5	5297	1.6	6164	2.2	8673	2.6
10. Ribbon Fish	7687	2.3	7440	2.2	24207	6.5	25718	7.9	12937	4.6	15597	4.7
11. Caranx	10478	3.2	16484	4.8	7197	1.9	12635	3.8	4760	1.7	10310	3.1
12. Leiognathus	2727	0.8	7708	2.2	3040	0.8	3597	1.1	4147	1.5	4243	1.3
13. Lactarius	468	0.1	823	0.2	1533	0.5	253	0.1	861	0.3	787	0.2
14. Pomfrets	799	0.2	3712	1.1	1614	0.4	1737	0.5	907	0.3	1753	0.5
15. Mackerel	19978	6.0	19968	5.8	25917	6.9	18585	5.7	18474	6.6	20534	6.2
16. Seer fish	5936	1.8	3250	0.9	3354	0.9	6275	1.9	3763	1.3	4515	1.4
17. Tunnies	12880	3.9	6705	1.9	6548	1.8	15391	4.7	10611	3.8	10427	3.1
18. Soles	3567	1.0	5778	1.7	7276	1.9	4487	1.3	4394	1.6	5100	1.5
19. (a) Penaeid Prawns	34478	10.4	40150	11.6	45034	12.1	29522	8.9	52633	18.9	40363	12.2
(b) Non-penaeid Prawns	55	..	174	0.1	394	0.1	75	0.0	1742	0.6	488	0.1
(c) Lobster	50	..	40	..	38	0.0	26	0.0	18	..	34	0.0
(d) Other Crustaceans	1316	0.4	4621	1.3	2176	0.6	7643	2.3	7286	2.6	4608	1.4
20. Cephalopods	872	0.3	4973	1.5	6516	1.7	2976	0.9	4242	1.5	3915	1.2
21. Miscellaneous	24162	7.3	32170	9.3	24841	6.7	14816	4.5	15466	5.5	22290	6.7
Total	331047	100.0	345037	100	373339	100.0	330509	100.0	279021	100.0	331785	100.0

APPENDIX 4.14

District-wise and Species-wise Distribution of Marine Fish Landings in Kerala in 1980

(Quantity in tonnes)

Species	Trivandrum	Quilon	Alleppey	Ernakulam	Trichur	Malap- puram	Kozhikode	Cannanore	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Elasmobranchs	546	1926	230	942	774	719	980	636	6753
2. Eels	..	..	..	5	1	..	..	..	6
3. Catfishes	418	9404	50	1006	909	591	915	490	13783
4. Chirocentrus	328	218	20	91	43	90	156	56	1002
5. (a) Oil Sardine	5609	7266	7730	12328	5793	7119	15513	8209	69667
(b) Lesser Sardine	2945	1291	6511	242	15	3	6	4	11017
(c) Hilsa Ilisha	12	..	..	1	1	..	..	..	14
(d) Other Hilsa	18	..	..	2	1	..	..	..	21
(e) Anchoviella	3893	2925	37	425	192	148	151	1	7772
(f) Thrissoeles	164	169	1247	251	35	51	103	221	2241
(g) Other clupeids	66	59	37	167	5	1	104	135	574
6. (a) Harpodon Nchereus	..	..	..	..	..	..	..	..	..
(b) Saurida and Saurus	346	6424	29	256	3	1	12	9	7080
7. Hemirhamphus and Belone	231	94	8	21	6	..	1	..	361
8. Flying Fish	..	..	..	..	..	..	..	..	..
9. Perches	1298	15037	58	1250	118	42	1	2	17806
10. Red Mullet	1	..	..	..	..	..	..	..	1
11. Polynemids	..	..	..	..	..	..	1	7	8
12. Sciaemids	358	3074	43	1748	398	172	115	256	6164
13. Ribbon Fish	11563	1042	..	60	99	53	64	56	12937
14. (a) Caranx	3075	420	85	262	167	90	82	218	4399
(b) Chorinenus	6	47	16	67	4	2	3	..	145
(c) Trachynotus	..	..	..	..	..	..	..	..	..
(d) Other Carangids	46	13	..	..	..	..	..	..	59
(e) Conyphaena	95	12	22	9	..	..	..	..	138
(f) Elacate	2	..	1	16	..	..	..	..	19
15. (a) Leiognathus	486	1144	378	363	24	17	887	848	4147
(b) Gazza	..	..	..	1	..	..	..	..	1
16. Lactarius	95	607	11	67	21	8	1	51	861
17. Pomfrets	95	129	3	158	157	62	96	207	907
18. Mackerel	4783	1575	1880	4893	1375	837	1810	1321	18474
19. Seerfish	801	1048	24	555	307	287	389	352	3763
20. Tunnies	8102	930	145	1430	..	..	2	2	10611
21. Sphyraena	296	5	1	28	..	..	..	..	330
22. Mugil	..	31	80	38	..	..	1	1	151
23. Bregmaceros	..	..	..	..	..	..	..	..	..
24. Soles	108	2793	117	794	155	113	144	170	4394
25. (a) Penaeid Prawns	62	36633	5195	6532	896	517	952	1846	52633
(b) Non-penaeid prawns	1718	24	..	..	..	..	..	..	1742
(c) Lobsters	8	7	..	..	..	..	2	1	18
(d) Crabs	22	18	8	194	3	15	42	24	326
(e) Squilla	..	4151	48	2039	15	186	355	166	6960
26. Cephalopods	1120	2248	7	541	229	82	..	15	4242
27. Miscellaneous	870	4255	285	1081	579	201	101	122	7494
Total	49686	105019	24806	37863	12325	11407	22989	15426	279021

Note: Data given are provisional.

APPENDIX 4.15

Fishermen Co-operatives in Kerala

Category	1978-79			1979-80			1980-81		
	No. of Societies	Member-ship	Paid up Share Capital (Rs. lakhs)	No. of Societies	Member-ship	Paid up Share Capital (Rs. lakhs)	No. of Societies	Member-ship	Paid up Share Capital (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Credit Societies	96	19876	8.88	91	17981	3.76	89	17651	3.70
MUCS	492	43434	17.39	451	39821	16.76	368	33413	15.66
Regional Marketing Societies (including Marketing Federation)	17	1957	38.05	16	2832	49.37	15	3488	49.53
Total	605	65267	64.32	558	60634	69.89	472	54552	68.89

APPENDIX 4.16

Beach Prices of Selected Marine Fishes in Kerala

Species	1979-80	1980-81
	Price in the Beach (Rs./kg.)	Price in the Beach (Rs./kg.)
(1)	(2)	(3)
1. Elasmobranches	1.21	1.25
2. Cat Fishes	1.26	1.31
3. Chirocentrus	1.30	1.33
4. (a) Oil Sardine	0.90	0.93
(b) Other Sardine	0.97	0.98
5. Sciaenids	1.10	1.12
6. Carangids	1.11	0.76
7. Leiognathus	0.66	0.70
8. Lactarius	2.18	2.21
9. Pomfrets	3.71	3.74
10. Mackerel	1.66	1.69
11. Seer Fish	4.65	4.76
12. Tunnies	3.06	3.14
13. Soles	0.73	0.77
14. Cephalopods	2.50	2.60
15. Miscellaneous	1.12	1.20
16. (a) Prawn (Naran)	9.96	11.70
(b) " (Poovalan)		
(c) " (Karikkadi)		
(d) " (Kazhanthan)		

APPENDIX 4.17

District-wise Distribution of Refrigeration Facilities in Kerala—1979-80

District	Ice Production Capacity (Tonnes/24 hrs.)	Freezing Capacity (Tonnes/24 hrs.)	Ice Storage (Tonnes)	Fresh Fish Storage (Tonnes)	Frozen fish Storage (Tonnes)
(1)	(2)	(3)	(4)	(5)	(6)
1. Trivandrum	24	..	115	65	..
2. Quilon	501	121	841	111	1797
3. Alleppey	464	19	806	44	410
4. Kottayam	3	..	3	70	..
5. Ernakulam	397	303	354	40	7727
6. Trichur	146	3	342	51	25
7. Mulappuram	189	..	290	50	..
8. Calicut	291	39	593	130	415
9. Cannanore	216	21	555	115	340
State Total	2289	506	3889	676	10774

APPENDIX 4.18

District-wise Distribution of Fishermen Population in Kerala—1980-81 (Estimated)

District	Marine				Inland				Total Fishermen Population
	Adults		Children	Total	Adults		Children	Total	
	Male	Female			Male	Female			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Trivandrum	39030	37749	54017	130796	292	295	376	964	13 1760
2. Quilon	23362	21529	28631	73522	3542	7941	10745	27328	10 0850
3. Alleppey	27241	26639	34257	88137	16700	15333	18044	50577	138714
4. Kottayam	..	..	..	..	6620	6322	7022	19964	19964
5. Idukki	..	..	..	..	..	..	..	..	..
6. Ernakulam	18298	17896	20670	56864	17656	16916	16913	51550	10 8414
7. Trichur	16774	17095	20923	54792	5267	5078	5512	15857	706 49
8. Palghat	..	..	..	..	99	114	209	422	422
9. Mulappuram	18127	18582	21777	58486	1067	1056	1229	3352	6 1838
10. Kozhikode	24092	23365	29717	77174	3214	3064	3983	10261	87435
11. Cannanore	23788	23156	27672	74616	492	431	358	1281	75897
12. Wynad	..	..	..	..	..	..	..	..	..
Total	190713	186011	237664	614987	60049	57081	64426	181556	795943

APPENDIX 4.19

Division-wise area of Forests in Kerala

(Area in Sq. Km.)

Division	As on 31-3-1980
(1)	(2)
1. Trivandrum	570.584
2. Thenmala	567.617
3. Punalur	280.050
4. Konni	331.664
5. Ranni	1057.456
6. Kottayam	730.823
7. Malayattur	680.488
8. Munnar	897.373
9. Chalakudy	855.903
10. Trichur	522.587
11. Thekkady Wild Life Division	777.000
12. Nenmara	484.071
13. Nilambur	324.690
14. Palghat	373.174
15. Kozhikode	420.617
16. Wynad	457.819
17. Kozhikode (Special Division)	3.697
Total	9335.613

APPENDIX 4.20

Area of Vested Forests in Kerala

Region	Area as on 31-3-1980 (Sq. Km.)
(1)	(2)
1. Tellicherry	176.528
2. Kozhikode	436.728
3. Nilambur	432.427
4. Palghat	801.140
5. Travancore-Cochin Area	68.440
Total	1915.263

APPENDIX 4.21

Out-turn of Forest Produce 1978-79, 1979-80

Item	Unit	1978-79	1979-80
(1)	(2)	(3)	(4)
1. Timber (Round Logs)	'000 cum.	447	435
2. Timber (Round Poles)	'000 Nos.	1387	1344
3. Sawn and Squared Timber	cum.	405	10
4. Firewood	'000 Tonnes	305	165
5. Charcoal	Tonnes	3798	1260
6. Cardamom	Kg.	4906	3070
7. Honey	"	2860	15430
8. Wax	"	127	120
9. Serivellos and Ivory	"	3	340
10. Reeds	'000 Nos.	16178	18459
11. Rattans	"	682	105
12. Bamboos	"	2231	1071
13. Sleepers—B. G.	"	..	133
M. G.	"	..	17
Special	"	..	..
14. Sandalwood	Tonnes	4	12

APPENDIX 4.22

Sale Proceeds of Timber and Forest Produce

(Rs. '000)

Item	1979-80	1980-81
(1)	(2)	(3)
A. Forests		
1. Timber	349015	361741
2. Firewood and Charcoal	13371	20449
3. Livestock	63	32
4. Other Items	42314	46715
Total A	404763	428937
B. Other Receipts including Interest on Forest Revenue	35750	29067
Grand Total (A+B)	440513	458004
Deduct Refunds	615	717
Net Total	439898	457287

APPENDIX 5.1
Growth of Kerala Power System at a Glance

Particulars	Beginning of 1st Plan 1-4-1951	End of 1st Plan as on 31-3-1956	End of 2nd Plan as on 31-3-1961	End of 3rd Plan as on 31-3-1966	End of the annual plan as on 1-4-1969	End of 4th Plan as on 31-3-1974	Fifth plan as on 31-3-1978	Position as on	
								31-3-1981	31-3-1982 (anticipated)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Installed Capacity—MW	36.0	85.5	132.5	192.5	546.5	621.5	1011.5	1011.5	1011.5
2. Maximum Demand—MW									
(a) System	24.8	62.9	116.3	173.7	352.7	500.2	802.2	843.1	850
(b) Internal	24.8	62.9	116.3	173.7	277.7	434.4	551.8	735.4	800
3. Generation per annum—MU	151.0	350.0	591.0	841.9	1623.0	2510.0	4170.6	5254.3	5231
4. Import per annum—MU	16.9	1.5	56.8	116.0	19.0	1.2	1.5	43.6	50
5. Export per annum—MU	..	..	11.6	..	28.2	317.8	1605.4	1770.9	1467
6. Energy Sales per annum—MU	140.1	274.0	517.2	749.7	1366.2	2120.5	3936.7	4539.2	4600
7. Energy Losses as a Percentage of Energy Available for Sale	14.3	19.7	17.9	20.2	15.9	15.4	11.4	13.7	12.4
8. Per Capita Consumption	13	18.5	30.0	40.0	66.0	79.1	94.6	95	96
9. 220 K.V. Lines—Ct. km.	..	..	..	..	316.4	316.4	853.8	886.8	886.8
10. 110 K.V. Lines—Ct. km.	..	..	527.0	617.0	1068.0	1350.0	1403.5	1545.2	1881.2
11. 66 K.V. Lines—Ct. km.	910.7	1070.0	1373.0	1717.5	1601.0	1711.0	1840.9	2075.5	2179.2
12. 11 K.V. Lines—Ct. km.	1067.0	2802.0	5449.4	6570.10	2241.0	9645.1	12151.4	14188.5	14938.5
13. L.T. Lines—Ct. km.	992.0	3783.0	8899.1	14189.0	16952.0	25968.0	37190.6	51635.9	5573.5
14. Step up Transformer Capacity—MVA	40.0	103.0	161.0	233.0	632.0	717.5	1149.5	1149.5	1149.5
15. No. of EHT Sub-Stations	12	15	22	38	41	59	75	91	104
16. Step down Transformer Capacity—MVA	57.5	85.0	251.0	425.0	834.0	1269.0	1762.5	2831.5	3030
17. Distribution Transformers									
(a) Nos.	324	845	2898	3930	4907	8285	9877	11656	12401
(b) Capacity—KVA	9950	50700	173906	261826	355972	566260	823744	972112	980200
18. No. of Villages Electrified/ No. of Villages	155/ 4555	381/ 4545	872/ 4545	1083/ 1573	1137/ 1573	1173/ 1268	1224/ 1268	1268/ 1268	1268/ 1268
19. No. of Consumers	28119	78575	174994	325063	439681	777030	1072015	1587577	1807574
20. Connected Load—MW	69.569	142.334	311.343	509.851	805.45	1231.465	1621.377	2121.531	2378
21. No. of Street Lights	7905	25489	82645	106996	144902	273587	284483	372005	412003
22. No. of Irrigation Pumps	191	893	4615	7007	13909	37611	58922	89133	103433
23. Total Revenue per Annum (Rs. lakhs)	58.4	140.7	311.7	706.8	1165.1	2379.1	57089	10742	11745

Source : Kerala State Electricity Board.

APPENDIX 5.2

Financial position of the Kerala State Electricity Board

(Rs. in lakhs)

Item	1978-79	1979-80	1980-81
(1)	2,	3,	4
1. Gross Revenue	8421.75 537.00	9124.90	10942
2. (Revenue Expenditure)	4797.15	5870.96	5371
3. Net Operating Surplus	4161.60	3253.94	5571
4. Total Capital Investment of the Board	41920.84	46174.84	53724
5. Total Loans Outstanding	31099.66	33405.36	35676
6. Loans Raised During the Year	2212.54	2633.40	2734
7. Loans Repaid During the Year	238.19	327.70	463
8. Total Interest Payable	1946.37	2107.86	2361
9. Amount Available as Surplus during the year	4161.60	3253.94	4067

Note : The figures furnished for 1980-81 are provisional.

APPENDIX 5.3

Consumption of Power and Revenue Collected (Internal) 1980-81

Category	No. of consumers as on 31-3-1981	Connected Load (M.W.) as on 31-3-1981	Energy Consumed		Revenue Collected	
			Million KWH	Percentage to Total	(Provisional Rs. lakhs)	Percentage to Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Domestic Lights, Fans, Heat and Small Power	1,166,715	723.522	409.2	14.26	1546.77	28.28
2. Commercial Lights, Fans, Heat and Small Power	293,898	186.611	174.4	6.0	836.77	15.30
3. Industrial (Low and Medium Voltage)	37,682	436.251	238.0	8.29	540.49	9.88
4. Industrial (High and Extra High Voltage)	570	407.336	1787.3	62.37	1953.57	35.72
5. Irrigation	86,838	287.766	87.4	3.05	133.4	2.44
6. Public Lighting	1398	13.552	40.5	1.41	272.0	4.97
7. Water Works and Sewage Pumping	472	11.553	37.2	1.29	60	1.1
8. Bulk Supply to Licences	4	55.000	95.6	3.33	126	2.31
Total	1,587,577	2121.53	2869.3	100.00	5469	100

Source : Kerala State Electricity Board.

