

KERALA

1968

AN ECONOMIC REVIEW

**PREPARED BY
THE STATE PLANNING BOARD
TRIVANDRUM
1969**

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CHAPTER 1

GENERAL REVIEW

1.1 The developments in the Indian economy during the year 1968 continued to be on the path of general crisis despite improvements in overall rate of growth of real national income, estimated at 9.1 per cent over the previous year, and marked improvements in certain individual sectors such as agricultural production and export earnings. Contrary to wide-spread expectations of a revival in the planning process—an expectation which survived three successive years of virtual abandonment of long term national planning under the guise of budgetary exercises called Annual Plans—the crises in planning continued to be as serious as ever before. The finalisation of the Fourth Five Year Plan has again been delayed due to the uncertainty of resources, both domestic and foreign. As a result, the Annual Plans of both the Centre and the States for 1969-70, the first year of the proposed new Fourth Plan, had to be finalised and budgeted without reference to the Fourth Plan. In other words, the alarming drift from no-plan to no-plan continued in 1968 as well.

1.2 According to the “quick estimates” prepared by the Central Statistical Organisation, the national income of India in real terms increased by 9.1 per cent in 1967-68. This increase in growth rate was largely due to recovery in agriculture from the serious set-back during the earlier drought-affected years. During the same period population is estimated to have increased by about 2.5 per cent and as a result, the real per-capita national income rose by 6.5 per cent. But this increase in aggregate and per capita income, by and large, only wiped out the decline in the two preceding years. In fact, if we take the period between 1964-65 to 1967-68, aggregate real income increased by only 3 per cent while per capita real income in 1967-68 was still below the 1964-65 level by 4.3 per cent.

1.3 The following table shows the estimates of national income and per capita income at 1960-61 prices for the years 1960-61 to 1967-68 and year to year changes.

India's National Income, 1960—68

Year	National Income (1960-61 prices)		Percentage increase in national income over the previous year	
	Total (Rs. Crores)	Per capita	Total	Per capita
1960-61	13443	308.9	..	..
1961-62	14023	315.0	4.3	1.9
1962-63	14319	314.2	2.1	(—)0.3
1963-64	15066	322.8	5.2	2.7
1964-65	16176	338.3	7.4	4.8
1965-66*	15119	308.6	(—)6.5	(—)8.8
1966-67*	15272	304.2	1.0	(—)1.4
1967-68**	16665	323.9	9.1	6.5

Revised estimates of the Central Statistical Organisation

* Preliminary estimate.

** Quick estimate.

Agricultural Output

1.4 An increase of 20 per cent in the aggregate output for agriculture in 1967-68 marked a recovery from stagnation in comparison with the last two years. Foodgrains production increased from 74.2 million tons in 1965-66 to 95.6 million tons in 1967-68. Non-food-grain crops with the exception of sugarcane also showed some increase. However, even this substantial increase in agricultural production brought the aggregate agricultural output to a level only marginally above that of 1964-65.

Index Number of Agricultural Production (1949-50=100)

Year	Index	% rise
1963-64	143.1	..
1964-65	158.5	10.8
1965-66	132.7	—16.3
1966-67	132.4	—0.2
1967-68	158.9	20.0

1.5 Though agricultural output expanded to a significant extent in 1967-68 and reached a level slightly better than that of 1964-65, there is no basis for the undue optimism that this marks the beginning of a self-sustained process of development characterised by some as the "green revolution". In fact, with all the investments in agriculture and the intensive application of inputs and high-yielding varieties of seed, Indian agriculture continues to be dependent essentially on the vagaries of monsoons with all the attendant problems of fluctuating fortunes in production. The technological break-through made possible by the high-yielding varieties cannot be sustained for long because of the repercussions which higher output has on prices and because of the basic deficiencies in the institutional framework and the continuance of feudal relations of production in agriculture.

Industrial Sector

1.6 In 1966 and 1967, India's industrial production was virtually stagnant at the level it had reached in 1965. In a number of important industries like basic metal industries, metal products except machinery and transport equipment industry, there was a decline in production in 1966 and 1967. Compared with 1965 the index of sugar production also decreased considerably. Industry wise indices of production are given in Appendix 1.2.