APPENDIX 5.4

Total Quantity of Power Sold and Receipts by the Sale of Electricity

Particulars of Receipts	During 1978-79			During 1979-80			During 1980-81		
	Power sold in MKWH	Income Rs. lakhs	Average Revenue per KWH (paise)	Power sold in MKWH	Income Rs. lakhs	Average Revenue per KWH (paise)	Power sold in MKWH	Income Rs. lakhs	Average Revenue per KWH (paise)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Domestic—Lights, Fans and Small Power	282.47	1052.59	37.26	354.03	1268.00	35.82	409.2	1546.77	37.80
2. Commercial—Lights, Fans and Small Power	143.85	581.85	40.45	157.97	647.52	40.99	174.4	836.77	47.98
3. Industrial—									
(a) Low and Medium Voltage	197.58	404.71	20.48	205.20	414.75	20.21	238.0	540.49	22.71
(b) High Voltage and EHV	1542.85	1769.43	11.47	1432.33	1340.44	9.36	1787.3	1953.59	10.93
4. Public Lighting	34.9	118.57	33.97	35.54	238.88	67.21	40.5	272	67.16
5. Irrigation—Agricultural Watering	85.88	102.77	11.97	80.38	110.27	13.72	87.4	133.4	15.21
6. Public Water Works and Sewage Pumping	29.66	48.27	16.27	32.04	51.67	16.13	37.2	60	16.13
7. Bulk Supply (Licences)	102.15	120.23	11.77	86.87	114.32	13.16	95.5	126	13.16
8. Total Sale to Neighbouring States	2097.19	2926.73	13.96	1933.82	3856.15	19.94	1728.20	4315	24.97
Total	4516.53	7125.15	15.77	4318.18	8042.03	18.62	4597.8	9784	21.28

Source : Kerala State Electricity Board

District wise Distribution of working Factories and Employment in Kerala for the Year Ending 31-12-1979

Industry	Trivandrum		Quilon		Alleppey		Kottayam		Idukki		Ernakulam		Trichur		Palghat		Malappuram		Kozhikode		Cannanore		State		Total			
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
Oil	19	123	29	148	44	392	12	63	8	50	52	353	83	557	11	80	8	55	48	308	23	153	337	2282				
Tea	5	138	6	146	..	..	7	99	72	3810	1	72	1	86	3	123	1	22	11	683	6	167	113	5346				
Cashew	14	7141	232	113147	5	6488	..	..	..	..	2	372	5	2807	..	..	..	..	2	818	3	1164	263	113937				
Cotton Textiles	15	1566	5	1466	5	566	3	510	..	..	15	2091	10	3163	24	1446	1	172	64	2307	621	11317	763	24604				
Coir	3	58	6	219	195	3237	3	44	..	..	19	345	8	53	..	..	8	86	44	686	10	97	296	4825				
Plywood Splints and Veneers	13	240	42	1283	19	512	23	1039	4	75	35	945	35	853	66	1360	16	214	98	1624	53	2501	404	10746				
Saw Mills	17	91	79	444	41	176	60	321	1	1	207	1349	130	803	117	546	44	239	126	1348	98	1004	920	6322				
Printing and Publishing	42	1465	36	317	31	211	79	890	4	27	116	1891	71	1177	37	547	10	63	75	1172	52	360	553	8120				
Rubber and Rubber Products	38	916	52	670	23	357	207	2535	17	205	109	2581	57	1333	96	262	21	177	80	586	64	380	704	10032				
Chemicals and Chemical Products	11	1063	7	198	18	443	16	416	2	36	48	6876	18	382	19	303	5	761	21	408	8	90	173	10976				
Matches	10	121	27	427	11	105	3	48	..	..	9	199	26	294	11	206	5	51	26	332	6	76	134	1837				
Soaps	1	5	2	30	3	26	2	5	..	..	10	1148	3	93	..	..	..	..	16	531	3	55	40	1893				
Tiles	1	38	46	1767	5	143	15	133	..	..	32	605	135	4153	12	528	5	341	34	3226	9	777	294	11751				
General Engineering	55	1812	97	2246	46	795	73	681	6	130	351	10002	131	1280	154	2860	14	236	151	1577	92	986	1170	22605				
Automobiles	31	2977	20	386	21	603	50	544	3	29	91	1196	40	536	44	337	15	97	108	1129	85	662	508	8496				
Others	49	1048	151	3419	103	2640	86	988	6	272	339	9567	217	4083	374	3084	31	411	285	6159	178	2067	1819	33733				
Total	324	18802	837	126313	570	16794	639	8316	123	4635	1436	39592	970	21653	908	11682	184	2925	1189	22934	1311	21856	8491	295502				

A: No of Factories. B: Employment.

APPENDIX 6.1(a)

District-wise Distribution of Working Factories and Employment in Kerala for the year ending 31-12-1980 (Provisional)

Industry Code	Trivandrum		Quilon		Alleppey		Kottayam		Idukki		Emakulam		Trichur		Palghat		Malappuram		Kozhikode		Cannanore		Total	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Total	361	19769	901	124624	625	17749	697	8796	125	4734	1563	40809	1001	21853	942	11909	240	3575	1235	23887	1414	22799	9104	300444
Oil	18	125	30	148	48	423	13	67	8	37	47	376	93	601	10	64	10	60	47	318	26	167	350	2386
Tea	5	118	6	154	..	..	7	106	73	3901	1	84	1	106	3	125	1	24	12	703	6	183	115	5504
Cashew	15	7339	228	108724	5	6732	..	..	..	..	2	369	5	2528	..	..	..	..	2	738	3	1120	260	127550
Cotton-Textiles	17	1621	6	1496	5	609	3	512	..	..	19	2281	17	3565	19	1593	3	536	68	2341	632	11542	789	26096
Coir	4	68	9	225	200	3003	2	32	..	..	22	382	8	56	..	..	8	98	43	708	10	97	305	4669
Plywood Splints & Veneers	14	254	51	1407	22	656	24	987	5	112	40	999	35	703	76	1555	18	244	103	1663	56	2621	444	11201
Saw Mill	21	126	97	558	43	194	69	366	1	2	232	1488	131	758	130	613	62	348	131	1440	107	1078	1024	6971
Printing & Publishing	43	1514	37	338	31	214	81	941	4	28	113	1788	71	869	37	537	14	79	77	1204	53	364	561	7876
Rubber and Rubber Products	36	1041	51	694	21	326	213	2636	20	230	79	1581	54	1248	24	148	23	175	61	425	60	327	642	8831
Chemicals & Chemical Products	12	1100	10	281	26	591	18	535	2	25	54	7193	18	340	19	319	6	723	25	475	12	121	202	11703
Matches	1+	163	28	444	12	155	3	41	..	..	11	231	26	265	12	206	5	42	26	322	7	89	144	1958
Soap	1	5	3	45	3	26	2	5	..	..	11	1176	3	64	..	..	..	..	16	565	4	75	43	1961
Tiles	3	102	45	1746	5	113	17	141	..	..	36	651	139	4163	12	533	7	437	35	3331	10	814	309	12031
General Engineering	64	2093	106	2541	50	880	80	655	6	130	387	9860	130	1250	162	2753	18	191	159	1807	105	1066	1267	23226
Automobiles	32	2908	21	2268	23	924	50	546	3	29	96	1312	42	810	44	325	20	117	113	1240	101	729	545	11208
Others	62	1192	173	3555	131	2903	115	1166	3	240	413	11038	228	4527	394	3138	45	501	317	6607	222	2406	2103	37273

A—No. of Factories.
B—No. of Employment.

APPENDIX 6.2

Progress of the Working of Kerala Financial Corporation at a Glance

(Rs. in lakhs)

Year	Loans Sanctioned (Cumulative)	Loans Disbursed (Cumulative)	Loans Outstanding (Cumulative)	Profit Before Taxation	Profit After Taxation
(1)	(2)	(3)	(4)	(5)	(6)
1974-75	3010.59	1746.32	1451.91	43.20	28.48
1975-76	3977.47	2250.45	1931.50	55.85	31.85
1976-77	4629.58	2787.75	2435.33	57.81	36.91
1977-78	5479.62	3309.24	2963.54	62.52	44.33
1978-79	6027.59	3938.60	3583.52	62.79	41.79
1979-80	7024.92	4679.12	4256.79	1.76	1.76
1980-81	8020.02	5521.18	5023.60	70.10	40.40

APPENDIX 6.3

Kerala Financial Corporation: Summary of Loan Operations as on 31-3-1981

(Rs. in lakhs)

Particulars	During the Year 1980-81						Since Inception upto 31-3-1980					
	Small Industries		Others		Total		Small Industries		Others		Total	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Applications Pending as on 1-4-1980	441	905.58	79	819.66	520	1725.24	..	..	..	..	..	..
2. Applications Received during 1980-81	922	2299.04	2	22.00	924	2321.04	6225	10730.46	437	3703.72	6662	14434.18
3. Applications sanctioned	542	1036.69	25	264.36	567	1301.05	4693	6535.55	350	2689.14	5043	9224.69
4. Applications Rejected/withdrawn	143	240.80	6	47.00	149	287.80	854	2262.59	37	489.47	891	2752.06
5. Applications sanctioned but cancelled or Reduced later	133	243.71	3	62.24	136	305.95	511	896.60	34	308.07	545	1204.67
6. Applications sanctioned effectively (Net)	409	792.98	22	202.12	431	995.10	4182	5638.95	316	2381.07	4498	8020.02
7. Amount Disbursed	608	593.43	28	248.63	636	842.06	3466	3741.60	287	1779.58	3753	5521.18
8. Applications pending	..	..	..	..	..	..	689	1867.99	37	489.00	728	2365.92

APPENDIX 6.4

District-wise sanction and Disbursement of Loans and Advances by the Kerala Financial Corporation as on 31-3-1981

(Rs. in lakhs)

Districts	Effective Sanction		Disbursement	
	No.	Amount	No.	Amount
(1)	(2)	(3)	(4)	(5)
<i>Backward Districts.</i>				
1. Trivandrum	562	1035.77	501	839.36
2. Alleppey	361	882.00	285	576.51
3. Trichur	368	760.17	307	509.11
4. Malappuram	201	354.36	178	262.88
5. Cannanore	301	517.53	254	316.66
Total	1793	3549.83	1525	2504.52
<i>Other Districts and Areas.</i>				
1. Quilon	623	887.16	549	581.52
2. Kottayam	336	725.45	278	496.90
3. Idukki	55	81.52	42	42.99
4. Ernakulam	1071	1892.58	824	1276.47
5. Palghat	157	282.40	123	167.75
6. Kozhikode	458	597.80	407	446.71
7. Mahe and Other Areas	4	3.13	5	4.32
8. Union Territory	1	0.15	..	..
Total	2705	4470.19	2228	3016.66
Grand Total	4498	8020.02	3753	5521.18

APPENDIX 6.5

*Industry-wise Classification of Loans Sanctioned and Disbursed by the Kerala Financial Corporation
as on 31-3-1981*

Type of Industry	Amount sanctioned	Percentage of total loan sanctioned	Amount disbursed	Percentage of total loan disbursed
(1)	(2)	(3)	(4)	(5)
1. Stone Quarrying	56.27	0.70	24.90	0.45
2. Food Manufacturing	953.55	11.89	636.88	11.54
3. Beverage Units	54.74	0.68	48.75	0.88
4. Tobacco Manufacturing	0.42	0.01	0.42	0.01
5. Textiles	608.50	7.59	470.17	8.52
6. Footwear and Other Wearing Apparels	57.35	0.72	44.92	0.81
7. Wood, Cork Except Furniture	188.05	2.34	156.62	2.84
8. Furniture and Fixtures	277.12	3.46	158.46	2.87
9. Paper Products	110.60	1.38	56.89	1.03
10. Printing, Publishing and Allied Industries	350.06	4.36	247.88	4.49
11. Leather Goods	0.30	0.00	0.45	0.01
12. Rubber Products	705.69	8.80	458.37	8.30
13. Chemical and Chemical Products	773.98	9.65	478.45	8.67
14. Petroleum Products	7.34	0.09	6.27	0.11
15. Non-Metallic Mineral Products	277.37	3.46	211.63	3.83
16. Basic Metal Industries	217.38	2.71	149.74	2.71
17. Metallic products	304.51	3.80	229.81	4.16
18. Machinery except electrical machinery	253.20	3.16	185.38	3.36
19. Electrical Machinery	370.41	4.62	286.21	5.18
20. Transport Equipments	110.33	1.38	76.92	1.39
21. Motion Pictures	94.71	1.18	76.61	1.39
22. Hotels	958.92	11.96	528.62	9.58
23. Fishing Boat	279.49	3.48	225.64	4.09
24. Transport	381.25	4.75	314.40	5.69
25. Miscellaneous Industries	598.48	7.46	416.79	7.55
26. Industrial Estate	30.00	0.37	30.00	0.54
Total	8020.02	100.00	5521.18	100.00

Government Owned Companies—Main Features

Name of Company	(Rs. in lakhs)																
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
	Paid up Capital 1979-80	1980-81	Share of Government & Public Sec-uring Institutions in the Paid-up Capital as on 31-3-1981	Total loans outstanding & Interest thereon as on 31-3-1981	Net fixed Assets as on 31-3-1981	Value of Production 1979-80	Value of Production 1980-81	Value of Raw materials summed during 1980-81	Sales during 1979-80	Sales during 1980-81	Export During 1980-81	Net Profit (+)/Loss (-) 1979-80	Net Profit (+)/Loss (-) 1980-81	1979-80	1980-81	Persons Employed (Nos.) 1979-80	1980-81
1. Kerala Ceramics Ltd.	107.95	107.95	107.95	480.88	123.40	107.44	119.22	12.99	95.01	117.88	34.84	(-)	17.43	(-)	66.32	616	609
2. Kerala Electrical & Allied Engineering Co., Ltd.	105.82	122.16	122.16	412.04	93.96	322.08	405.51	166.97	318.90	444.75	Nil.	(-)	15.41	(+)	19.43	711	578
3. Kerala Soaps & Oils Ltd.	149.97	119.97	149.97	458.00	212.87	515.63	849.37	501.65	523.36	747.36	Nil.	(+)	10.14	(+)	11.60	494	507
4. Kerala State Drugs & Pharmaceuticals Ltd.	190.00	210.00	210.00	123.57	295.74	269.00	327.53	139.09	310.61	325.15	Nil.	(+)	2.86	(+)	26.08	283	302
5. Kerala State Detergents & Chemicals Ltd.	67.00	89.00	89.00	219.41	92.79	208.65	328.65	161.18	155.51	238.91	Nil.	(+)	1.48	(+)	1.25	159	243
6. Travancore Plywood Industries Limited	48.59	48.59	48.59	129.32	48.80	204.20	293.40	86.80	198.82	303.26	14.59	(+)	0.57	(+)	30.13	520	659
7. Trivandrum Rubber Works Ltd.	213.62	213.62	213.62	307.57	50.90	258.54	286.31	141.78	230.77	288.06	Nil.	(-)	30.52	(-)	29.49	435	442
8. Kerala Minerals & Metals Ltd.	479.05	1979.00	1979.00	641.00	2722.00	77.34	86.09	6.81	79.13	85.13	0.56	(+)	17.95	(+)	9.72	529	521
9. Trivandrum Spinning Mills Limited	184.99	184.99	184.99	141.49	136.63	227.75	225.68	109.36	225.31	218.87	Nil.	(+)	32.58	(+)	15.86	560	565
10. Sitaram Textiles Ltd.	N.A.	233.00	233.00	311.30	357.76	N.A.	457.20	216.97	N.A.	412.00	Nil.	N.A.	N.A.	(-)	57.09	963	987
11. Steel Industries Kerala Ltd.	..	348.40	348.40	66.61	128.35	..	29.22	13.64	..	29.22	Nil.	..	..	(-)	9.35	31	61
12. Foam Matting (India) Ltd. *	N.A.	34.00	34.00	67.44	122.46	Nil.	N.A.	9.68	Nil.	9.96	8.84	..	..	(-)	7.83	25	82
13. Kerala Premopipe Factory Ltd.	19.50	19.50	19.50	41.83	8.42	N.A.	80.38	33.53	N.A.	83.00	Nil.	N.A.	N.A.	(+)	2.00	279	279

* Commercial Production started only on 1-10-1980.

APPENDIX 6.7

Government owned Companies—Production and Capacity Utilisation

Name of Company	Name of Product	Unit	Licenced Capacity		Installed Capacity		Production		Capacity Utilisation in Percentage	
			1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Kerala Ceramics Limited	Porcelain	Tonnes	450	450	595	595	543	528	91.3	88.7
	China Clay	"	5000	5000	5000	5000	5708	6270	114.2	125.4
	Spray and Dried Kaolin	"	18000	18000	18000	18000	4237	3406	23.5	18.9
2. Kerala Electrical & Allied Engineering Co., Ltd.	Distribution Transformers	KVA.	120000	120000	120000	120000	88685	108305	79.9	90.3
	HRC. Fuses	Nos.	..	120000	..	120000	..	3896	..	3.2
	G.I. Structures	M.T.	..	..	6000	6000	970	2308	16.2	38.5
	Steel Structures	"	1200	1200	1200	1200	536	557	44.7	46.4
3. Kerala Soaps and Oils Ltd.	Alternators	Nos.	600	600	750	750	670	633	89.3	84.4
	Electrical Accessories	"	..	..	..	..	62863	58487	..	..
	Soaps	M.T.	4300	4300	9000	9000	6079	8210	67.5	91.2
	Glycerine	"	N.A.	N.A.	260	260	70	82	26.9	31.5
4. Kerala State Drugs & Pharmaceuticals Ltd.	Shardiver Oil	"	300	300	300	300	58	17	19.3	5.7
	Tablets	Lakh Nos.	Not fixed	Not fixed	2514	2514	N.A.	3135	..	136.6
	Granules	Kgm.	"	"	20000	20000	"	2620	..	13.1
	Powders	"	"	"	..	..	"	6500	..	..
5. Kerala State Detergents & Chemicals Ltd.	Capsules	Lakh Nos.	"	"	149	149	"	164	..	110.1
	Liquids	Lakh Litres.	"	"	2.25	2.25	"	1.20	..	53.3
	<i>Injebiles:</i> (a) Bottles (b) Vials (c) Ampoules	"	"	"	450 15 60	450 15 60	" " "	5.60 2.87 29.85	.. .. ..	124.1 19.1 49.8
6. Travancore Plywood Industries Ltd.	Detergent Cake	M.T.	10000	10000	3600	3600	1700	2152	47.2	59.8
	H.D. Powder Liquid Detergent	" "	" "	" "	1440 ..	1440 ..	0.90 ..	.. 2	0.06..	....
	Plywood & Allied Articles	Lakh Sq. mtres. of 4mm. basis	22.8	22.8	27.38	27.38	12.62	13.15	46.1	48.0

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7.	Trivandrum Rubber Works Ltd.	Nos.	1500000	1500000	1500000	1500000	538347	479914	35.9	31.9
	Cycle Tyres									
	Cycle Rims	"	300000	300000	300000	300000	322904	373403	107.6	124.5
	Cycle Tubes	"	1800000	1800000	1800000	1800000	45607	..	2.5	..
	Rubber Hoses	Mtrs.	..	..	..	..	26491	..	..	..
	Sheetings	Kgm.	..	..	..	..	511260	443710	..	..
	Camel Back	"	..	..	..	..	318537	379610	..	..
	Cycle	Nos.	..	..	..	..	381	273	..	..
	Latex Goods	Kgm.	..	..	..	..	86719	98492	..	..
	Flaps	Nos.	..	..	..	..	..	947	..	..
8.	Kerala Minerals & Metals Ltd.	Tonnes	Not applicable	Not applicable	25000	25000	19380	22835	77.5	91.3
	Rutile	"	"	"	2400	2400	1634	1940	68.1	88.8
	Sillimanite	"	"	"	300	300	..	..	..	..
	Zircon	"	"	"	1500	1500	1454	1432	96.9	95.5
	Brown Ilmenite	"	"	"	300	300	..	167	..	55.7
	Monazite	"	"	"	240	240	122	115	50.8	47.9
9.	Trivandrum Spinning Mills Ltd.	Kgm.	25200	25200	25200	25200	638000	593928	..	..
	Cotton Yarn	Spindles	Spindles	Spindles	Spindles	Spindles				
40.	Sitarum Textiles Ltd.	Spindles	..	25000	..	12500	..	12064	..	96.5
	Cotton Yarn	Metres	..	5400000	..	5400000	..	5066195	..	93.8
11.	Steel Industrials Kerala Ltd.	M.T.	Not applicable	Not applicable	Not applicable	Not applicable	..	388	..	..
	Fabricated Steel Sections	"	"	"	"	"	..	356	..	..
	Ferrous Scrap	"	"	"	"	"	..	..	..	..
12.	Foam Matings (India) Ltd.	Sq. Metres	..	..	..	3.6 million	..	33214	..	0.9
	Foam Backed Coir Matings	Nos.	..	..	..	..	N.A.	3586	..	..
13.	Kerala Premo Pipe Factory Ltd.	Prestressed Concrete Pipes	..	..	..	..	..	..	..	..
	R. C. C. Pipes	"	..	..	..	..	..	5045	..	..