General Index Numbers of Industrial Production

(Base 1960=100)

<i>Year</i>	<i>General Index</i>	<i>Percentage variation</i>
1961	109.2	..
1962	119.7	9.6
1963	129.7	8.4
1964	140.9	8.6
1965	150.9	7.1
1966	152.4	0.99
1967	150.9	-0.99

Source : Reserve Bank of India, Report on Currency & Finance 1967-68.

1.7 After these two years of stagnation the year 1968 again saw expansion in industrial production. During the first eight months of the year the index number of industrial production registered an increase of about 6 per cent over the corresponding period of the preceding year. Among the factors which contributed to this recovery from the earlier record of depressing performances, special mention should be made of improved agricultural products, particularly raw-materials, and the improvements in our exports (which reached a level of Rs. 968.6 crores in the first nine months of 1968).

1.8 The improvement in industrial production during 1968 was also an indicator of the emerging cyclical pattern of industrial activity in India. As a result of the ever-increasing ties between Indian capital and foreign capital on the one hand, and the integration of the Indian economy with the crisis-ridden economies of the advanced capitalist countries in the West through aid and trade on the other, the Indian economy has been brought more closely into the orbit of the international monetary crisis.

1.9 The crisis in the international monetary system which exploded in 1967 continued to dominate the world capitalist system in 1968. The weakness of Dollar and Franc in March and November 1968, which came to a new critical stage and the recent run on the sterling exposing its vulnerability confirmed the fundamental crisis in international monetary system.

Economic Concentration

1.10 The high degree of concentration and centralisation of ownership in the industrial sector in India continued unabated in 1968. The growth and consolidation of monopolistic and oligarchic formations in Indian industries has been revealed by a number of studies on the subject, all of which indicate in clear terms the natural and objective law underlying such a development under conditions of maturing capitalism. According to the official Monopolies Inquiry Commission, 75 business groups in India, both Indian and foreign, controlled as much as 1,536 companies in 1963-64. The total assets of these companies amounting to Rs. 2,606 crores was about 47% of the entire assets of all non-governmental and non-financial companies in India.

1.11 The process of concentration in production resources has meant a very highly skewed ownership pattern and consequent increase in economic and social powers of giant companies and oligarchies as can be seen from the following table:—

Percentage Distribution of Factories according to Size Class

	<i>Small factories</i>	<i>Medium factories</i>	<i>Large factories</i>	<i>Total</i>
1. Number of factories	91.5	4.5	2.8	100.0
2. Value of fixed capital	8.1	7.3	84.6	100.0
3. Persons employed	34.8	15.7	47.5	100.0
4. Value of gross output	28.9	16.3	53.8	100.0
5. Value added by manufacture	20.7	14.9	63.6	100.0

Source : Annual Survey of Industries, 1963. The figures do not add up to the totals as the figures for factories taking fixed capital on rent or lease have been left out.

1.12 The process of concentration in industrial field has been helped by the growth of a similar phenomenon in the banking and financial sector and the close fusion of the top strata of the two.

Structure of Banking in India, 1965*

(Amount in Rs. Crores)

	No. of Banks	Paid up Capital	Reserves	Deposits	Creait
Total Private Banks of which:	101	34.9	41.1	2,029.4	1,541.5
At the top, banks with deposits of above Rs. 100 crores	7	18.3	22.6	1,360.9 (67.0)	987.6 (64.0)
At the bottom, scheduled banks with deposits of less than Rs. 5 crores and non- scheduled banks	64	4.0	3.0	90.0 (3.4)	62.3 (4.0)

Source : Reserve Bank of India. Statistical Tables relating to Banks in India

* Figures in brackets indicate percentage of the totals for all private banks.

The device of inter-corporate investments has been made use of by these groups to strengthen their gross power; and the oligarchy born out of such an unholy wedlock is reported to have been the major obstacle to all the national social objectives embodied in the directive principles of our constitution and the professed goal of socialist society.

Dependence on foreign Aid

1.13 After eighteen years of planning, India continues to be dependent on foreign capital*; infact, the dependence has grown to such alarming proportions that the very basis of our non-alignment and independent foreign policy has been shaken. Foreign private capital owns and controls a substantial proportion of the production of a wide range of products such as tea, jute, petroleum refineries, mining and chemical industries. Our total debt (net of repayment) to the foreign governments and international institutions such as the World Bank is estimated to be about Rs. 5,413 crores.

*For details see Appendix 1.3 and 1.4.