APPENDIX 6.8

Government Majority Companies—Main Features

Name of Company	(Rs. in lakhs)																
	Paid up Capital		Share of Government and Public Sector Financing institutions in the Paid up Capital as on 31-3-1981.		Total Loans Outstanding & interest accrued thereon as on 31-3-1981		Net Fixed Assets as on 31-3-1981		Value of Production			Sales during		Net profit (+)/Loss(-)		Persons Employed (Nos.)	
	1979-80	1980-81	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81
1. Travancore-Cochin Chemicals Ltd.	694.75	634.75	564.75	1656.72	1118.06	916.00	1141.56	249.66	1025.70	1288.96	1.00	(+)	4.71	(+)	129.76	1130	1178
2. Travancore Titanium Products Ltd.*	159.75	159.75	140.03	514.20	374.42	980.44	N.A.	421.55	1100.92	1283.23	12.64	(-)	33.74	(+)	34.30	1431	1402
3. Transformers and Electricals Kerala Ltd.	399.38	399.40	259.00	1300.00	576.00	1065.33	2083.21	1402.00	941.07	2064.29	Nil	(-)	74.78	(+)	27.99	1554	1788
4. United Electrical Industries Ltd.*	93.90	99.90	99.90	95.55	98.37	208.78	280.67	141.37	226.57	276.39	Nil	(+)	17.17	(+)	22.46	510	544
5. Travancore Cements Ltd.*	50.00	50.00	40.96	1.50	25.54	322.78	N.A.	55.09	479.19	423.56	Nil	(+)	45.14	(+)	21.97	458	440
6. Traco Cable Company Ltd.	129.92	129.92	N.A.	133.15	70.45	419.96	450.71	340.79	428.08	449.08	Nil	(+)	12.42	(+)	13.71	238	241
7. Forest Industries (Travancore) Ltd.	17.71	17.71	9.19	..	4.54	47.03	67.14	44.73	62.15	77.67	Nil	(+)	0.61	(+)	1.74	156	157
8. Chalakudy Refractories Ltd.	46.23	52.25	52.12	85.80	56.99	18.20	13.87	2.93	8.51	14.88	Nil	(-)	6.41	(-)	27.17	164	167
9. Pallathra Bricks & Tiles Ltd.	24.06	25.06	24.55	18.72	N.A.	16.96	25.76	N.A.	17.44	N.A.	Nil	(-)	2.79	N.A.	N.A.	129	130
10. Travancore Sugars and Chemicals Ltd.	51.00	51.00	..	21.22	16.79	253.91	257.07	112.01	272.73	274.68	Nil	(+)	9.69	(-)	1.49	796	796**

Calendar year 1979 and 1980 respectively.

*Calendar year 1979 and 1980 respectively.

**Last year's figure retained.

Government Majority Companies—Production and Capacity Utilisation

Name of Company	Name of Product	Unit	Licenced Capacity				Installed Capacity				Production				Capacity Utilisation in Percentage	
			1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
1. Travancore-Cochin Chemicals Ltd.	Zinc Hydroxide	M.T.	179	13	
	Caustic Soda	"	60000	60000	59400	31000	31002	33711	59400	31000	31002	33711	52.2	56.8		
	Hydro Sulphate of Soda	"	3000	3000	2100	2100	110	10	2100	2100	110	10	5.2	0.5		
	Sodium Sulphide	"	2100	2100	2100	2100	344	639	2100	2100	344	639	16.4	31.4		
	Chlorine Products	"	58080	58080	52272	52272	27282	29666	58080	52272	27282	29666	52.2	56.8		
2. Travancore Titanium Products Ltd.*	Titanium Dioxide	Tonnes	24500	24500	24500	24500	8381	10939	24500	24500	8381	10939	34.2	44.6		
	Power Transformers	MVA	6000	6000	3000	3000**	1710	3356	6000	3000**	1710	3356	57.0	111.8		
3. Transformers & Electricals, Kerala Ltd.	Current and Potential Transformers, Bushings	Nos.	1000	1000	760	760	404	712	1000	760	404	712	53.2	93.7		
	Circuit Breakers	"	..	375	..	Not Assessed	..	12	..	Not Assessed	..	12	..	..
4. United Electrical Industries Ltd.*	KWH Metres	Nos.	177000	177000	200000	177000	111717	136537	177000	177000	111717	136537	55.9	77.1		
	Motor Control Gears	"	Not fixed	Not fixed	4500	4500	4222	4595	Not fixed	4500	4222	4595	93.8	102.1		
	L.T. Switch Gear	"	600	600	600	600	194	203	600	600	194	203	32.3	33.8		
	11 K.V. Switch Gear	"	Not fixed	Not fixed	Not fixed	Not fixed	20	57	Not fixed	Not fixed	20	57	..	..
	Plastic Film Capacitors	Million Nos.	25	25	10	15	5.60	5.60	25	15	5.60	5.60	5.60	37.3		
	Carbon Film Resistors	"	50	50	20	20	11.42	17.94	50	20	11.42	17.94	57.1	89.7		
	Other Products	"	Not fixed	Not fixed	Not fixed	Not fixed	60	210	Not fixed	Not fixed	60	210	..	..
	White Cement	M.T.	50800	50800	30000	30000	36946	37867	50800	30000	36946	37867	123.2	126.2		
	Cement Paints	"	6000	6000	600	600	454	556	6000	600	454	556	75.7	92.7		
	A.A.C./A.C.S.R.	"	1500	1500	1500	1500	859	851	1500	1500	859	851	57.3	56.7		
5. Traco Cable Company Limited	P.V.C. Covered conductors and Bare Copper Conductors	Lakh crore Metres	329	329	50	50	27.11	24.44	329	50	27.11	24.44	54.2	48.9		
	Wooden Doors, Windows, Furniture etc.	Cum.	Not fixed	Not fixed	1500	1500	799	1156	Not fixed	1500	799	1156	53.3	77.1		
8. Chalakudy Refractories Ltd.	Refractories	Tonnes	Not assessed	Not assessed	5000	5000	2077	1841	Not assessed	5000	2077	1841	41.5	36.8		
	Sand Lime Bricks	Lakh Nos.	120	120	120	120	82.11	92	120	120	82.11	92	68.4	76.7		
10. Travancore Sugars and Chemicals Limited	Sugar	Tonnes	750 tonnes cane/day	750 tonnes cane/day	900 tonnes cane/day	900 tonnes cane/day	4363 bagged	3334 tonnes bagged	750 tonnes cane/day	900 tonnes cane/day	4363 bagged	3334 tonnes bagged	..	..
	Spirit	Proof Litres	2835315	2835315	2700000	2700000	2073311	1791546	2835315	2700000	2073311	1791546	76.8	66.3		
Indian Made Fine Liquors Molasses	Arrack	"	1200000	1200000	..	..	3810870	2734686	1200000	..	3810870	2734686	..	..
	Indian Made Fine Liquors	"	..	..	..	..	96913	65945	..	..	96913	65945	..	..
	Molasses	Tonnes	..	..	..	..	2883	2001	..	..	2883	2001	..	..

*Calendar year 1979 and 1980 respectively.

**Expansion scheme for enhancing to 6000 MVA. is in progress..

Government of India Companies—Production and Capacity Utilisation

Name of Company	Name of Product	Unit	Licenced Capacity			Installed Capacity			Production		Capacity in Percentage		Utilisation	
			1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81
			(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)				
1. Cochin Refineries Ltd.	Liquified Petroleum Gas	M.T.			10000	10000	10000	14545	13859	145.5	138.6			
	Naphtha	"			267000	267000	267000	254004	277713	95.1	104.0			
	Motor Spirit—83	"			184000	184000	184000	138257	140140	75.1	76.2			
	Motor Spirit—90	"			..	..	..	10552	..	..	..
	Aviation Turbine Fuel	"			..	..	..	14447	15055	..	..	
	Superior Kerosene	"			73500	73500	73500	336603	322713	457.9	439.1			
	High Speed Diesel	"	33,00,000	33,00,000	707000	707000	707000	907580	969318	132.5	140.7			
	Light Diesel Oil	"			..	..	..	29041	25427	..	..	
	Asphalt	"			..	..	..	3161	5519	..	..	
	Furnace Oil	"			1110000	1110000	1110000	975533	942911	87.9	84.9			
	Bitumen	"			..	..	..	3153	..	..	..
	Low Sulphur Heavy Stock	"			..	..	..	47771	76652	..	..	
	2. Fertilisers and Chemicals Travancore Ltd.	Ammonium Sulphate	"	16500	16500	198000	198000	198000	129531	104964	65.4	53.0		
		Ammonium Phosphate 20:20	"	49020	49020	49500	49500	49500	40577	36471	82.0	73.7		
Ammonium Phosphate 16:20		"	132000	132000	99000	99000	99000	82187	61455	83.0	62.1			
Ammonium Chloride		"	23870	23870	24750	24750	24750	8739	10180	35.3	41.1			
Super Phosphate		"	44000	44000	49500	44000	44000	24353	10901	49.2	24.8			
Cryolite		"	1650	1650	1650	1650	1650	127	119	7.7	7.2			
Sulphur Dioxide		"	8500	8500	8250	8250	8250	595	37	7.2	0.5			
Olcum		"	..	..	6600	6600	6600	2303	1392	34.9	21.1		
Urea		"	330000	330000	330000	330000	330000	212009	246000	64.2	74.5			
Complex Fertilisers		"	485000	485000	485000	485000	485000	99406	198414	20.5	40.9			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
3.	Indian Rare Earths Ltd. (a) Chavara Unit	M.T.	N.A. N.A.	200000 600	160000 ..	144000 240	146843 ..	104022 131	91.8 ..	72.2 54.6
	Zircon	"	..	10000	9000	7460	9056	5125	100.6	68.7
	Rutile	"	..	9000	7500	7200	4940	3701	65.9	51.4
	Sillimanite	"	..	4000	..	1600	..	614	..	38.4
	Cerium Oxide	"	..	..	12	12	27	20	225.0	166.7
	Rare Earths Chloride	"	4300	4300	5000	5000	3448	3509	68.9	70.2
	Trisodium Phosphate	"	5000	5000	5600	5600	4093	4331	73.1	77.3
	Thorium Hydroxide	"	650	650	820	820	1102	1210	134.4	147.6
	Rare Earths Flouride	"	..	..	180	180	68	162	37.8	90.0
	Rare Earths Oxide	"	..	..	60	60	37	47	61.6	78.3
4.	Modern Bakeries (India) Ltd.	Lakh Nos. of 400 gms.	Not applicable	Not applicable	123	123	170.39	181.18	138.5	147.3
	Modern Bread									
	Modern Bun	Lakh Nos.	do.	do.	47.66	47.66	6.85	8.04	14.4	16.9
5.	Indian Telephone Industries Ltd.	Electronic Switching Instruments	Nos. of Lines	..	17500	..	10000	2581	..	96.80
6.	Hindustan Latex Ltd.	Contraceptive Condoms	Million Pieces	288	288	288	177.70	105.23	61.7	36.5
	Meteorological Balloons (875 gms.)	Nos.	..	..	25000— 30000	25000— 30000	..	..	..	..
7.	Hindustan Insecticides Ltd.	Technical DDT.	Tonnes	1344	1344	1344	1362	1001	101.3	77.5
	Formulated DDT.	"	2688	2688	2688	2688	2551	2001	94.9	77.4
	Technical BHC.	"	3000	3000	3000	3000	2442	1541	81.4	51.4
	Formulated BHC.	"	3000	3000	3000	3000	2551	2601	85.0	86.7
	Endosulphan 35 EC.	"	1910	1910	1910	1910	537	266	28.1	13.9
8.	HMT Limited, Kalamasery	Machine Tools and Accessories	Nos.	1200	636	877	471	263	74.1	30.0
	Printing Machines and Accessories	"	..	1200	95	105	78	33	82.1	31.4

Khadi and Village Industries—Production, Sales, Employment and Wages during 1979-80 and 1980-81

Industry	Production		Sales		Employment						Total Wages (Rs. lakhs)	
	Value (Rs.lakhs)		Value (Rs. lakhs)		Full time		Part time		Casual		1979-80 1980-81	
	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
A. Khadi	80.40	100.30	111.38	109.80	9245	11576	102	..	..	..	53.12	73.42
B. Village Industries												
1. Village Oil	132.28	174.97	130.31	186.86	460	501	1045	1214	1500	1715	12.62	13.46
2. Village Pottery	93.29	120.51	98.11	133.97	5716	5791	414	209	..	..	72.37	88.41
3. Fibre and Screw Pine	392.52	428.60	433.88	472.94	51846	52398	1147	986	..	..	287.52	296.16
4. Blacksmithy and Carpentary	26.79	84.75	23.28	77.48	198	797	73	57	..	..	5.69	26.71
5. Handmade Paper Industry	5.44	3.32	3.98	3.51	107	210	123	..	..	..	2.58	1.48
6. Gurkandasari	68.36	124.59	78.12	131.97	1040	1118	591	660	388	419	15.22	19.62
7. Palmgur	61.94	63.86	69.34	70.38	270	270	14530	14210	550	750	39.20	42.80
8. Bee Keeping	144.60	187.43	144.60	187.43	101	2750	N.A.	11611	N.A.	..	N.A.	187.43
9. Village leather	71.40	87.53	75.91	92.78	803	847	433	534	NA	NA	18.38	30.34
10. Lime Manufacturing	74.85	82.49	81.47	87.28	1460	1884	976	1085	..	..	29.47	38.77
11. Non-Edible oil and Soap	15.71	17.27	14.75	16.44	58	57	328	572	620	376	2.43	1.61
12. Cottage Match	66.78	95.87	74.94	98.30	868	1434	1320	2929	..	..	14.08	20.65
13. Cane and Bamboo	25.87	30.09	26.89	31.94	1603	1897	1495	1680	..	..	13.99	17.51
14. Collection of Forest Plants (Medicinal Plants)	1.31	1.56	0.88	0.88	5	5	200	344	200	NA	0.14	0.25
15. Processing of Cereals and Pulses	63.61	87.92	84.61	102.34	1278	2267	434	138	..	..	16.19	23.80
16. Fruit Processing and Preservation	4.62	3.81	3.80	3.70	12	20	9	12	7	5	0.31	0.47
Total	1329.77	1694.81	1456.25	1808.00	75070	83822	23220	36241	3265	3265	583.31	882.89

APPENDIX 7.1

District-wise Distribution of Public Works Department Roads as on 1-4-1981 (Kms.)

District	State Highways	Major District Roads	Other District Roads	Village Roads	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Trivandrum	117	282	1018	71	1488
2. Quilon	270	696	1267	230	2463
3. Alleppey	182	243	832	..	1257
4. Kottayam	258	651	856	..	1765
5. Idukki	371	507	434	..	1312
6. Ernakulam	186	801	724	76	1787
7. Trichur	186	490	671	72	1419
8. Palghat	143	595	281	276	1295
9. Malappuram	161	399	285	308	1153
10. Calicut	57	339	125	451	972
11. Wynad	40	325	116	36	517
12. Cannanore	84	322	524	807	1737
Total	2055	5650	7133	2327	17165

APPENDIX 7.2

Growth of Motor Vehicles in Kerala During the Last Five Years

Type of vehicle	As on 31-3-1977	As on 31-3-1978	As on 31-3-1979	As on 31-3-1980	As on 31-3-1981
(1)	(2)	(3)	(4)	(5)	(6)
1. Goods Vehicles					
(i) Four Wheelers & Above	17165	17755	17907	20128	22896
(ii) 3 Wheelers including Tempos	327	441	620	993	1786
2. Buses					
(i) Stage Carriage	8711	7993	8120	8705	9159
(ii) Contract Carriage/Omni Bus	528	615	703	842	1041
3. Cars & Station Wagons					
(i) Car	41875	45350	49882	54381	56802
(ii) Station Wagons	153	206	222	196	236
(iii) Taxi Cab	12256	13933	15195	17780	18960
(iv) Jeep	6308	7082	6919	7023	7834
4. 3 Wheelers					
(i) Autorikshaw	4492	4585	5666	7397	9640
(ii) Motorised Cycle Rikshaw	41	58	49	38	42
5. Two Wheelers					
(i) Motorised Cycle	49	60	53	58	70
(ii) Scooter/Motor Cycle	32031	38123	43633	50943	59531
6. Tractor, Trailer, Articulator	1722	1772	1794	1864	1853
7. Tractor	1728	1722	1626	1892	2146
8. Tiller	340	366	425	469	530
9. Trailer	237	224	242	260	285
10. Others	1289	1408	1539	1735	1786
Total	129252	141693	154595	174704	194597
Percentage Increase Over the previous year	..	(9.62)	(9.11)	(13.01)	(11.39)

APPENDIX 7.3

Number of Motor Vehicles Having Valid Registration in Kerala as on 31-3-1981

District	Goods vehicles		Buses		Cars & Stations Wagons			
	4 Wheelers and above	3 Wheeler Including Tempos	Stage Carriage	Contract Carriage Omini Bus	Car	Station Wagon	Taxi Cab	Jeep
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Trivandrum	2294	687	189	206	12672	75	2356	1737
2. Quilon	2945	11	431	72	6534	8	2244	698
3. Alleppey	1182	98	333	75	5467	2	1896	282
4. Kottayam	2366	131	498	108	3214	..	1821	467
5. Idukki	1047	4	122	40	1050	4	666	487
6. Ernakulam	3903	601	864	204	10321	19	2053	816
7. Trichur	2430	30	958	98	4276	14	2266	356
8. Palghat	1046	9	401	61	2883	10	887	308
9. Malappuram	1163	4	492	31	2324	..	1837	238
10. Kozhikode	2483	97	751	38	4701	56	1196	1728
11. Cannanore	2031	114	726	107	3352	46	1738	684
12. Wynad* K.S.R.T.C.	6	..	3394	1	8	2	..	33
Total	22896	1786	9159	1041	56802	236	18960	7834

APPENDIX 7.3—Contd.