Foreign Aid during the three Five Year Plans

	<i>Foreign Aid authorised (Rs. crores)</i>	<i>Foreign Aid as a proportion of total Plan Outlay (Percentage)</i>
First Plan	203	10.2
Second Plan	1,090	23.7
Third Plan	2,455	28.5

1.14 The U.S.A. accounts for 51 per cent of the total authorisation of total external assistance. Half of U.S. aid to India has come under title I of the P.L. 480 programmes. Title I programme up to end of March 1968 excluding the amount provided under credit term amounted to \$4,131 million. The rupee counterpart funds have been allocated in the following manner.

Allocation of P. L. 480 Counterpart Funds

	<i>Amount (\$million)</i>	<i>Percentage to the Total</i>
1. Loans to the Government of India	2,494	60.4
2. Grants to the Government of India	818	19.8
3. Loans to private enterprises under the Cooley Amendment	272	6.6
4. For the use of the U. S. Government	547	13.2
Total	4,131	100.0

Source : Reserve Bank of India. Report on Currency and Finance 1967-68.

1.15 During 1967-68 out of the total foreign assistance authorisation 64 per cent accounted for loans, 34 per cent P.L. 480 and 2 per cent grants. About 60 per cent of the loan authorised in 1967-68 were by way of non-project aid, 20 per cent for financing improvements of food and fertilizers, 6 per cent for debt servicing and the balance 14 per cent was tied to specific projects.

Crisis in Resources

1.16 The year 1968 was marked by continued uncertainty about external assistance and presented the basic weakness of the economy,

viz., greater dependence on foreign aid. In the absence of required fresh authorisation, India was financing its balance of payments gap largely by drawing upon the aid in the pipe line and even this was running out fast. All attempts to raise additional domestic resources are becoming increasingly difficult in view of the sources of evasion and leakages inbuilt in our socio-economic structure, particularly the rights and privileges attached to private property in the means of production.

1.17 The crisis in domestic resource mobilisation was further aggravated by continuously rising general level of prices. Contrary to the expectation of a reversal of the rising trend in prices, there was an increase of 9.1 per cent in the whole-sale prices during the quarter, July-September 1968. Even after a good harvest and measures claimed to have been taken by the Government, the price level is again in the neighbourhood of the peak level of 224.1 reached on October 14, 1967.

Index Numbers of Wholesale Prices—All India

(1952-53—100)

	<i>November,</i> 25, 1967	<i>November,</i> 23, 1968	<i>Percentage</i> <i>variation</i>
Food Articles	244.8	225.8	—7.8
Industrial raw materials	218.9	236.5	8.0
Manufactures	165.3	172.0	4.0
All Commodities	213.9	210.6	—1.5

1.18 The working class consumer price index (1949=100) in 1966-67 showed a considerable increase of 22 points over that in 1965-66. This increase was followed by a similar increase of 22 points in 1967-68 over that of the previous year.

1.19 The continually rising unemployment coupled with the ever-increasing price level and the stagnation in incomes of poor and vulnerable sections of the community are stark realities of the Indian situation which the overall figures of national income or per capita income or the aggregate level of industrial and agricultural output cannot conceal. The year 1968, despite recovery and improvements in several sectors of the economy, was an year of profound crisis. In fact, the Indian economy in 1968 presented a gloomy picture warranting a rethinking on the basic economic and social policies to be pursued at the national level.

CHAPTER 2

KERALA'S ECONOMY, 1968

2.1 A review of Kerala's economy during 1968 reveals the stark reality that the State has, per force, to partake all the weaknesses, marginal benefits and fluctuating economic prospects which characterise the crisis in Indian economy at the present stage of development. Since the State's economy is, in many ways, intimately interwoven with the crisis-ridden fabric of the socio-economic system in India, it is obvious that Kerala has not only to contend with whatever improvements accrue out of the slow pace of national development, but has to fully receive all the adverse effects of faulty policies, pursued at the national level, in the field of planning, fiscal and monetary policies, industrial policy, export-import policy, policies relating to foreign aid, etc. In a situation where the States have lesser and lesser control over investible resources which are generated in the economy the Union being in a position to substantially enhance its gross power over national resources under the present unbalanced structure of Union-State relations, it is inevitable that the economic destiny of every State is, in a large measure, determined by overall developments at the national level. While Kerala was fortunate in sharing the benefits of improved agricultural production in India in 1968, she had to suffer all the serious maladies in the nation's economy such as rising prices, increasing unemployment, widening of regional disparities and the general crises in the industrial sector. In the following paragraphs a summary of the developments in the major sectors of economic activity in Kerala during 1968 is presented.

Population and Income

2.2 During the decade 1951-61 the population of Kerala increased at the rate of 2.24 percent (compound interest) per annum compared with 1.98 per cent for India. It is estimated that during the period 1966-71, the annual rate of natural increase in Kerala will go up to 2.51 per cent and that of India to 2.46 per cent. On this basis, the population of the State in 1968 is estimated to be 201.6 lakhs.

2.3 Estimates of State income for the year 1967-68 are not available. The latest available estimates relate to the year 1964-65. According to these figures Kerala's percapita income (at current prices) was only Rs. 391 as against Rs. 423 for the country as a whole. It may also be pointed out that Kerala occupies the tenth rank among the Indian States in regard to percapita income. The gap between the figures for Kerala and India as a whole has widened in 1964-65 compared with the previous years. The sector-wise

distribution of state income indicates that the share of agriculture as well as industries has gone down during the years 1950-51 to 1964-65.

Agriculture

2.4 The agricultural sector of the State's economy showed noticeable progress during the year. Total cropped area increased by 135 thousand hectares. This increase was achieved mostly by double cropping or multiple cropping. Area sown more than once has registered an increase of 97 thousand hectares during the year. There was a remarkable increase of 38 thousand hectares in the net area sown. The area under cultivation went up significantly in the case of all except two of the important crops viz., sugarcane and tea. The fall in the area under sugarcane is rather disturbing in view of the fact that it will adversely affect the working of the three sugar factories in the State which are even now working much below capacity.

2.5 There was appreciable increase in the production of rice and tapioca during the year 1967-68. Rice production rose to 11.24 lakh tonnes compared with 10.84 lakh tonnes in the previous year. In the case of tapioca, production went up from 34.10 lakh tonnes to 41.98 lakh tonnes. Increase was also effected in the case of coconut, arecanut, rubber and bananas. Pepper production remained at the previous year's level and a marginal decrease was noticed in the production of tea.

2.6 The food situation in the state was less severe than in the previous year. Imports of rice into Kerala during 1968 was 6.24 lakh tonnes as against 5.41 lakh tonnes during 1967. Full ration was issued during sixteen weeks and three fourths ration was issued during eleven weeks. During the remaining weeks the ration was only half, that is, at the rate of 80 gms. per adult per day. Government continued the intensive efforts for large scale procurement of paddy from the cultivators. During the year 1968, 1.17 lakh tonnes of paddy was procured compared with 1.15 lakhs tonnes in 1967.

Fishery and Animal Husbandry

2.7 The fisheries sector in Kerala registered remarkable progress during the year under review. The total production of fish during the year 1967-68 was 2.53 lakh tonnes valued at Rs. 10.2 crores in comparison with 2.35 lakh tonnes valued at Rs. 7.8 crores during the previous year. Thus, though there was an increase of 4 percent only in the volume of production, the value increased by 31 percent, mainly due to changes in the quantity of catches of different varieties. There was considerable increase in the quantity of high-valued varieties like prawns and mackerel. Prawn catches increased by 28 percent during the year, mainly due to the greater intensity of fishing efforts and the introduction of trawlers.

2.8 There was a general increase in the price of fish during the year. The average beach price of all marine fish in 1967-68 was 38 paise per kilogram, higher by 6 paise per kilogram compared with the previous year. The price of prawns went up from 103 paise/kg. to 115 paise/kg. over the year and that of mackerel from 47 paise/kg. to 60 paise/kg. Oil sardines registered an increase in price of only one paise/kg. from its 1966-67 level of 18 paise/kg. There was a steady rise in the raw material price of prawn products primarily due to the cut-throat competition by exporters for the procurement of raw materials for their industry. The rise in the price of raw prawns coupled with a sharp fall in the prices of prawn products in the U.S.A. precipitated a temporary slump in prawn trade with the result that a couple of marginal firms were forced to quit the industry. But the big offers received from Japan, following the quick action taken by Indian industrialists helped the industry to tide over this difficult situation and pushed up the total export earnings considerably.