District	3 Wheelers		2 Wheelers		Tractor Trailer/Articulated	Tractor	Tiller	Trailer	Others	Total
	Auto-rickshaw	Motorised Cycle Rickshaw	Motorised Cycle	Motor Scooter/Cycle						
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1. Trivandrum	1038	..	..	13148	143	107	41	26	468	35187
2. Quilon	358	9	7	5217	127	36	21	54	81	18853
3. Alleppey	515	..	..	5364	38	200	28	22	47	15549
4. Kottayam	649	..	2	3060	83	137	53	12	46	12647
5. Idukki	14	..	9	800	194	65	21	12	121	4656
6. Ernakulam	1826	19	9	12502	360	94	45	62	430	34128
7. Trichur	804	11	35	7065	365	130	55	9	181	19083
8. Palghat	468	1	7	4015	277	1019	190	20	54	11656
9. Malappuram	328	..	1	1059	33	222	21	38	135	7926
10. Kozhikode	1439	1	..	4405	142	134	37	28	94	17330
11. Cannanore	2201	1	..	2892	91	2	18	2	91	14096
12. Wynad* K.S.R.T.C.	..	..	..	..	..	..	..	..	..	..
	..	..	..	4	..	..	..	..	38	3486
Total	9640	42	70	59531	1833	2146	530	285	1786	194597

* Not separately available.

APPENDIX 7.4

Number of Vehicles Newly Registered in the State during the year 1980-81

District	Goods Vehicles		Buses		Cars and Station Wagons			
	4 Wheeler and Above	3 Wheeler Including Tempos	Stage Carriage	Contract Carriage Omni Bus	Car	Station Wagons	Taxi	Jeep
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Trivandrum	142	13	..	22	586	..	15	41
2. Quilon	317	..	24	18	307	1	41	63
3. Alleppey	90	50	8	28	209	1	4	8
4. Kottayam	205	19	19	12	115	..	..	138
5. Idukki	34	1	3	2	27	..	32	48
6. Ernakulam	374	187	55	15	238	..	..	132
7. Trichur	262	2	25	41	161	11	..	95
8. Palghat	99	3	14	6	26	..	..	19
9. Malappuram	89	1	24	5	69	..	..	47
10. Kozhikode	195	32	60	4	178	26	15	56
11. Wynad	..	..	..	..	..	..	..	..
12. Cannanore	91	43	18	7	41	..	1	10
K.S.R.T.C. Registration	..	..	260	..	..	..	..	..
Total	1898	351	510	160	1957	39	108	597

APPENDIX 7.4—Contd.

District	3 Wheelers		2 Wheelers		Tractor Trailer Articulated	Tractor	Tiller	Trailer	Others	Total
	Auto-rickshaw	Motorised Cycle Rickshaw	Motorised Cycle	Scooter/Motor Cycle						
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1. Trivandrum	176	..	..	1492	52	16	17	8	..	2580
2. Quilon	70	..	..	800	7	11	10	..	5	1674
3. Alleppey	241	..	..	815	1	4	11	..	29	1499
4. Kottayam	106	..	..	532	3	20	11	6	3	1189
5. Idukki	1	..	..	99	..	11	6	1	6	271
6. Ernakulam	378	..	..	2073	11	39	14	5	27	3548
7. Trichur	103	..	1	1031	11	42	1	3	..	1729
8. Palghat	48	..	..	474	9	51	18	5	14	786
9. Malappuram	63	..	..	201	5	8	1	1	..	514
10. Kozhikode	296	1	..	298	11	24	..	..	8	1204
11. Wynad*	..	..	..	..	..	..	..	..	..	..
12. Cannanore	347	..	..	435	..	..	..	1	8	1002
K.S.R.T.C. Registration	..	..	..	..	..	..	..	..	..	260
Total	1829	1	1	8250	110	226	89	30	100	16256

*Not separately available.

APPENDIX 7.5

Kerala State Road Transport Corporation—Operational Statistics (1980-81)

Transport Unit	No. of Schedules	No. of Routes	Route Distance (in km.)	Gross km. operated (lakhs)	Effective Kilometre operated (lakhs)	Passenger carried (lakhs)	No. of accidents
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Alleppey	103	126	5130	99.00	98.46	346.47	179
2. Alwaye	83	122	4484	78.27	77.82	267.38	336
3. Attingal	60	140	4908	52.18	52.07	250.99	58
4. Cannanore	63	34	5668	66.41	65.52	88.28	131
5. Chalakudy	52	78	2603	47.50	47.02	146.36	197
6. Changanacherry	59	145	3448	51.94	51.91	193.62	173
7. Chengannur	70	145	4792	60.81	60.48	207.63	100
8. Ernakulam	76	140	8630	81.94	81.48	143.13	200
9. Guruvayoor	30	35	3041	33.94	33.69	48.52	43
10. Kayamkulam	84	131	4031	76.18	75.80	239.95	251
11. Kottarakkara	89	151	6651	79.83	78.74	268.47	86
12. Kottayam	99	174	9312	89.93	89.06	224.72	303
13. Kozhikode	127	80	10095	116.50	116.19	201.87	224
14. Muvattupuzha	66	73	4107	51.58	51.24	137.22	196
15. Nedumangad	77	150	5596	74.09	73.80	266.85	132
16. Neyyattinkara	108	230	7980	95.02	94.61	376.16	239
17. Palai	68	111	5174	57.18	56.57	214.64	220
18. Palghat	63	51	6325	71.58	71.18	82.92	141
19. Pappanamcode	70	69	2054	42.19	41.80	282.97	111
20. Pathanamthitta	40	89	3275	34.24	33.38	95.59	117
21. Payyannur	48	46	3070	47.26	46.44	79.52	88
22. Perinthalmanna	23	20	3402	27.94	27.34	41.05	27
23. Perumbavoor	53	49	2182	44.31	43.97	119.01	95
24. Ponkunnam	23	20	2367	18.85	18.54	32.22	39
25. Ponnani	19	19	2006	22.84	22.70	32.02	52
26. Punalur	47	113	4612	43.11	42.78	147.33	133
27. Quilon	140	166	8873	129.77	128.10	397.15	212
28. Shertalai	37	63	2030	31.98	31.61	107.05	112
29. Sultanbathery	80	66	3837	62.81	61.20	214.28	43
30. Thiruvalla	68	140	6320	58.52	58.19	245.16	122
31. Trichur	100	100	6375	100.79	100.03	197.61	411
32. Trivandrum CL	153	146	9064	164.97	164.61	354.76	367
33. Trivandrum Cy.	217	573	8679	112.55	110.76	846.24	293
34. Vaikom	27	11	807	3.16	3.16	10.90	5
35. Vizhinjam	46	38	1154	37.60	37.57	161.38	70
Total	2568	3718	159772	2266.72	2247.89	7069.52	5506

APPENDIX 7.6

Railway Net-Work (All India)

Year	Total Route km.		Running Track km.		Total Track km.**	
	Electrified	Total	Electrified	Total	Electrified	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1950-51	388	53596	937	59315	1253	77609
1955-56	388	55011	937	60845	1253	78233
1960-61	748	56247	1752	63602	2259	83706
1965-66	2423	58399	4847	68375	6302	92474
1970-71	3706	59790	7447	71669	9586	98546
1973-74	4191	60234	8401	74104	10823	101028
1974-75	4397	60301	8804	74197	11286	101395
1975-76	4659	60216	9245	74255	11819	101990
1976-77	4720	60666	9373	74839	12002	102037
1977-78	4720	60693	9360	75012	12037	103325
1978-79	4722	60777	9363	75195	12070	103587
1979-80	4820*	60933	9562	75450	12305	103906

* In addition 95 km. were energised but not opened to traffic as on 31-3-1980.

** This includes track in yards and sidings.

Source: Indian Railways Year Book 1979-80.

APPENDIX 7.7

State-wise Route Kilometrage of Indian Railways (as at the end of 1979-80)

State	Route km.	Percentage
(1)	(2)	(3)
Andhra Pradesh	4709	7.73
Assam	2194	3.60
Bihar	5312	8.72
Gujarat	5671	9.30
Haryana	1450	2.38
Himachal Pradesh	256	0.42
Jammu & Kashmir	77	0.13
Karnataka	3013	4.95
Kerala	916	1.50
Madhya Pradesh	5739	9.42
Maharashtra	5234	8.59
Nagaland	9	0.01
Orissa	1948	3.20
Punjab	2139	3.51
Rajasthan	5614	9.22
Tamil Nadu	3822	6.27
Tripura	12	0.02
Uttar Pradesh	8811	14.46
West Bengal	3722	6.10
<i>Union Territories</i>		
Chandigarh	11	0.02
Delhi	168	0.28
Goa, Daman & Diu	79	0.13
Pondicherry	27	0.04
Total	60933	100.00

Source: Indian Railways Year Book 1979-80.

APPENDIX 7.8

Air Traffic from Trivandrum and Cochin Airports for the Years 1979-80 and 1980-81

		1979-80				1980-81					
		Originating Traffic		Terminating Traffic		Originating Traffic		Terminating Traffic			
Sector	Passenger No.	Freight (Kgs.)	Sector	Passenger No.	Freight (Kgs.)	Sector	Passenger No.	Freight (Kgs.)	Sector	Passenger No.	Freight (Kgs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Trivandrum-Bombay	76215	819875	Bombay-Trivandrum	71047	439805	Trivandrum-Bombay	64204	727921	Bombay-Trivandrum	63633	322530
Trivandrum-Madras	20462	38406	Madras-Trivandrum	22179	656357	Trivandrum-Madras	18873	158032	Madras-Trivandrum	20887	665731
Trivandrum-Cochin	8644	144529	Cochin-Trivandrum	11408	147468	Trivandrum-Cochin	6961	35956	Cochin-Trivandrum	8162	50448
Trivandrum-Male	5387	72404	Male-Trivandrum	5810	2070	Trivandrum-Male	6364	121084	Male-Trivandrum	5738	5657
Trivandrum-Colombo	6852	20527	Colombo-Trivandrum	9191	105295	Trivandrum-Colombo	5298	22433	Colombo-Trivandrum	5667	137568
Trivandrum-Madurai	698	4357	Madurai-Trivandrum	770	5497	Trivandrum-Madurai	258	1668	Madurai-Trivandrum	220	492
Cochin-Coimbatore	2903	2915	Coimbatore-Cochin	2852	109088	Cochin-Coimbatore	2555	2000	Coimbatore-Cochin	3309	119697
Cochin-Bombay	35194	111601	Bombay-Cochin	32908	119299	Cochin-Bombay	62015	297560	Bombay-Cochin	60741	301139
Cochin-Bangalore	9883	9734	Bangalore-Cochin	11229	24386	Cochin-Bangalore	10525	11931	Bangalore-Cochin	11290	29293
Cochin-Madras	14280	55122	Madras-Cochin	14461	62773	Cochin-Madras	12502	32790	Madras-Cochin	13069	85499

Source: Indian Airlines.

APPENDIX 7.9

The Number of New Passports Issued by the Passport and Emigration Office at Cochin during the year 1980-81

Months	Fresh Passports	Miscellaneous Services	Emigration Clearance
(1)	(2)	(3)	(4)
April 1980	4684	3317	1452
May 1980	6021	4028	1480
June 1980	5177	2511	1313
July 1980	6033	3795	1339
August 1980	5843	3507	1191
September 1980	7006	2696	1756
October 1980	7030	4950	1597
November 1980	6144	4733	4726
December 1980	8005	4690	1849
January 1981	7085	4905	2130
February 1981	8491	4229	1743
March 1981	10183	5719	2352
Total	81702	49080	22928

Source : Regional Passport and Emigration Office, Cochin

APPENDIX 7.10

Import and Export Tonnage of Cargo Handled and Revenue Collected at the Intermediate and Minor Ports of Kerala during 1980-81

Name of Port	Import (Tonnes)			Export (Tonnes)			Total (Tonnes)			Revenue (Rs.) earned	
	Coastal	Foreign	Total	Coastal	Foreign	Total	Coastal	Foreign	Total	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Alleppey	..	..	..	..	..	..	..	..	..	69139	23927
2. Calicut (including Beypore)	2795	16191	18986	4084.5	12840	53685	43640	29031	72671	540391	267894
3. Neezadikara	..	..	..	..	103290	103290	..	103290	103290	932637	1209403
4. Trivandrum	..	..	..	..	..	..	..	..	..	3952	23610
5. Quilon	..	..	..	..	..	..	..	..	..	14572	2554
6. Azhikode (Munambam)	..	..	..	..	..	..	..	..	..	8494	7806
7. Ponnani	..	..	..	..	..	..	..	..	..	18120	15075
8. Badagara	..	..	..	..	..	..	..	..	..	15886	6324
9. Tellicherry	..	..	..	..	..	..	..	..	..	7232	5566
10. Cannanore	..	..	..	..	..	..	..	..	..	7505	..
11. Azhikkal	579	..	579	14306	..	14306	14885	..	14885	57866	74940
12. Kasargod	..	..	..	..	..	..	..	..	..	8497	7472
13. Vizhinjam	..	..	..	..	..	..	..	..	..	..	102
Total	3374	16191	19565	55151	116130	171281	58525	132321	190846	1677091	1644673

Source: Director of Ports, Kerala.

APPENDIX 7.11

Number and Tonnage of Steamers and Sailing Vessels which Called at the Intermediate and Minor Ports of Kerala—1980-81

Name of Port	Coastal/ Foreign	Steamers		Sailing vessels		Total No. of vessels	Total Tonnage
		Number	Tonnage	Number	Tonnage		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Intermediate Ports							
1. Neendakara	Coastal	..	..	..	..	..	..
	Foreign	12	59114	..	..	12	59114
2. Alleppey	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
3. Calicut (Including Beypore)	Coastal	9	6693	385	48454	394	55147
	Foreign	3	3013	8	1900	11	4913
II. Minor Ports							
4. Trivandrum	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
5. Quilon	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
6. Azhikode	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
7. Ponnani	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
8. Badagara	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
9. Azhikkal	Coastal	..	..	189	21168	189	21168
	Foreign	..	..	..	..	..	..
10. Tellicherry	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
11. Cannanore	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
12. Kasargode	Coastal	..	..	..	..	..	..
	Foreign	..	..	..	..	..	..
Grand Total 1980-81	Coastal	9	6693	574	69622	583	76315
	Foreign	15	62127	8	1900	23	64027
Total		24	68820	582	71522	606	140342
Grand Total for 1979-80	Coastal	12	1565	523	59418	535	60983
	Foreign	18	99669	13	1362	31	101031
Total		30	101234	536	60780	566	162014

Source : Director of Ports, Kerala.

APPENDIX 7.12

Tonnage of Principal Commodities of Imports into Cochin Port
During the Year 1980-81

Commodity	Coastal	Foreign	Total
(1)	(2)	(3)	(4)
1. Rice and Paddy	..	..	..
2. Other Grains Including Pulses and Flour	..	14702	14702
3. Coal	..	..	..
4. Cashewnuts	..	6979	6976
5. Machinery	..	8506	8506
6. Iron and Steel	64	16871	16935
7. Tin Plate	..	1001	1001
8. Motor Vehicles and Parts	44	67	111
9. Chemicals and Chemical Preparations	..	909	909
10. Oil Seeds Including Copra and Groundnut	56	..	56
11. Drugs and Medicines	..	639	639
12. Paper, Old Newspaper, Stationery	..	31500	31500
13. Cotton Raw and Waste	..	..	..
14. Oilman Stores, Provisions and Spices	..	517	517
15. Sulphur	..	121962	121962
16. Rock Phosphate	..	328735	328735
17. Fertilisers	..	154515	154515
18. Liquid Ammonia	..	56701	56701
19. Salt	1	..	1
20. Zinc Concentrate	..	11114	11114
21. Calcined Bauxite	9129	..	9129
22. Soda	..	..	..
29. Candles, Paraffin Wax and Tallow	..	..	..
24. P. O. L.	584628	2556626	3141254
25. Cement	441	156467	156908
26. Transhipment Cargo	117	1126	1243
27. Miscellaneous	856	48113	48969
Total	595336	3517047	4112383

Source: Cochin Port Trust Administration Report, 1980-81.

APPENDIX 7.13

Tonnage of Principal Commodities of Exports from Cochin Port
During the Year 1980-81

Commodities	Coastal	Foreign	Total
(1)	(2)	(3)	(4)
1. Coir Product	..	29387	29387
2. Tea	..	61242	61242
3. Rubber	..	240	240
4. Coffee	..	20839	20839
5. Coconuts	..	..	..
6. Copra	..	..	..
7. Cashew Kernels	..	29365	29365
8. Chemicals	..	6077	6077
9. Cotton Raw and Waste	..	4266	4266
10. Rice and Other Foodgrains	3266	7	3303
11. Pepper	..	25138	25138
12. Ginger	..	4671	4671
13. Cardamom	..	565	565
14. Turmeric	..	2469	2469
15. Coconut Oil	..	..	..
16. Cashew Shell Liquid	..	8629	8629
17. Lemongrass Oil	..	342	342
18. Timber	607	5247	5854
19. Marine Products	..	35507	35507
20. Oil Cakes	..	..	..
21. Machinery	51	2792	2843
22. Iron and Steel	37	1305	1342
23. Mineral Sand Including Granite	21	8078	8099
24. Cement	2105	..	2105
25. P. O. L.	822986	..	822986
26. Transhipment Cargo	5	682	687
27. Miscellaneous	2178	43008	45186
Total	831286	289856	1121142

Source: Cochin Port Trust Administration Report, 1980-81.

APPENDIX 7.14

Category Analysis of Ships that Called at the Cochin Port During the Year 1980-81

Type of Vessels Entered	No.		NRT	
	1979-80	1980-81	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)
1. Tankers	172	189	2172655	2190083
2. Colliers	..	..	..	..
3. Foodgrain Ships	..	..	..	..
4. Fertiliser Ships	56	58	221751	408515
5. General Cargo Ships	573	462	2232540	1771646
6. Fully containerised Ships	57	65	372301	433944
7. Ro—Ro Ships	3	12	37621	62285
8. Passenger Ships	1	2	13655	16632
Total	867	788	5250523	4883105

Source : Cochin Port Trust, Administration Report 1980-81.