2.9 The co-operative movement in the fisheries sector gained considerable momentum during the year. Compared with only 53 societies in the previous year, in 1967-68, 230 new co-operatives were organised—227 Malsya ulpadaka co-operatives, 2 regional marketing co-operatives and one marketing federation. At the end of March 1968, there were 748 fisheries co-operatives—194 credit, 537 malsya-ulpadaka and 17 marketing societies. Total membership also increased from 69,074 to 78,847 during the year under review. Similarly paid-up share capital registered a tremendous growth from Rs. 9.07 lakhs to 12.45 lakhs.

2.10 The welfare assistance to fishermen included a housing and colonisation scheme and also scholarships to the children of fishermen. During the year 30 houses were constructed for fishermen and 121 houses were under various stages of construction. Children of fishermen communities were awarded 112 scholarships during the year compared with only 78 in 1966-67.

2.11 In the field of animal husbandry, dairying and milk supply, two new projects namely, an intensive cattle development project and an egg powder factory were taken up for implementation during the year. The intensive cattle development project with its headquarters at Alwaye will cover parts of the three districts—Alleppey, Kottayam and Ernakulam. The region will have the six existing key villages including the Hill Cattle Development Scheme at Kanjirappally. The Cattle feed Manufacturing Unit located at Malampuzha will also form part of this scheme. This project when completed will provide a "compact organisation for stepping up milk production as an integral part of agricultural production programme". The egg powder factory envisaged to be completed by 1970-71 will have a production capacity of one tonne of egg powder per day.

2.12 Kerala accounts for about 20 percent of total production of eggs in the country with only 9 percent of the poultry population. The export potential is about 20 crores of eggs per annum. Under the Chengannur egg collection and marketing scheme, 20.55 lakhs eggs were collected during 1967-68 out of which 16.20 lakhs were disposed of.

2.13 In the field of dairy development, the Nilambur Milk Chilling Centre sponsored as part of the Calicut Milk Scheme was completed and commissioned in 1967-68. The Ernakulam Milk Scheme was commissioned in August 1967. Establishment of milk supply schemes at Kottayam and Alleppey has been under way during the year.

Forestry and Plantation

2.14 Forests contributed about 5 percent of the total revenue of the State during 1967-68. The net receipts from the sale of timber and minor forest produces increased to Rs. 714.1 lakhs during the year under review, registering an increase of Rs. 48.9 lakhs over the previous year. Rubber plantation industry made significant progress both in area and production. High yielding planting materials were introduced in 60% of the total area. Production of rubber increased from 50 thousand tonnes in 1966-67 to 60 thousand tonnes in 1967-68, recording an increase of 20 per cent. During the same period consumption of rubber also increased. In the case of tea total area and production declined by 1.02 and 5.9 percent respectively. In the case of coffee there was increase both in area and in total yield. The average yield per hectare increased from 418 kg. in 1966-67 to 433 kg. in 1967-68.

Industry and mining

2.15 According to the provisional estimates available for September 1968, the total number of factories in Kerala increased to 3078 (as on 30-9-1968) compared with 2827 in the previous year. Factory employment also increased during the corresponding period from 1.95 lakhs to 2.02 lakhs. The factory sector in Kerala is dominated by traditional and relatively low technology-based industries such as cashew, oil mills, coir, etc. Basic metal industries absorb only one percent of the factory workers in the State.

2.16 Districtwise analysis of factory employment reveals that, Quilon district ranks first in the matter of total factory employment with 89987 factory workers. Ernakulam and Kohizkode Districts with 23819 and 18465 factory workers respectively get the second and third ranks. The fact that most of the cashew factories are located in Quilon District accounts for this.

2.17 During the period April 1967 to December 1967, sixteen joint stock companies—one public and 15 private—were newly registered. Three public companies and 11 private companies were struck off. Seventeen companies were liquidated—5 public and 12 private. Thus there was a net reduction of 16 in the total number of joint stock companies. Against 990 in 1966-67, the number of joint stock companies in 1967-68 was only 974.

2.18 The Bidi Industry faced a very serious crisis during the year under review. Several large scale units have been wound up. This has led to a critical situation where nearly 15000 workers were thrown out of employment.

2.19 A workable reserve of bauxite deposit of 18 lakh tonnes have been discovered in Kumbala in North Kerala. Iron ore has been found in Cherupa, Eliottumala, Nanminda, Naduvannur and East West hill in Kozhikode district. Preliminary estimates place the amount of magnetite ore at 330 million tonnes.

Power.