Growth of Post Offices in Kerala

Category of Office	As on									
	1-4-1969	1-4-1974	1-4-1975	1-4-1976	1-12-1976	1-4-1977	1-4-1978	1-4-1979	1-4-1980	1-4-1981
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Head Offices	22	28	29	31	32	32	33	34	44	51
2. Sub Post Offices	967	1204	1219	1233	1229	1238	1270	1954	1994	2079
3. Branch Offices	2732	2786	2774	2780	2836	2833	2915	2364	2474	2446
Total	3721	4018	4022	4044	4097	4103	4218	4352	4512	4576

Source : Post Master General, Kerala

APPENDIX 7.16

Area and Population Served by each Post Office in the Various Districts of Kerala State

Name of District	Area Served by each P. O. in sq. Km.	Population Served by each Post Office
(1)	(2)	(3)
1. Trivandrum	6.22	7118
2. Quilon	10.37	6308
3. Alleppey	4.61	5742
4. Kottayam	5.44	4150
5. Idukki	19.92	3823
6. Ernakulam	6.82	7176
7. Trichur	6.36	5119
8. Palghat	10.19	4726
9. Malappuram	9.55	6302
10. Kozhikode	6.34	6045
11. Wynad	14.55	3790
12. Cannanore	9.37	5293
Average for State	8.47	5544

Source : Post Master General, Kerala

APPENDIX 7.17

Statistics of Post Offices as on 1-4-1981 in Kerala State

Name of Division		HQS	S.Os.	E.D.S.Os	B.Os.	Mobile B.Os.	Total
(1)		(2)	(3)	(4)	(5)	(6)	(7)
1.	Trivandrum (N)	2	68	14	85	14	183
2.	Trivandrum (S)	2	53	22	98	16	191
3.	Quilon	3	64	42	94	7	210
4.	Kottayam	3	82	52	114	5	256
5.	Alleppey	3	62	60	29	13	167
6.	Tiruvalla	2	45	37	53	1	138
7.	Alwaye	3	64	60	91	3	221
8.	Idikki	2	52	26	162	12	254
9.	Changanacherry	2	45	25	76	1	149
10.	Pathanamthitta	3	59	48	108	17	235
11.	Ernakulam	2	68	8	49	5	132
12.	Palghat	3	88	43	91	7	232
13.	Trichur	3	79	62	125	21	290
14.	Irinjalakkuda	2	57	30	87	11	187
15.	Ottapalam	2	48	39	100	11	200
16.	Calicut	2	63	25	179	12	281
17.	Malappuram	2	41	37	118	20	218
18.	Tellicherry	1	39	14	118	5	177
19.	Cannanore	2	49	18	86	4	159
20.	Badagara	2	36	45	112	..	195
21.	Mavelikkara	1	39	22	40	1	103
22.	Tirur	2	40	26	82	11	161
23.	Kasaragod	2	34	49	148	4	237
Total		51	1275	804	2245	201	4576

Source : Post Master General, Kerala

APPENDIX 7.18

Statistics Relating to Telephone Exchanges—Kerala for the Years 1980 and 1981

Telephone District/ Division	No. of Exchanges		Total Equipped Capacity		Total Working Connections		Total Waiting List		Public Call Offices	
	As on April 1980	As on April 1981	As on April 1980	As on April 1981	As on April 1980	As on April 1981	As on April 1980	As on April 1981	As on April 1980	As on April 1981
(1)	(2)	(3)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Trivandrum Phones District	3	3	11500	12600	10679	11549	1134	1813	97	113
2. Ernakulam Phones District	6	6	14300	14500	13125	13612	1990	2824	69	74
3. Kerala Circle including all Divisions [Excluding (1) & (2)]	493	456	78790	83600	70422	76818	13802	18080	2001	2107
Total—Kerala State	442	465	104590	110700	94226	101979	16926	22717	2167	2294

Source : General Manager, Telecommunications, Trivandrum.

APPENDIX 8.1

Principal Exports Through Cochin Port—1977-81

(Quantity: Tonnes)

Commodities	1977-78	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)
1. Coir Products	43706	48360	57299	29387
2. Tea	64322	43017	67289	61242
3. Rubber	12921	101	124	240
4. Coffee	15050	24006	22422	20839
5. Coconuts	62	..	..	..
6. Copra	120	..	..	..
7. Cashew Kernal	43279	32278	44114	29365
8. Chemicals	15339	11944	7654	6077
9. Cotton, Raw and Waste	300	333	4397	4266
10. Rice and Other Foodgrains	17320	2573	7774	3303
11. Pepper	26150	18814	25710	25138
12. Ginger	7107	9264	8165	4671
13. Cardamom	408	668	1000	565
14. Turmeric	3251	2824	3724	2469
15. Coconut Oil	1	19	6	..
16. Cashew Shell Liquid	2682	5266	11163	8629
17. Lemongrass Oil	154	445	322	342
18. Timber	17573	13432	5239	3854
19. Marine Products	42049	45530	43916	35507
20. Oil Cake	1020	315	207	..
21. Machinery	7393	5193	4949	2843
22. Iron and Steel	2525	2691	2814	1342
23. Mineral Salt including Granite	8457	4879	6520	8099
24. Cement	13967	1876	2341	2105
25. P.O.L.	826586	902041	685919	822986
26. Transshipment Cargo	7039	6179	2945	687
27. Miscellaneous	70204	59300	92030	45186
Total	1248985	1241348	1108052	1121142

APPENDIX 8.2

Principal Imports Through Cochin Port—1977-81

(Quantity: Tonnes)

Commodities	1977-78	1978-79	1979-80	1980-81
(1)	(2)	(3)	(4)	(5)
1. Rice and Paddy	303	..	..	..
2. Other Grains including Pulses and Flour	25866	47391	22331	14702
3. Coal	139229	111382	..	..
4. Cashewnuts	37802	6532	16797	6976
5. Machinery	6545	8976	3849	8506
6. Iron and Steel	5649	10594	79227	16935
7. Tin Plate	3461	1190	4246	1001
8. Motor Vehicles and Parts	23	51	77	111
9. Chemicals and Chemical Preparations	1355	3216	3511	909
10. Oil Seeds including Copra and Groundnut	751	4798	204	56
11. Drugs and Medicines	11	20	6	639
12. Paper, Old News paper and Stationery	16957	24458	39362	31500
13. Cotton, Raw and Wastage	27793	7301	..	..
14. Oilman Stores, Provisions and Spices	16232	25521	27622	517
15. Sulphur	118704	157955	175401	121962
16. Rock Phosphate	257841	321821	319947	328735
17. Fertilisers	86287	135755	128509	154515
18. Liquid Ammonia	35036	49590	57797	56701
19. Salt	444	16381	356	1
20. Zinc Concentrate	20687	29568	24697	111114
21. Calcined Bauxite	14646	8762	14138	9129
22. Soda	7359	5302	2253	..
23. Candles, Paraffin Wax and Tallow	18	510	..	..
24. P.O.L.	2981660	2936846	3181062	3141254
25. Cement	40056	234524	155280	156908
26. Transshipment Cargo	7039	6179	2945	1243
27. Miscellaneous	73657	74058	97782	48969
Total	3925411	4228681	4356499	4112383

APPENDIX 8.3

Export of Spices from India/Kerala

Commodities	All India (1979-80)				Export through Cochin Port (1979-80)			
	Quantity (M.Tonnes)	Percentage to Total	Value Rs. lakhs	Percentage to total	Quantity (M.Tonnes)	Percentage to Total	Value Rs. lakhs	Percentage to Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Pepper	20898.45	18.18	3352.25	21.62	20685.61	60.75	3239.97	62.32
2. Cardamom	3003.65	2.61	4888.53	31.52	478.82	1.41	711.32	13.68
3. Chillies	10262.50	8.93	773.02	4.98	1424.30	4.18	137.54	2.65
4. Ginger	11485.98	9.99	726.96	4.69	7186.45	21.11	446.42	8.59
5. Turmeric	26609.84	23.15	1980.61	12.77	3050.01	8.96	252.73	4.86
6. Curry Powder	2644.27	2.30	255.63	1.65	872.48	2.56	96.18	1.85
7. Coriander Seed	4325.11	3.76	146.98	0.95	3.66	0.01	0.17	0.03
8. Cumen Seed	17830.54	15.51	2120.69	13.68	70.36	0.21	9.44	0.18
9. Celery seed	3153.48	2.74	192.65	1.24	35.63	0.10	2.11	0.04
10. Fenel Seed	1911.57	1.66	124.88	0.81	5.00	0.01	0.59	0.01
11. Fenugreek Seed,	4798.31	4.17	156.62	1.01	4.00	0.01	0.36	0.01
12. Garlic	3380.07	2.94	153.99	0.99	14.00	0.04	1.15	0.02
13. Aniseed	172.30	0.15	13.29	0.09	..	..	..	..
14. Cassia	957.20	0.83	48.73	0.31	..	..	..	..
15. Maccg	10.60	0.01	0.13	0.00	..	..	..	..
16. Tegpat	1269.15	1.10	12.84	0.08	10.05	0.03	0.13	0.01
17. Oils of Spieces	19.66	0.02	82.59	0.53	16.21	0.05	64.43	1.24
18. Oleoresins of Spieces	181.61	0.16	244.25	1.58	174.91	0.51	234.19	4.50
19. Miscellanous Spieces	2044.01	1.79	233.01	1.50	18.94	0.06	2.01	0.04
∨ Total	114958.30	100.00	15507.65	100.00	34050.43	100.00	5198.74	100.00

Source: The Spices Export Promotion Council.

APPENDIX 8.4

Item-wise Export of Marine Products from Kerala

(Quantity in Tonnes—Value in Rs. Crores)

Item	1977-78		1978-79		1979-80		1980-81	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Frozen Shrimp	26932	70.48	25816	81.04	26047	92.37	24481	84.27
2. Frozen Froglegs	1058	2.59	1802	4.50	1684	3.68	2372	5.88
3. Frozen Lobster Tails	320	1.97	394	3.03	221	2.02	273	1.61
4. Frozen Cuttle Fish and Fillets	620	0.97	685	1.38	979	2.90	634	1.16
5. Frozen Squids	352	0.41	1651	2.32	593	0.94	382	0.67
6. Fresh and Frozen fish	16	0.02	974	0.24	123	0.20	37	0.03
7. Canned Shrimp	116	0.52	185	0.85	226	1.09	259	1.02
8. Others	405	0.49	794	0.63	661	0.73	710	0.70
Total	29819	77.45	32301	93.99	30534	108.98	29148	95.34

Source: Marine Products Export Development Authority.

APPENDIX 9.1

Progress of Educational Institutions—High Schools

Year	Government Schools	Private Schools	Total
(1)	(2)	(3)	(4)
1961-62	276	653	929
1962-63	312	703	1015
1963-64	315	705	1020
1964-65	345	801	1146
1965-66	345	806	1151
1966-67	391	884	1275
1967-68	394	888	1282
1968-69	440	941	1381
1969-70	441	941	1382
1970-71	442	942	1384
1971-72	446	947	1393
1972-73	448	951	1399
1973-74	452	952	1404
1974-75	536	952	1488
1975-76	566	955	1521
1976-77	590	1076	1666
1977-78	594	1081	1675
1978-79	597	1083	1680
1979-80	597	1083	1680
1980-81	780	1191	1971

APPENDIX 9.2

Progress of Educational Institutions—Upper Primary Schools

Year	Government Schools	Private Schools	Total
(1)	(2)	(3)	(4)
1961-62	576	1409	1985
1962-63	711	1574	2285
1963-64	705	1580	2285
1964-65	758	1670	2428
1965-66	761	1686	2447
1966-67	778	1697	2475
1967-68	782	1697	2479
1968-69	797	1738	2535
1969-70	797	1735	2532
1970-71	809	1734	2543
1971-72	811	1740	2551
1972-73	811	1739	2550
1973-74	809	1739	2548
1974-75	857	1731	2588
1975-76	880	1726	2606
1976-77	883	1835	2718
1977-78	888	1830	2718
1978-79	893	1846	2739
1979-80	893	1846	2739
1980-81	857	1861	2718

APPENDIX 9.3

Progress of Educational Institutions—Lower Primary Schools

Year	Government Schools	Private Schools	Total
(1)	(2)	(3)	(4)
1961-62	2835	3910	6745
1962-63	2985	3919	6904
1963-64	2928	3991	6919
1964-65	2898	4032	6930
1965-66	2904	4050	6954
1966-67	2861	4072	6933
1967-68	2864	4076	6940
1968-69	2805	4112	6917
1969-70	2805	4123	6928
1970-71	2804	4091	6895
1971-72	2804	4091	6895
1972-73	2798	4089	6887
1973-74	2807	4097	6904
1974-75	2900	4075	6975
1975-76	2910	4065	6975
1976-77	2883	4109	6992
1977-78	2849	4120	6969
1978-79	2846	4124	6970
1979-80	2846	4124	6970
1980-81	2744	4143	6887

APPENDIX 9.4

Number of Departmental Schools Sanctioned During 1981-82

District	Lower Primary Schools	Upper Primary Schools	High Schools
(1)	(2)	(3)	(4)
1. Trivandrum	4	14	16
2. Quilon	2	10	11
3. Alleppey	1	7	8
4. Kottayam	..	9	5
5. Idukki	5	14	16
6. Ernakulam	7	9	5
7. Trichur	..	13	4
8. Palghat	7	8	9
9. Malappuram	6	15	4
10. Kozhikode	3	10	9
11. Wynad	11	2	2
12. Cannanore	26	26	28
Total	72	137	117

APPENDIX 9.5

*Standard-wise Strength of Students—1981-82**

Standard	Boys	Girls	Total
(1)	(2)	(3)	(4)
I	336782	313498	650280
II	333186	316504	649690
III	330010	312510	642520
IV	329827	311344	641171
Total L. P. Section	1329805	1253856	2583661
V	322748	299295	622043

(1)	(2)	(3)	(4)
VI	299634	276515	576149
VII	288329	265466	553795
Total U. P. Section	910711	841276	1751987
VIII	257279	236727	494006
IX	236169	223216	459385
X	185334	182838	368172
Total H. S. Section	678782	642781	1321563
Grand Total	2919298	2737913	5657211

* Provisional

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
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1960-61	2939408	100	330893	100	3270301	100
1961-62	3041388	103	416364	126	3457752	106
1962-63	3131503	107	490564	148	3622067	111
1963-64	3263617	111	554819	168	3818436	117
1964-65	3424765	117	585336	177	4010101	123
1965-66	3552693	121	615143	186	4167836	127
1966-67	3688679	125	639959	193	4328638	132
1967-68	3784864	129	666773	202	4451637	136
1968-69	3912830	133	702384	212	4615204	141
1969-70	3989363	136	709290	214	4698653	144
1970-71	4074808	139	724724	219	4799532	147
1971-72	4229533	144	450198	227	4979731	152
1972-73	4375389	149	780886	236	5156275	158
1973-74	4404716	150	865861	262	5270577	161
1974-75	4423247	151	936042	283	5125705	157
1975-76	4377461	149	907896	274	5285357	162
1976-77	4350016	148	1003665	303	5353681	164
1977-78	4405592	150	1088166	329	5493758	168
1978-79	4340729	147	1197403	362	5538132	169
1979-80	4318198	147	1275063	385	5593261	171
1980-81	4283995	146	1310671	396	5594666	171
1981-82	4335648	147	1321563	399	5657211	173

APPENDIX 9.7

Number of Students Appeared and Passed the S.S.L.C. Examination

Year (1)	Students Appeared for S.S.L.C. Examination			Students Passed S.S.L.C. Examination		
	Boys (2)	Girls (3)	Total (4)	Boys (5)	Girls (6)	Total (7)
March 1980	196114	186138	382252	79528	83222	162750
September 1980	25141	18654	43795	2731	2028	4759
March 1981	238249	228828	467077	89736	94705	184441

APPENDIX 9.8

Number of Arts and Science Colleges in Kerala—District-wise

District (1)	1980-81			1981-82		
	Government (2)	Private (3)	Total (4)	Government (5)	Private (6)	Total (7)
1. Trivandrum	5	11	16	6	11	17
2. Quilon	..	13	13	1	16	17
3. Alleppey	..	14	14	..	15	15
4. Kottayam	1	16	17	1	20	21
5. Idukki	1	1	2	1	2	3
6. Ernakulam	2	15	17	3	17	20
7. Trichur	3	12	15	3	14	17
8. Palghat	3	5	8	3	6	9
9. Malappuram	3	4	7	3	6	9
10. Kozhikode	6	7	13	7	7	14
11. Wynad	..	..	..	2	..	2
12. Cannanore	5	6	11	6	7	13
Total	29	104	133	36	121	157

APPENDIX 9.9

Number of Colleges Affiliated to the Universities in Kerala—1981-82

Colleges	Kerala University			Cochin University			Calicut University			Total		
	Govt.	Private	Total	Govt.	Private	Total	Govt.	Private	Total	Govt.	Private	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Arts and Science Colleges	12	81	93	..	..	..	24	40	64	36	121	157
2. Training Colleges	1	13	14	..	..	..	3	2	5	4	15	19
3. Engineering Colleges	1	2	3	..	..	..	2	1	3	3	3	6
4. Medical Colleges	3	..	3	..	..	..	2	..	2	5	..	5
5. Ayurveda Colleges	2	..	2	..	..	..	..	2	2	2	2	4
6. Law Colleges	2	1	3	..	..	..	1	..	1	3	1	4
Total	21	97	118	..	..	..	32	45	77	53	142	195

APPENDIX 9.10

Number of Arts and Science Colleges Newly Started During 1981-82

District	1981-82		Total
	Government	Private	
(1)	(2)	(3)	(4)
1. Triyandrum	1	..	1
2. Quilon	1	3	4
3. Alleppey	..	1	1
4. Kottayam	..	4	4
5. Idukki	..	1	1
6. Ernakulam	1	2	3
7. Trichur	..	2	2
8. Palghat	..	1	1
9. Malappuram	..	2	2
10. Kozhikode	1	..	1
11. Wynad	2	..	2
12. Cannanore	1	1	2
Total	7	17	24

Source: Directorate of Collegiate Education

APPENDIX 9.11

Enrolment by Stages in Arts and Science Colleges in Kerala—1980-81

Stages	1980-81		
	Boys	Girls	Total
(1)	(2)	(3)	(4)
Pre-degree	77710	71157	148867
Degree	43124	44343	87467
Post-graduate	2813	3053	5866
Total	129647	118553	242200

APPENDIX 9.12

Number of Engineering Colleges, Students and Teachers in Kerala—1980-81

Type of Management	No	Enrolment			Teachers*
		Boys	Girls	Total	
(1)	(2)	(3)	(4)	(5)	(6)
Government	2	1878	494	2372	291
Private	3	1791	303	2094	237
Quasi Government (R. E. C.)	1	1010	51	1061	127
Total	6	4679	848	5467	655

* Excluding Skilled Assistants

APPENDIX 9.13

Number of Polytechnics in Kerala—District-wise 1980-81 and 1981-82

District (1)	1980-81			1981-82		
	Govt. (2)	Private. (3)	Total (4)	Govt. (5)	Private (6)	Total (7)
1. Trivandrum	2	..	2	2	..	2
2. Quilon	..	1	1	..	1	1
3. Alleppey	..	2	2	..	2	2
4. Kottayam	1	..	1	1	..	1
5. Idukki	1	..	1	1	..	1
6. Ernakulam	1	..	1	1	..	1
7. Trichur	3	1	4	3	1	4
8. Palghat	2	..	2	2	..	2
9. Malappuram	1	1	2	1	1	2
10. Kozhikode	2	..	2	2	..	2
11. Cannanore	1	1	2	1	1	2
Total	14	6	20	14	6	20

APPENDIX 9.14

Number of Students and Teachers in Polytechnics in Kerala (1980-81)

Type of Management (1)	Enrolment (2)	Teachers (3)
Government	4225	482
Private	2642	242
Total	6867	724

APPENDIX 9.15

Number of Junior Technical Schools in Kerala District-wise—1981-82

District (1)	1981-82 (2)
1. Trivandrum	2
2. Quilon	2
3. Alleppey	2
4. Kottayam	2
6. Idukki	1
6. Ernakulam	1
7. Trichur	4
8. Palghat	3
9. Malappuram	2
10. Kozhikode	2
11. Wynad	1
12. Cannanore	3
Total	25

APPENDIX 9.16

Number of Industrial Training Institute in Kerala District-wise—1980-81

District (1)	1980-81		
	Government (2)	Private (3)	Total (4)
1. Trivandrum	4	17	21
2. Quilon	1	23	24
3. Alleppey	1	21	22
4. Kottayam	2	13	15
5. Idukki	1	6	7
6. Ernakulam	1	25	26
7. Trichur	1	14	15
8. Palghat	1	2	3
9. Malappuram	1	3	4
10. Kozhikode	1	6	7
11. Cannanore	1	6	7
Total	15	196	151

APPENDIX 9.17

Number of Students and Teachers in Industrial Training Institutes in Kerala District-wise -1980-81

District	No. of Students						No. of Teachers					
	Government			Private			Government			Private		
	Boys	Girls	Total	Boys	Girls	Total	Men	Women	Total	Men	Women	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Trivandrum	1954	405	2359	1408	234	1642	208	16	224	118	27	145
2. Qulon	741	20	761	2947	151	3098	57	2	59	231	29	260
3. Alleppey	509	12	521	2949	184	3133	64	3	67	240	24	264
4. Kottayam	861	76	937	1612	92	1704	78	3	81	116	16	132
5. Idukki	126	20	146	274	17	291	10	2	12	23	2	25
6. Ernakulam	705	65	770	2522	147	2669	55	7	62	190	25	215
7. Trichur	665	72	737	839	116	955	92	18	110	76	15	91
8. Palghat	752	15	767	141	5	146	57	6	63	12	..	12
9. Malappuram	126	20	146	213	4	217	10	2	12	16	3	19
10. Kozhikode	370	42	412	333	79	412	41	5	46	29	6	35
11. Cannanore	802	21	823	348	26	374	69	3	72	30	2	32
Total	7611	768	8379	13586	1055	14641	741	67	808	1081	149	1230

APPENDIX 9.18

Progress of Expenditure on General School Education

Year	Expenditure (Rs. in Crores)	Index of Increase
(1)	(2)	(3)
1961-62	16.83	100
1962-63	17.11	102
1963-64	18.46	110
1964-65	19.88	118
1965-66	25.23	150
1966-67	29.33	174
1967-68	36.66	218
1968-69	49.21	251
1969-70	49.07	292
1970-71	52.53	312
1971-72	57.64	342
1972-73	59.71	355
1973-74	67.39	400
1974-75	86.17	512
1975-76	105.69	628
1976-77	116.73	694
1977-78	124.80	742
1978-79	134.14	797
1979-80	157.11	934
1980-81	182.10 (R.E.)	1082
1981-82	200.39 (B.E.)	1191

APPENDIX 9.19

Cost per Pupil per Year in the Different Stages of School Education

(Amount in Rupees)

Year	Primary Stage	Secondary Stage
(1)	(2)	(3)
1965-66	49.30	90.37
1966-67	54.17	103.81
1967-68	65.07	130.07
1968-69	73.23	139.71
1969-70	82.38	164.08
1970-71	85.91	176.23
1971-72	89.26	187.29
1972-73	94.51	194.15
1973-74	102.24	211.70
1974-75	117.52	217.90
1975-76	170.02	361.32
1976-77	186.16	356.40
1977-78	193.61	363.02
1978-79	206.21	356.43
1979-80	238.27	369.34
1980-81	267.51	400.74
1981-82	307.89	461.76

APPENDIX 9.20

Per Capita Government Expenditure on Education in Kerala

Year	Population (lakhs)	Government Expenditure on Education (Rs. lakhs)	Expenditure per Head (Rs.)
(1)	(2)	(3)	(4)
1961-62	173.02	1854.84	10.72
1962-63	177.02	1914.14	10.81
1963-64	181.26	2019.46	11.14
1964-65	185.52	2807.80	12.44
1965-66	189.88	2837.43	14.94
1966-67	194.35	3774.60	17.88
1967-68	198.92	4147.85	20.85
1968-69	203.48	4363.98	22.92
1969-70	208.15	5428.98	26.08
1970-71	212.80	6012.37	28.25
1971-72	218.29	6614.87	30.30
1972-73	223.92	7104.72	31.73
1973-74	228.18	8234.58	36.07
1974-75	232.45	10317.00	44.38
1975-76	234.80	12897.00	54.93
1976-77	239.50	14102.81	58.88
1977-78	243.90	15156.30	62.14
1978-79	246.21	16013.34	65.04
1979-80	249.90	18433.49	73.76
1980-81	253.84	21359.16 (R.E.)	84.14
1981-82	254.03	23548.44 (B.E.)	92.70

Medical Institutions and Beds in Kerala as on 31-3-1980

District	Hospitals		P.H. Centres & Medical College Units		Dispensaries		M.C.H. Centres		T.B. Centres & Clinics		Grat-in-aid Institutions as on 31-3-1979		Others		Total	
	Institutions No.	Beds No.	Institutions No.	Beds No.	Institutions No.	Beds No.	Institutions No.	Beds No.	Institutions No.	Beds No.	Institutions No.	Beds No.	Institutions No.	Beds No.	Institutions No.	Beds No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Trivandrum	19	4746	18	186	50	146	1	20	1	28	3	452	7	..	99	5578
Quilon	12	1556	20	250	56	120	..	..	4	86	1	120	..	..	93	2132
Alleppey	13	3101	20	221	48	102	..	..	2	12	3	575	1	..	87	4011
Kottayam	14	2274	15	192	31	95	..	..	2	48	1	200	..	..	63	2809
Idukki	4	194	4	46	35	99	..	..	..	..	..	..	..	..	43	339
Ernakulam	20	2320	17	190	49	212	..	..	4	40	2	501	2	..	94	3263
Trichur	19	3099	18	232	47	71	..	..	1	..	1	170	..	..	86	3512
Palghat	11	1024	11	129	53	160	..	..	1	52	..	..	1	..	77	1365
Malappuram	8	775	12	114	48	74	..	..	2	52	..	..	..	..	70	1015
Kozhikode	10	3348	15	132	48	151	..	..	1	..	..	..	3	..	77	3631
Cannanore	14	2166	13	203	98	196	..	..	2	..	..	..	2	..	129	2565
Total	144	24543	163	1895	563	1426	1	20	20	318	11	2018	16	..	918	30220

Source: Director of Health Services.

APPENDIX 9.22

*Medical and Public Health—Detailed Break up of Expenditure
(Rs. in lakhs)*

Item	1980-81 Revised Estimate	1981-82 Budget Estimate
(1)	(2)	(3)
1. Medical		
(a) Medical Establishment	44.61	49.06
(b) Hospital and Dispensaries	2934.74	3246.77
(c) Ayurvedic Medicines	381.89	394.24
(d) Medical Colleges and Schools	428.47	738.14
(e) Others	177.52	176.77
(f) Employee's State Insurance Schemes	468.34	485.27
2. Public Health		
(a) Public Health Establishment	285.80	291.81
(b) Prevention of Food Adulteration	31.40	30.96
(c) Bacteriological Laboratories	36.15	61.89
(d) Family Welfare	584.81	730.41

Source: Budget in Brief—1981-82

APPENDIX 9.23

*Per Capita Expenditure on Medical and Public Health
(Revenue Account)*

States	1977-78 Revised Estimate (Rs.)	1978-79 Budget Estimate (Rs.)
(1)	(2)	(3)
1. Andhra Pradesh	14.96	15.89
2. Assam	13.22	11.98
3. Bihar	7.84	7.95
4. Gujarat	16.46	16.56
5. Haryana	18.05	21.26
6. Jammu and Kashmir	25.92	27.71
7. Kerala	19.29	20.63
8. Madhya Pradesh	13.84	15.95
9. Maharashtra	16.68	20.06
10. Karnataka	14.36	18.34
11. Orissa	12.95	15.53
12. Punjab	20.54	23.81
13. Rajasthan	18.81	20.09
14. Tamil Nadu	16.43	17.20
15. Uttar Pradesh	8.25	9.53
16. West Bengal	15.09	16.66
All States Average	14.13	14.14

Source: Budget in Brief 1981-82.

APPENDIX 9.24

*District-wise Distribution of Institutions and Beds under
Ayurvedic System of Medicine as on 31-3-1981.*

District	Hospitals		Number of Dispensaries	Total No of Institutions
	No. of Hospitals	No. of Beds		
(1)	(2)	(3)	(4)	(5)
Trivandrum	11	484	40	51
Quilon	8	125	37	45
Alleppey	9	170	40	49
Kottayam	8	140	21	29
Idukki	1	30	18	19
Ernakulam	11	210	32	43
Trichur	12	193	56	68
Palghat	4	110	41	45
Malappuram	9	155	39	48
Kozhikode	5	60	36	41
Cannanore	7	141	59	66
Total	85	1818	419	504

APPENDIX 9.25

*District-wise Distribution of Institutions and Beds under
Homoeopathic System of Medicine as on 31-3-1981*

District	Hospitals		Number of dispensaries	Total No. of Institutions
	No. of Hospitals	No. of beds		
(1)	(2)	(3)	(4)	(5)
Trivandrum	3	125	14	17
Quilon	1	25	15	16
Alleppey	2	50	17	19
Kottayam	2	85	15	17
Idukki	1	25	13	14
Ernakulam	2	50	12	14
Trichur	1	25	9	10
Palghat	1	25	12	13
Malappuram	1	25	17	18
Kozhikode	1	50	15	16
Cannanore	2	50	19	21
Total	17	535	158	175

APPENDIX 9.26

Urban Water Supply Schemes in the State
(Including L.I.C. Aided Schemes)

District	Progress During 1980-81 (Nos.)		Progress During 1981-82 (Nos.)		Towns Having Protected Water Supply (Nos.)		1979-80		1980-81		1981-82*		1979-80		1980-81		1981-82 *			
	Schemes in operation at the end of 1979-80	Schemes completed during 1980-81	Schemes in operation by the end of the year	Schemes under construction at the end of the year	Schemes completed during 1981-82	Schemes in operation by the end of the year	Schemes under construction at the end of the year	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Trivandrum	3	—	3	1(⊙)	..	3	1(⊙)	3	3	3	3	3	3	3	3	3	3	81	81	82
Quilon	1	1	2	1	..	2	1	1	2	2	2	2	2	2	2	2	2	62	62	62
Alleppey	5	..	5	2(b)	2(b)	5	..	5	5	5	5	5	5	5	5	5	5	84	84	85
Kottayam	3	..	3	2(b)	1+1(b)	4	..	3	3	3	3	3	3	3	3	3	3	70	70	75
Idukki	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Ernakulam	5	..	5	2	..	5	2	5	5	5	5	5	5	5	5	5	5	81	81	81
Tyssur	5	..	5	2(b)	..	5	2(b)	5	5	5	5	5	5	5	5	5	5	69	69	70
Palghat	2	..	2	1(b)	..	2	1(b)	2	2	2	2	2	2	2	2	2	2	58	58	58
Malappuram	2	..	2	1(b)	..	2	1(b)	2	2	2	2	2	2	2	2	2	2	51	51	55
Kozhikode	2	..	2	..	..	2	..	2	2	2	2	2	2	2	2	2	2	69	69	70
Wyanad	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cannanore	3	..	3	..	..	3	..	3	3	3	3	3	3	3	3	3	3	55	55	58
State	31	1	32	13	4	33	9	31	32	33	33	33	33	33	33	33	33	62	62.5	62.9

* Anticipated

⊙ Peppers Dam for the augmentation of Trivandrum W.S. Scheme.

(b) Including augmentation Schemes.

APPENDIX 9.27

Rural Water Supply Schemes in the State (Piped)

(Including L.I.C. Aided Schemes)

District	No. of schemes in operation at the end of 1979-80	Progress During 1980-81 (Nos.)			Progress During 1981-82 (Nos.)		
		Schemes completed during the year	Schemes in operation by the end of the year	Schemes under construction at the end of the year	Schemes completed during the year	Schemes in operation at the end of the year	Schemes under construction at the end of the year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Trivandrum	71	7	78	26	8	86	46
2. Quilon	57	12	69	42	7	78	76
3. Alleppey	73	6	79	37	8	87	45
4. Kottayam	103	9	112	33	8	120	32
5. Idukki	22	7	29	14	10	39	34
6. Ernakulam	82	7	89	33	15	104	65
7. Trichur	91	5	96	27	14	110	36
8. Palghat	77	7	84	25	10	94	37
9. Malappuram	51	7	58	19	8	66	50
10. Kozhikode	64	8	72	23	7	79	24
11. Wynad	..	..	..	..	..	..	..
12. Cannanore	109	8	117	20	15	132	38
Total	800	83	883	299	110	995	483

* Anticipated

APPENDIX 9.28

Drainage/Sewerage Schemes in the State

District	Name of Scheme	Progress During 1981-82 (Nos.)*															Population Covered (%) by the end of
		Schemes in operation at the end of 1979-80 (Nos.)	Schemes completed during the year (4)	Schemes in operation by the end of the year (5)	Schemes completed during the year (6)	Schemes completed in operation by the end of the year (7)	Schemes in operation by the end of the year (8)	Schemes under construction during the year (9)	Towns Covered by the end of (Nos.)	1981-82	1979-80	1980-81	1981-82	1979-80	1980-81	1981-82	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)		
1. Trivandrum	Trivandrum	1(+)	..	1(+)	1	..	1(+)	1	1(+)	1(+)	1(+)	1(+)	30	30	30		
2. Quilon	Quilon	..	..	..	1	..	..	1	..	..	..	..	..	..	..
3. Alleppey	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4. Kottayam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5. Idukki	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6. Ernakulam	Cochin	1(+)	..	1(+)	1	..	1(+)	1	1(+)	1(+)	1(+)	10	15	15	15		
7. Tricher	Guruvayur	..	..	..	1	..	..	1	..	..	..	..	..	..	..
8. Palghat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9. Malappuram	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10. Kozhikode	Calicut	..	..	..	1	..	..	1	..	..	..	..	..	..	..
11. Wynad	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12. Cannanore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
State		2	..	2	5	..	2	5	2	2	2	..	..	..	..

Note: (+) Anticipated

(+) Partially Covered.

APPENDIX 9.29

L.I.C. Aided Rural Water Supply Schemes in the State

District	Progress During 1980-81 (Nos.)			Progress During 1981-82*			
	Schemes in Operation at the end of 1979-80 (Nos.)	Schemes Completed During 1980-81	Schemes in Operation at the end of 1980-81	Schemes Under Construction at the End 1980-81	Schemes Completed During 1981-82 (upto 12/81)	Schemes in Operation at the End of 1981-82	Schemes Under Construction at the End of 1981-82 (as on 12/81)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Trivandrum	21	..	21	..	..	21	5
2. Quilon	11	2	13	1	1	14	3
3. Alleppey	15	..	15	3	..	15	8
4. Kottayam	29	..	29	2	..	29	4
5. Ernakulam	18	..	18	..	2	20	3
6. Idukki	..	..	..	..	..	..	4
7. Trichur	19	..	19	1	..	19	7
8. Palghat	17	..	17	1	..	17	12
9. Malappuram	16	..	16	1	..	16	2
10. Kozhikode	9	..	9	..	..	9	10
11. Wynad	..	..	..	..	..	..	..
12. Cannanore	26	..	26	1	..	26	12
Total	181	2	183	10	3	186	70

*Anticipated

APPENDIX 9.30

L.I.C. Aided Urban Water Supply Schemes in the State

District	Progress During 1980-81 (Nos.)			Progress During 1981-82 (Nos.)*			
	Schemes in Operation at the End of 1979-80 (Nos.)	Schemes Completed During 1980-81	Schemes in Operation at the End of 1980-81	Schemes Under Construction at the End of 1980-81	Schemes Completed During 1981-82	Schemes in Operation at the End of 1981-82	Schemes Under Construction at the End of 1981-82
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Trivandrum	3	..	3	..	..	3	..
2. Quilon	..	1	1	1	..	1	1
3. Alleppey	5	..	5	2(b)	2(b)	5	..
4. Kottayam	2	..	2	1+1(b)	1+1(b)	3	..
5. Idukki	..	..	..	1	..	..	1
6. Ernakulam	5	..	5	2	..	5	2
7. Trichur	5	..	5	1+1(b)	..	5	2(b)
8. Palghat	2	..	2	1(b)	..	2	1(b)
9. Malappuram	2	..	2	1(b)	..	2	1(b)
10. Kozhikode	2	..	2	..	..	2	..
11. Wynad	..	..	..	..	..	..	..
12. Cannanore	3	..	3	..	..	3	..
State	29	1	30	12	4	31	8

Note: *Anticipated

(b) Including augmentation schemes.

APPENDIX 9.31

Expenditure on Sewerage and Water Supply Schemes in the State (Including L I C Assisted Schemes)

(Rs. in lakhs)

Year	Water Supply						Sewerage/Drainage Schemes					
	Plan	Urban Non-Plan	Total	Plan	Rural Non-Plan	Total	Plan	Total Non-Plan	Total	Plan	Non-Plan	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1979-80	582.23	386.93	969.16	350.19	78.57	428.76	932.42	465.50	1397.92	90.40	22.84	113.24
1980-81	918.20	460.27	1378.47	246.16	84.47	330.63	1164.36	544.74	1709.10	126.30	23.27	149.57
1981-82 (Anticipated)	900.00	524.70	1024.70	628.00	90.00	718.00	1528.00	614.70	2142.70	200.00	34.00	234.00

* Excluding expenditure on ESP type latrines, and open dug wells and water pollution control.

APPENDIX 9.32

Expenditure on Water Supply Schemes with L I C Assistance

(Rs. in lakhs)

Year	Urban Water Supply Scheme				Rural Water Supply Scheme				Total			
	Plan		Non-Plan	Total	Plan		Non-Plan	Total	Plan		Non-Plan	Total
	Total	Of Which L. I. C. Aid			Total	Of Which L. I. C. Aid			Total	Of which L. I. C. Aid		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1979-80	582.23	582.23	386.93	969.16	350.19	91.16	78.57	428.76	932.42	673.39	465.50	1397.92
1980-81	918.20	918.20	460.27	1378.47	246.16	40.14	84.47	330.63	1164.36	958.34	544.74	1769.10
1981-82 (Anticipated)	900.00	900.00	524.70	1024.70	628.00	133.00	90.00	718.00	1528.00	1053.00	614.70	2142.70

APPENDIX 9.33

Financial Achievements Relating to the Department of Town Planning

(Rs. lakhs)

Year	Plan	Non-Plan	Total
(1)	(2)	(3)	(4)
1979-80	64.09	25.52	89.61
1980-81	31.68	28.26	59.94
1981-82 (Anticipated)	43.51	31.54	75.05

Source: Chief Town Planner.

APPENDIX 9.34

Financial Achievements Relating to the Department of Municipal Administration

(Rs. in lakhs)

Year	Plan	Non-Plan	Total
(1)	(2)	(3)	(4)
1979-80	42.09	90.36	132.45
1980-81	203.00	84.73	287.73
1981-82 (Anticipated)	203.00	122.50	325.50

Source: Director of Municipal Administration.

APPENDIX 9.35

Town and Regional Planning—Achievements

Details	Unit	Upto to 1980-81	During 1981-82 (Anticipated)	Total	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1. Master Plans Prepared	Nos.	16	2	18	
2. Master Plans Sanctioned by Government	"	3	..	3	
3. Regional Plans Prepared	"	1	1	2	Regional plans for Trivandrum and Calicut are under preparation
4. Town Improvement Projects Prepared (Under the Centrally Sponsored Schemes)	"	10	2	12	
5. District Planning Units Sanctioned	"	10	1	11	
6. Planning & Development Authorities Formed	"	6	3	9	
7. Traffic Operation Plans Prepared for Urban Centres	"	..	..	..
8. Others Specify	"	..	..	..

Source: Chief Town Planner

APPENDIX 9.36

Financial assistance to Planning & Development Authorities Provided by the Chief Town Planner—(Plan Scheme)

(Rs. in lakhs)

Name of Schemes/Development Authority	Assistance given			Total
	Upto 1979-80	1980-81	1981-82 (Anticipated)	
(1)	(2)	(3)	(4)	(5)
1. Financial Assistance to Planning & Development Authorities for Implementation of Development Plans				
(a) Calicut Development Authority:	20.51	Nil	Nil	20.51
(b) Trivandrum Development Authority	20.00	Nil	Nil	20.00
(c) Greater Cochin Development Authority	Nil	5.00	Nil	5.00
(d) Idukki Development Authority	Nil	5.00	2.00	7.00
(e) Kothamangalam Municipality	Nil	Nil	3.00	3.00
(f) Perumbavoor do.	Nil	Nil	1.00	1.00
(g) Chalakudy do.	Nil	Nil	2.00	2.00
(h) Punalur do.	Nil	Nil	5.00	5.00
(i) Chengannur do.	Nil	Nil	3.00	3.00
Sub Total (1)	40.51	10.00	16.00	66.51
2. Financial assistance to Development Authorities for Urban Environmental Improvement Scheme:				
(a) Greater Cochin Development Authority	1.00	1.00	Nil	2.00
Sub Total—2	1.00	1.00	Nil	2.00
3. Urban Development Including Acquisition of Land				
(a) Calicut Development Authority	5.00	3.00	Nil	8.00
(b) Trivandrum Development Authority:	5.00	Nil	Nil	5.00
Sub Total—3	10.00	3.00	Nil	13.00
4. Creation of Plannibg and Development Authorities in District H. Q. and Urban Centres:				
(a) Velloor-Mulakkulam Development Authority	..	1.00	1.05	2.05
(b) Trivandrum Development Authority	..	4.00	Nil	4.00
(c) Calicut Development Authority	..	3.00	Nil	3.00
(d) Trichur Development Authority	..	Nil	2.00	2.00
(e) Idukki, Quilon and Kottayam	..	Nil	4.95	4.95
Sub Total 4	..	8.00	8.00	16.00
5. Scheme for Development of Growth Centres				
(a) Muthukulam Panchayat	Nil	0.20	Nil	0.20
(b) Kandalloor Panchayat	Nil	0.20	Nil	0.20
(c) Arattupuzha Panchayat	Nil	1.10	Nil	1.10,
Sub Total 5	Nil	1.50	Nil	1.50
Grand Total 1 to 5	51.51	23.50	24.00	99.01

Source—Chief Town Planner.

4/855/MC.

APPENDIX 9.37

*Assistance to Urban Local Bodies for Non-remunerative works (Plan Schemes) Purposes wise,
provided by the Director of Municipal Administration*

(Rs. in lakhs)

Category/Purpose	Unit	1979-80		Achievement 1980-81		1981-82 (Anticipated)	
		Physical	Financial	Physical	Financial	Physical	Financial
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Office Buildings	Nos.	1	1.03	1	0.02	2	1.32
2. Town Hall	"	2	3.29	..	..	1	0.84
3. Roads	"	15	6.38	3	3.31	18	3.79
4. Drains	"	..	..	3	0.83	..	..
5. Culverts	"	..	..	..	..	..	..
6. Bridges	"	..	..	..	..	..	..
7. Maternity and Child welfare Centre	"	..	..	..	..	..	..
8. Library	"	1	0.77	..	..	..	..
9. Park	"	1	0.17	..	..	..	..
10. Play Ground	"	..	..	..	..	..	..
11. Stadium	"	1	1.56	1	1.84	..	..
12. E. S. P. Type Latrine	"	200	0.09	100	0.01	100	0.05

Source: Director of Municipal Administration

APPENDIX 9.38

Financial Achievements Relating to the Department of Municipal Administration

(Rs. in lakhs)

Year	Plan	Non-Plan	Total
(1)	(2)	(3)	(4)
1979-80	42.09	90.36	132.45
1980-81	203.00	84.73	287.73
1981-82 (Anticipated)	203.00	122.50	325.50

Source: Director of Municipal Administration

APPENDIX 9.39

*Assistance to Urban Local Bodies for Non-Remunerative Works—Plan Schemes**(Amount Rs. in lakhs)*

Name of Beneficiary Town/Urban Local	Unit	Achievements					
		1979-80		1980-81		1981-82 (Anticipated)	
		Physical	Financial	Physical	Financial	Physical	Financial
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Changanacherry	Nos.	1	0.77	..	..	..	..
2. Kottayam	..	1	1.56	..	..	..	..
3. Palai	..	2	0.46	1	1.84	..	..
4. Pathanamthitta	..	2	1.75	..	..	..	..
5. Shertallai	..	1	0.23	..	..	..	..
6. Malappuram	..	1	2.00	1	1.00	2	2.00
7. Neyyattinkara	..	1	0.02	..	..	..	..
8. Palghat	..	1	0.65	..	..	..	..
9. Quilon	..	1	2.39	..	..	..	..
10. Trichur	..	1	0.90	..	..	..	..
11. Kothamangalam	..	1	0.17	1	0.16	..	..
12. Guruvayoor	..	1	2.00	1	1.85	..	..
13. Chengannur	1	0.30	..	..
14. Muvattupuzha	1	0.02	1	1.01
15. Perumbavoor	1	0.01	1	0.94
16. Kayamkulam	1	0.32	..	..
17. Cannanore	1	0.31
18. Shoranur	1	0.05
19. Attingal	1	0.84
20. Varkala	1	0.75
21. Nedumangad	1	0.10
22. Kasargod	..	1	0.39	1	0.51	..	..
Total		15	13.29	9	6.01	9	6.00

Source: Director of Municipal Administration

APPENDIX 9.40

Non-Plan Grant Assistance to Urban Local Bodies

(Rs. in lakhs)

Category of Beneficiary Urban Local Body	Assistance Given								
	1979-80			1980-81			1981-82 (Anticipated)		
	G. P. G.	S. P. G.	Total	G. P. G.	S. P. G.	Total	G. P. G.	S. P. G.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(i) Corporations	18.80	18.66	37.46	8.83	21.82	30.65	15.41	33.49	48.90
(ii) Municipalities	28.67	11.57	40.24	25.59	13.39	38.98	17.11	38.57	55.48
(iii) Guruvayoor Township	0.23	0.39	0.62	0.24	0.29	0.53	0.26	0.58	0.84
(iv) Other, if any, Specify		..	..	..	..	..	..	..	..
Total	47.70	30.62	78.32	34.66	35.50	70.16	32.78	72.64	105.22

Note: G. P. G. General Purpose Grant

S. P. G. Specific Purpose Grant

Source: Director of Municipal Administration

APPENDIX 9.41

Urban Development—Assistance for Slum Clearance/Improvement in the State
(Plan Schemes)

(Rs. in lakhs)

Name of Beneficiary	1979-80		1980-81		1981-82 (Anticipated)	
	No. of Schemes Assisted	Amount Spent	No. of Schemes Assisted	Amount Spent	No. of Schemes	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Urban Local Body	5	10.00	13	65.00	15	75.00

Source: Director of Municipal Administration

APPENDIX 9.42

Urban Development—Assistance under the Centrally Sponsored Scheme for
Integrated Development of Small and Medium Towns (Plan Schemes)

Name of Beneficiary (Town)	1979-80		1980-81		1981-82	(Anticipated)
	No. of Project Sanctioned	Assistance given (Rs. lakhs)	No. of Project Sanctioned	Assistance Given (Rs. lakhs)	No. of Project	Assistance (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Guruvayur	3	10.00	..	..	..	..
Kottayam	1	8.00	..	..	..	..
Trichur	..	..	12	30.00	On-going Project	110.00 (Anticipated)
Kayamkulam	..	..	9	18.80	..	..
Tirur	..	..	9	25.20	..	..
Tellicherry	..	..	6	36.00	..	2.00
Chengannacherry	..	..	7	22.00	..	20.00
Badagara	..	..	..	..	9	..
Total	4	18.80	43	132.00	9	132.00

Source: Director of Municipal Administration

APPENDIX 9.43

*Urban Development Works (Scheme-wise) assisted by Kerala Urban Development
Finance Corporation—Remunerative Schemes*

(Rs. in lakhs)

Name of Schemes	upto 1979-80		1980-81		1981-82 (Anticipated)				
	No. of Works Assisted	Amount	No. of Works Assisted		Amount		No. of Works Assisted		Amount
			Old	New	Old	New	Old	New	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1. Bunks	16	5.57	..	..	..	..	1	1.21
2. Shops/Stalls and Commercial Centres	57	181.89	..	..	..	..	6	22.00
3. Office Buildings/Shop cum Office Buildings	34	196.09	1	2	6.45	..	8	41.22	
4. Bus/Lorry/Cart/Jetty/Stand	40	167.75	3	..	57.34	3	3	62.65	
5. Comfort Stations	4	1.55	..	1	1.00	..	1	2.85	
6. ESP Type Latrines/Conversion of Dry Latrines into Sanitary Types/Pail Type Latrines into Flushout Latrines, etc.	6	17.15	4	2	7.75	..	5	27.50	
7. Markets and Godowns	31	102.40	..	6	20.71	1	9	37.80	
8. Fire Station Buildings	2	0.86	..	..	..	..	..	..
9. Town Halls	8	46.85	..	..	..	..	2	3.77
10. Rest House	10	79.89	..	..	..	..	4	13.00
11. Housing Schemes	4	20.06	..	..	..	..	1	10.00
12. Stadium	3	21.96	..	1	6.66	..	1	5.00	
13. Slaughter Houses	6	24.61	..	1	1.00	..	1	3.50	
14. Town Planning Schemes	11	377.50	..	2	40.00	2	1	28.39	
15. Working Women's Hostel	2	6.77	..	..	..	..	1	2.00
16. Loans for House Connection Service for Water Supply	4	6.24	..	..	..	..	..	..
17. Lodges	7	19.18	..	..	..	..	3	9.00
18. Quarters for Commissioners	3	0.60	..	..	..	..	..	..
19. Purchase of Junker	1	8.26	..	1	11.00	..	..	..
20. Library Buildings	1	0.47	..	1	5.00	..	..	..
21. Purchase of Lorry	1	0.75	..	..	..	..	..	..
22. Electric Crematorium	1	3.50	..	..	..	..	..	..
23. Road Works	..	..	..	3	4.87	..	3	5.00
24. Electrical Sub Station	..	..	..	1	35.00	1	..	19.00
25. Repayment of Rural Development Board loans	..	..	..	3	14.24	..	..	..
26. Purchase of Road Roller	..	..	..	1	2.00	..	..	..
27. Way Side Inn	..	..	..	..	..	..	1	1.00
28. Landing Place	..	..	..	..	..	..	1	1.60
Total	252	1289.90	8	25	213.02	7	52	296.49	

Source: Kerala Urban Development Finance Corporation

APPENDIX 9.44

Urban Development Works (Agency-wise) Assisted by the Kerala Urban Development Finance Corporation—Remunerative Schemes

(Rs. in lakhs)

Name of Beneficiary Urban Local Body	Upto 1979-80		1980-81		1981-82 (Anticipated)			
	No. of Works Assisted	Amount	No. of Works Assisted		Amount	No. of Works Assisted		Amount
			Old	New		Old	New	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Town Planning Bodies</i>								
1. Calicut Development Authority	5	28.17	..	2	10.70	2	..	20.00
2. Greater Cochin Development Authority	17	420.00	1	1	40.00	..	..	..
3. Trivandrum Development Authority	..	..	..	..	..	..	1	10.00
<i>Municipal Corporations</i>								
1. Calicut Corporation	18	76.99	2	..	9.00	1	1	20.00
2. Cochin Corporation	12	94.98	1	1	12.00	..	1	10.00
3. Trivandrum Corporation	6	29.09	..	..	..	..	2	29.00
<i>Ist Grade Municipalities</i>								
1. Alleppey Municipality	7	17.82	..	..	..	..	..	..
2. Cannanore	3	53.00	..	2	2.00	..	3	4.47
3. Changanacherry	6	16.42	..	..	..	..	2	4.40
4. Kottayam	10	55.49	..	..	..	1	..	3.50
5. Palghat	6	43.20	..	1	1.28	..	2	13.58
6. Quilon	11	43.84	..	2	11.66	..	1	6.00
7. Tellicherry	10	26.08	1	1	23.59	2	1	5.00
8. Trichur	11	64.38	..	1	35.00	1	2	26.00
<i>IInd Grade Municipalities</i>								
1. Alwaye	9	54.64	..	..	..	..	..	..
2. Badagara	11	21.40	..	..	..	..	1	7.00
3. Chalakudy	4	9.97	..	1	6.50	..	1	14.54
4. Irinjalakuda	12	17.29	..	..	..	..	1	4.40
5. Kasargod	3	4.50	..	..	..	..	..	..
6. Kunnankulam	2	16.28	..	..	..	..	..	..
7. Muvattupuzha	7	15.40	..	1	2.00	..	3	7.48
8. Palai	6	49.89	..	..	..	..	..	..
9. Perumbavoor	10	8.85	..	1	2.00	..	2	2.40
10. Punalur	6	6.98	1	1	3.00	..	3	21.60
<i>IIIrd Grade Municipalities</i>								
1. Angamaly	..	..	..	..	..	..	2	7.00
2. Attingal	7	3.06	..	1	3.05	..	1	3.00
3. Chittoor Thathamangalam	2	4.78	1	..	0.50	1	..	0.50
4. Kayamkulam	9	11.96	..	..	..	..	1	1.00
5. Kodungallur	..	..	..	3	3.49	..	3	7.00
6. Kothamangalam	2	7.67	..	..	..	..	1	10.00
7. Malapuram	5	16.44	..	1	2.87	..	4	7.46
8. Manjeri	..	..	..	..	..	..	..	..
9. Mavelikara	6	5.49	..	..	..	..	3	2.75
10. Neyyattinkara	3	2.50	..	..	..	..	1	2.00
11. Parur	6	15.09	..	1	1.40	..	..	..
12. Pathanamthitta	2	7.65	..	..	..	..	..	..
13. Ponnani	..	..	..	1	2.14	..	..	..
14. Shertalai	5	6.46	..	1	1.00	..	2	4.21
15. Shoranur	..	..	..	1	10.61	..	..	..
16. Thiruvalla	3	5.39	..	1	0.23	..	1	2.70
17. Tirur	3	20.81	1	..	29.00	1	1	27.00
18. Vaikom	5	4.04	..	..	..	..	1	1.00
19. Guruvayur Township	2	3.75	..	..	..	..	..	..
20. Trippunithura	..	..	..	..	..	..	1	3.50
21. Nedumangad	..	..	..	..	..	..	1	3.00
22. Thodupuzha	..	..	..	..	..	..	2	5.00
Total	252	1289.90	8	25	213.02	9	52	296.49

Source: Kerala Urban Development Finance Corporation

TABLE 9.45

Working Results of the Kerala Urban Development Finance Corporation

(Rs. in lakhs)

Details	Upto 1979-80	1980-81	1981-82 Anticipated	Total
(1)	(2)	(3)	(4)	(5)
1. Authorised Share Capital	100.00	100.00	100.00	100.00
2. Paid up Share Capital				
(a) Government	9.85	9.85	24.85	34.70
(b) Urban Local Bodies	9.31	9.31	23.65	32.96
4. No. of Share Holder Urban Local Bodies	49	49	49	49
4. Loans Disbursed to Urban Local Bodies				
(a) Amount Disbursed	1289.90	213.06	296.49	1799.45
(b) No. of Beneficiary Urban Local Bodies	37	23	35	44
5. Open Market Borrowing	1012.50	110.00	100.00	1222.50
*6. Profit/Loss	19.90	2.93	3.00	25.83

* Profit before taxation and appropriation.

Source: Kerala Urban Development Finance Corporation.

APPENDIX 9.46

Information & Publicity :—Physical and Financial Achievements of the Public Relations Department

Details	Upto 1979-80	1980-81	1981-82 (Anticipated)
(1)	(2)	(3)	(4)
I. Press Services:			
1. No. of Press Tours Conducted	3	1	1
II. Publicity			
1. Press Hand Outs Issued (Nos.)	8000	8500	9000
2. Books Published (Nos.)	13	41	20
3. Journals Published (Nos.)	1	2	2
4. Exhibitions Conducted (Nos.)	12	9	16
5. Community Listening Sets			
(a) To Scheduled Castes (Nos.)	101	52	50
(b) To Scheduled Tribes (Nos.)			
6. No. of Information Centres	5	1	..
7. No. of Field Publicity Centres	3	..	..
8. No. of Ranga salas Established	1	..	..
III. Advertisements etc.			
1. No. of Display Advertisements	533	580	432
2. Special Issues in Newspapers (Sponsored) Nos.	13	13	8
3. Newspaper Supplements Sponsored		Nil	
4. Total Expenditure on Display Advertisements (Rs. lakhs)	48	32	52
IV. Films			
1. Film Subsidy			
(a) No. of Films Shot Fully in Kerala		not known	
(b) No. of Feature Films given Subsidy	180	50	75
(c) Amount Disbursed (Rs. lakhs)	77.5	25	36.5
2. Film Shows Organised (Nos.)	1250	1300	1200
3. Film Prints Received (Nos.)	..		..
4. Documentaries Produced (Nos.)	2	5	2
5. Total Cost of Documentaries Produced/Procured (Rs. lakhs)	1.35	1.50	2
6. (a) Feature Films Produced/Procured (Nos.)		Nil	
(b) Total Cost of Feature Films Produced/Procured (Rs. lakhs)		Nil	
V. Cultural Programmes			
1. (a) No. of Malayalam Dramas Stages for Awards	29	21	15
(b) No. of Dramas for which Awards given	12	13	15
2. (a) No. of Films Screened for Awards	26	28	28
(b) Details of Awards given			
3. Cultural functions organised	25	30	3
VI. Welfare Programmes			
1. Pension to Cine Artistes			
(a) No. of Applications for Pension Received	56	68	81
(b) No. of Persons Granted Pension	36	47	35
(c) Rate of pension (Rs.)	Rs. 100 to 300	range	
(d) Amount disbursed (Rs. lakhs)	2.9	1.4	1.5
2. Welfare Fund for Journalists			
(a) No. of Persons Granted Pension	52	101	119
(b) Rate of Pension (Rs.)	Rs. 150 to 250	range	
(c) Amount Disbursed (Rs. lakhs)	2.5	2.5	2.5
VII. Expenditure			
1. Total Expenditure on Information and Publicity			
(a) Plan (Rs. lakhs)	28.9	19.58	56.2
(b) Non Plan (Rs. lakhs)	22.1	57.67	88.4

APPENDIX 9.47

Number of Students Belonging to Scheduled Castes and Scheduled Tribes (1980-81)

Class	No. of Scheduled Caste Students	No. of Scheduled Tribe Students	Total
(1)	(2)	(3)	(4)
1. Lower Primary	308035	24322	332357
2. Upper Primary	190050	9410	199460
3. Secondary	130691	5543	136234
Total	628776	39275	668051

APPENDIX 9.48

Number of College Going Scheduled Castes and Tribes Students during 1980-81

Class	No. of Scheduled Caste Students	No. of Scheduled Tribe Students	Total
(1)	(2)	(3)	(4)
1. Pre-degree	14397	851	15248
2. Degree	3552	308	3860
3. Post-Graduate	233	21	254
Total	18182	1180	19362

APPENDIX 9.49

Persons Belonging to Scheduled Castes and Scheduled Tribe Communities who Received Appointment in Various Government Departments as on 1-7-1981

Total No. of Gazetted Posts in various Government Departments	15564
Post filled by Special Recruitment from among Scheduled Caste and Scheduled Tribe Communities	398
Total No. of Officers Coming under Scheduled Castes/Tribes	843
Posts Reserved for SC/ST and Pending Appointment	300
Non-Gazetted Officers—Total	244669
Filled by Special Recruitment from among SC/ST	6724
Total No. of N.G.O.s under SC/ST	22464
Post Reserved for SC/ST but Pending Appointment	2654

APPENDIX 9.50

Live Register Figures showing the Number of Registrants (SC and ST) with the Employment Exchange as on 31-10-1981

Category	Scheduled Castes	Scheduled Tribes	Total
(1)	(2)	(3)	(4)
Below S.S.L.C.	96192	4661	100853
S.S.L.C./Matriculate	37668	1244	38912
P.U.C., P.D.C., Intermediate, etc.	3798	155	3953
Graduates	951	32	983
Post Graduates	171	3	174
Total	138780	6095	144875

APPENDIX 9.51

District-wise Population of Scheduled Tribes

State/District	No. of Hamlets/Localities	No. of Households	Population		
			Male	Female	Total
(1)	(2)	(3)	(4)	(5)	(6)
Trivandrum	123	2150	5073	5204	10277
Quilon	50	1122	2829	2775	5604
Alleppey	106	495	1148	1116	2264
Kottayam	110	2479	6795	6671	13466
Idukki	289	6461	17526	16729	34255
Ernakulam	66	365	877	840	1717
Trichur	62	595	1402	1348	2750
Palghat	214	4798	10510	10357	20867
Malappuram	288	1771	3834	3957	7791
Kozhikode	1073	10963	25474	25835	51309
Cannanore	1088	10253	24836	24906	49742
State	3469	41452	100304	99798	200042

Source: Report on Socio-Economic Survey of Tribals in Kerala.

APPENDIX 9.52

Tribal Population Committee-wise

Communities	No. of Households	Population		
		Male	Female	Total
(1)	(2)	(3)	(4)	(5)
1. Adiyar	1724	3859	4153	8012
2. Allar	81	161	171	332
3. Aranadan	114	213	251	463
4. Cholanaickan	55	132	124	256
5. Eravallan	305	617	632	1249
6. Hill Pulaya	468	1103	1003	2106
7. Irular	3221	7172	7088	14260
8. Kadar	217	513	469	982
9. Kanikkar	2368	5582	5780	11362
10. Kattunnaickan	1249	2685	2574	5259
11. Kondareddies	48	115	120	235
12. Koraga	110	247	249	496
13. Koppalan	9	29	29	58
14. Kudiya	26	73	74	137
15. Kurichian	2878	7984	7699	15683
16. Kurumbas	292	738	685	1423
17. Kurumans	639	1583	1602	3185
18. Vettakuruman	50	117	109	226
19. Mullakuruman	1887	4913	4808	9721
20. Tenkuruman	407	947	882	1829
21. Uralikuruman	575	1260	1151	2411
22. Malasar	79	157	151	308
23. Malayar	871	1872	1782	3654
24. Mala Arayan	4465	12375	12172	24547
25. Mala Pandaram	152	394	326	720
26. Mala Vedan	369	849	826	1675
27. Mala Vattuvan	12	39	34	73
28. Mala Kuravan	3	6	7	13
29. Mannan	930	2725	2646	5371
30. Maratti	1379	3935	3792	7727
31. Muthuvan	2024	4949	4848	9797
32. Naickan	367	963	947	1910
33. Palliyar	200	488	475	963
34. Paniyan	10388	22880	23880	46760
35. Pulayan	379	867	923	1790
36. Ulladan	1899	4882	4604	9486
37. Uraly	1067	2756	2559	5315
38. Vishavan	45	124	113	237
All	41452	100304	99738	200042

Source: Report on Socio-Economic Survey of Tribals in Kerala.

APPENDIX 9.53

Literacy level of Tribals and General Population

State/District	Literacy in Percentage	
	Tribals (1976-78)	General Population (1971)
(1)	(2)	(3)
1. Trivandrum	63.04	62.54
2. Quilon	54.21	64.97
3. Alleppey	37.90	70.44
4. Kottayam	75.19	72.88
5. Idukki	44.82	56.42
6. Ernakulam	38.50	65.37
7. Trichur	26.47	61.61
8. Palghat	6.98	46.69
9. Malappuram	6.17	47.90
10. Kozhikode	17.07	57.23
11. Cannanore	10.40	54.84
State	26.55	60.42

Source: Report of Socio-Economic Survey of Tribals in Kerala.

APPENDIX 9.54

Percentage Distribution of Tribal Population by Educational Status and Districts

State/District	Illiterate	Literate with no Educational Standard	Below Primary	Below Upper Primary	Studied upto 10th Standard	S.S.L.C. passed or Above	Holder of Certificate of a Technical Course	Holders of Diploma of a Technical Course	All
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Trivandrum	36.95	0.01	26.88	21.23	13.74	1.12	0.06	0.01	100.00
2. Quilon	45.79	..	33.28	15.22	5.30	0.37	0.04	..	100.00
3. Alleppey	62.10	..	21.56	11.31	4.42	0.57	0.04	..	100.00
4. Kottayam	24.81	0.71	29.38	23.47	15.94	5.30	0.23	0.16	100.00
5. Idukki	55.18	0.07	21.48	13.06	7.83	2.31	0.06	0.01	100.00
6. Ernakulam	61.50	..	15.43	14.21	7.46	1.28	0.06	0.06	100.00
7. Trichur	73.53	..	20.43	4.04	1.89	0.11	..	..	100.00
8. Palghat	93.02	0.06	4.98	1.19	0.60	0.12	0.01	0.02	100.00
9. Malappuram	93.83	..	4.38	1.14	0.59	0.05	..	0.01	100.00
10. Kozhikode	82.93	0.01	10.70	5.27	0.94	0.14	0.01	..	100.00
11. Cannanore	89.60	0.01	6.39	2.78	0.85	0.34	0.01	0.02	100.00
Kerala	73.45	0.07	13.65	7.85	3.95	0.97	0.04	0.02	100.00

Source: Report on Socio-Economic Survey of Tribals in Kerala.

APPENDIX 9.55

Selected Physical Activities and Achievements of the Social Welfare Department

Institutions	1979-80		1980-81		1981-82 (anticipated)	
	No. of Institutions	No. of Beneficiaries	No. of Institutions	No. of Beneficiaries	No. of Institutions	No. of Beneficiaries
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Departmental Institutions						
1. Abalamandir	10	204	10	211	10	234
2. After Care Home	6	226	6	213	6	224
3. Rescue Home	3	163	3	174	3	168
4. Shelter for Waifs and Strays	2	139	2	141	2	145
5. Home for Physically Handicapped	5	73	5	113	5	80
6. Home for Mentally Deficient Children	2	37	2	28	2	40
7. Childrens Home	1	33	1	31	1	30
8. Custodial Care Home	1	10	..	..	..	..
9. Working Women's Hostel	4	85	4	128	4	140
10. Working Men's Hostel	2	52	2	51	2	60
11. I.C.D.S. Projects	13	93306	18	111202	23	193007
12. Day Care Centres	20	1000	30	1500	30	1500
13. After Care Home for Women	1	12	1	9	1	15
14. Vocational Training Centres	2	100	2	98	2	100
15. Care Home for Disabled Children	2	47	2	43	4	45
16. Creches	..	..	..	..	..	..
17. Nurseries/Balwadies	..	..	..	..	..	..
18. Others	..	..	..	..	..	..
II Voluntary Organisation						
1. Orphanages—Total						
(a) Orphanages in Receipt of Grants	252	19759	294	23721	294	23725
(b) Orphanages not in Receipt of Grants	..	..	..	..	..	..
2. Home for Aged and Infirms	..	..	..	..	..	..
3. Foundling Home	4	390	5	440	5	440
4. Beggar Homes	..	..	..	..	..	..
5. Creches	188	7520	275	11000	275	11000
6. Nurseries/Balwadies	..	..	..	..	..	..
7. Day Care Centres	..	..	..	..	..	..
8. Others	..	..	..	..	..	..

APPENDIX 9.56

Financial Achievements of the Social Welfare Department

Particulars	1979-80			Achievements (Rs. in lakhs) 1980-81			1981-82 (Anticipated)		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Administrative Expenses of the Department	1.25	2.51	3.76	4.55	2.77	7.32	5.00	3.00	8.00
2. Expenses for Running the Various Departmental Institutions	1.76	23.47	25.23	0.66	23.84	24.50	2.00	24.00	26.00
3. Assistance Given to Voluntary Organisations									
(i) Orphanages	2.74	82.10	84.84	10.05	100.93	110.98	20.00	110.00	130.00
(ii) Home for Aged and Infirm	..	7.51	7.51	..	9.99	9.99	N.A.	10.00	10.00
(iii) Foundling Homes @	..	..	..	..	..	..	..	..	..
(iv) Beggar Homes	..	0.46	0.46	..	1.19	1.19	N.A.	1.50	1.50
(v) Industrial Assistance to Women's Welfare Organisations	..	..	..	3.28	..	3.28	2.15	..	2.15
(vi) Assistance Given to Organisations for Starting Creches/Nurseries	1.84	..	1.84	3.00	..	3.00	3.00	..	3.00
(vii) Day Care Centres	..	2.10	2.10	..	3.58	3.58	..	4.02	4.02
(viii) World Food Programme	..	13.93	13.93	..	12.83	12.83	..	14.00	14.00
(ix) Production Centres for Disabled	0.39	..	0.39	0.10	..	0.10	0.10	..	0.10
(x) Special Nutrition Programme	34.17	47.99	82.16	55.60	43.63	99.23	96.00	135.12	231.12
4. Assistance Extended to Individuals (Category-wise)									
(i) Grants to Persons Contracting Inter-castes Marriage	..	1.50	1.50	..	1.50	1.50	..	1.50	1.50
(ii) Self Employment Programme for disabled	1.00	..	1.00	1.00	..	1.00	1.50	..	1.50
(iii) Scholarship for Mentally Retarded Children	..	..	..	0.10	..	0.10	0.15	..	0.15
(iv) Prematric Scholarship	1.15	..	1.15	14.86	..	14.86	15.00	..	15.00
(v) Assistance for Special Aid Appliances	0.71	..	0.71	2.00	..	2.00	2.00	..	2.00
(vi) T.A. for Interviews	..	0.04	0.04	..	0.04	0.04	..	0.04	0.04
(vii) Self Employment Scheme for Women (Widows, Deserted Women etc.)	5.00	..	5.00	5.00	..	5.00	1.25	..	1.25
(viii) Others (specify) Extension of Financial Assistance to Ex-convicts and probationers	0.25	..	0.25	0.10	..	0.10	0.10	..	0.10
	50.26	181.61	231.87	100.30	200.30	300.60	148.25	303.18	451.43

@ Expenditure included under Orphanages.

Source: Social Welfare Department.

APPENDIX 9.57

Social Welfare Programmes of the Social Welfare Advisory Board|Central Social Welfare Board

Details	1979-80	1980-81	1981-82 (anticipated)
(1)	(2)	(3)	(4)
1. Programmes for Children			
A. Programmes assisted by the State Social Welfare Board direct:			
1. Assistance for Holiday Camps for Children			
(a) No. of Camps Conducted	96	109	48
(b) No. of Participants	4800	5450	2400
(c) Assistance Given (Rs. '000)	324	347	215
2. Assistance to Creches			
(a) No. of Creches Assisted	120	119	139
(b) No. of Children Benefited	3000	2975	3875
(c) Assistance Given (Rs. '000)	630	624	683
3. Assistance to Balawadies			
(a) No. of Balawadies Assisted	320	271	213
(b) No. of Children Benefited	9305	9005	8950
(c) Assistance Given (Rs. '000)	314	360	305
4. Assistance for Supplementary Nutrition for Children in Creches and Balawadies			
(a) No. of Balawadies/Creches Assisted	135	121	110
(b) No. of Children Benefited	4050	3750	3550
(c) Assistance Given (Rs. '000)	388	298	215
(i) Non recurring (Specify Purpose)			
II. Programmes for Women			
5. Condensed Course for Education for Adult Women of Age Group 18-30			
(i) No. of Organisations Assisted for Running Condensed Courses	77	153	158
(ii) No. of Women Benefited	1818	2950	3180
(iii) Assistance Given (Rs. '000)	822	1334	1350
6. Assistance to Working Womens Hostels			
(i) No. of Hostels Assisted	15	14	14
(ii) Assistance Given (Rs. '000)	42	40	40
III. Social & Economic Programmes for Employment & Income Generation to Low Income Groups			
(i) No. of Organisations Assisted	52	48	40
(ii) No. of Programme Assisted (Category-wise)		(33)	(30)
	(Dairy scheme 26)	(15)	(10)
(iii) No. of Women Benefited	1443	1324	1000

Source: Social Welfare Advisory Board.

APPENDIX 9.58

Kerala State Council for Child Welfare: Physical and Financial Achievements of the Child Welfare Programmes

Details	Unit Nos.	1979-80	1980-81	1981-82 (anticipated)
(1)	(2)	(3)	(4)	(5)
I. Training Programme				
1. No. of Balasavika Training Institutes Functioning	..	3	3	3
2. No. of Persons Trained	..	165	168	155
II. Assistance to Balwadies				
1. No. of Balwadies Assisted	..	55+4	55+4	55+4
III. Creches Directly Run by the Council				
1. No. of Creches	..	1	1	1
2. No. of Children in Creches	..	250	188	300

Source: Kerala State Council for Child Welfare.

APPENDIX 9.59

Selected Physical Achievements of the Prisons Department

Institutions	1979-80		1980-81		1981-82 (anticipated)	
	No. of Institutions	No. of Beneficiaries	No. of Institutions	No. of Beneficiaries	No. of Institutions	No. of Beneficiaries
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Borstal Schools, for Girls Calicut	1	200	2	205	2	210
2. Industrial Training Units in Balwadies and Juvenile Delinquents Trained	5	148	5+2	210	6+1	..
3. The Children's Courts (State Wide scheme)	1	..	10	..	10	..
4. Welfare Officers in Prisons (Nos.)	4	1133	6	1147	6	..
5. No. of Central Jails and Prisoners	3	1316	3	1147	3	1273
6. No. of Sub Jails and Prisoners	32	871	32	960	32	1176
<i>Others</i>						
7. Implementation of Children Act	..	..	2	..	2	..
8. Direction and Administration—Inspection Wing and Statistical Unit	2	State-wide scheme	2	State wide scheme	2	State wide scheme

Source: Inspector General of Prisons.

APPENDIX 9.60

Salient Features of the Toddy Workers Welfare Fund

I	No. of Registered Workers in the Fund as on 30-9-1981		35,338	
II	No. of Unregistered do.		7,491	
III	<i>Assessment of Welfare Fund</i>			
	Total Amount Assessed as on 30-9-1981	Rs.	2,006.08	lakhs
IV	<i>Recovery of Amount Assessed</i>			
	Total Recovery as on 30-9-1981		1,748.327	„
	Balance to be Recovered		257.76	„
V	<i>Collection of Welfare Fund</i>			
	Total Collection as on 30-9-1981	Rs.	1,989.94	„
VI	<i>Irrecoverable Amounts</i>			
	Irrecoverable Amounts Reported by R.R. Authorities as on 30-9-1981		65.95	lakhs
VII	<i>(a) Final Payment of P.F.</i>			
	Total Payments During the Period from 4/81 to 9/81		13.79	„
	(b) Residual Balance Payments During the Period from 4/81 to 9/81		8.91	„
	(c) Gratuity do.		6.89	„
VIII	<i>Advances from the P.F.</i>			
	Total Payments for H.B.A. as on 30-9-1981		138.43	„
	Do. Treatment do.		25.56	„
	Do. Marriage of Daughters of Toddy Workers as on 30-9-1981		3.506	„
	Do. Education of Children of Toddy Workers as on 30-9-1981		0.87	„
IX	<i>Funds</i>			
	1. Investment in Fixed Deposits		1,467.779	„
	2. Loans to other Institutions			
	(Date as on 30-9-1981)			
	(i) Kerala Health Research and Welfare Society		122.50	lakhs
	(ii) Kerala State Industrial Enterprises Ltd.		100.00	„
	(iii) Kerala Agro Machinery Corporation		100.00	„
	(iv) Kerala State Film Development Corporation		15.50	„
	(v) Travancore Rayons		85.00	„
	(vi) Kerala State Housing Board		175.00	„
	Sub Total (2)		598.00	lakhs

Source: Chief Welfare Fund Inspector.

Selected Physical achievements of the Applied Nutrition Programme

Details	Unit	1979-80	1980-81	1981-82 (anticipated)
(1)	(2)	(3)	(4)	(5)
<i>Applied Nutrition Programme</i>				
1. Total Production KIF	Tonnes	55	100	100
2. No. of Blocks under ANP	Nos.	95	95	105
3. Population Covered	Nos. (lakh)	95	95	105
4. No. of House Gardens Raised	Nos.	5000	5000	7350
5. No. of Poultry Units Started	"	3000	3000	3100
6. No. of Officials/Non-officials Trained	Nos. (lakh)	1.5	1.5	1.7
7. No. of Nutrition Education Camps Conducted	Nos.	2500	2500	3000
8. No. of Nutrition Education Seminars Organized	Nos.	12	13	12
9. No. of Wells for Irrigation Constructed	Nos.	200	200	220
10. No. of Pumpsets Supplied	Nos.	20	22	12