2.20 The installed capacity of the State system as on 31-3-1968 was 528500 KW compared with 360500 KW on 31-12-1967. With the commissioning of the Sabarigiri Project a break through in power generation was achieved and the state became self-sufficient in power. But, since the project was completed late in the year, power had to be purchased from other states though in a smaller quantity. During 1967-68 only 31.64 KW of electricity was purchased from other states in comparison with 77.99 KW during the previous year.

2.21 One unit of Sholayar Project with a capacity of 18 M.W. and three units of the Sabarigiri Project each with a capacity of 50 M.W. were commissioned during the year under review, thereby raising the installed capacity of the State system to 528.5 M.W. By the end of March 1969, it is expected that the third unit of the Sholayar Project would start functioning and this would help to raise the installed capacity to 546.5 M.W.

2.22 Industries continue to be the major consumers of electric power. They consume about 81 percent of the total power generated but contribute only 45 percent of the total revenue. Domestic consumption forms 4.36 percent of the power generated and its share in total revenue is as high as 16.72 percent. The differences in tariff rates account for this.

Transport and Communications.

2.23 The Kerala State Road Transport Corporation made considerable progress during 1967-68. The capital investment of the

Corporation which stood at Rs. 629.04 lakhs at the beginning of the year rose to 684.04 lakhs by the end of the year. The Government of Kerala raised their share capital contribution by 44 lakhs during the year and the southern railway made an additional contribution of Rs. 11 lakhs.

2.24 The scheme of complete nationalisation of the Ernakulam-Vaikom-Kottayam route was modified as a partial exclusion scheme covering the road sector Ernakulam-Erattupetta via Vaikom and the scheme was implemented on 11-1-1968 with 38 buses on service. The partial exclusion scheme on the Kayamkulam-Punalur route was also implemented with effect from 20-9-1968 by introducing 15 buses. Proceedings are in progress for the nationalisation of the Trichur-Shoranur-Palghat and the Trichur-Guruvayoor routes. Interstate services from Guruvayoor and Palghat to Palani, from Kozhikode to Ootty and from Palghat to Ootty and Coimbatore were introduced during the year.

2.25 There was a net addition of 105 buses, 7 lorries and 8 other vehicles to the operating fleet of the Corporation raising the fleet strength to 1111 buses, 64 lorries and 56 other vehicles. The number of effective schedules and kilometres of operation also increased considerably.

2.26 The revenue receipts of the Corporation increased from Rs. 751.66 lakhs in 1966-67 to Rs. 887.97 lakhs in 1967-68. But the expenditure increased faster from Rs. 569.13 lakhs to 758.49 lakhs on account of the increase in the cost of maintenance.

Export-Import Trade.

2.27 Exports from the ports of Kerala during 1967-68 were considerably higher than in the previous year. Export earnings in 1967-68 amounted to Rs. 145 crores as against Rs. 137 crores during 1966-67. In the case of almost all the important commodities the quantity exported increased considerably.

2.28 The years' total exports of Cashew kernels was 54968 tonnes valued at Rs. 49.85 crores. This was 5000 tonnes more than in the previous year. The U.S.A. continues to be the highest buyer of cashew kernel. Though Indian exports to U.S.A. have registered an increase of about 25 percent during the last five years, India's share in U.S.A.'s exports of cashew declined because countries like Brazil and Mozambique captured a higher share of the increased demand.

2.29 Though the exports of coir products as a whole increased by 800 tonnes the earnings therefrom declined by Rs. 136 lakhs.

2.30 During the year under review 24644 tonnes of pepper worth Rs. 12.94 crores was exported. This was an improvement over

the previous years' performance of 20020 tonnes valued at Rs. 11.27 crores. The increase was mainly due to a higher offtake by USSR and other East European countries.

2.31 Exports of tea showed marked improvements during the year with tea exports of 46844.97 tonnes as against 40,577.37 tonnes in the previous year. This, substantially better export performance was the result of a combination of factors. There has been a revival of overseas demand for Indian tea. The bumper crop in India on the one hand and the poor crop in East Africa on the other in the early part of the year were also contributory factors.

2.32 Exports of marine products increased from 13099.42 tonnes in 1966-67 to 15820.82 tonnes in 1967-68. During the corresponding period the value of exports increased from Rs. 15.19 crores to Rs. 16.84 crores. Shrimp remains the major item of seafood exported, accounting for about 82 percent of the exports of marine products.

Education.

2.33 The percapita Government expenditure on education in 1967-68 was Rs. 20.19 compared with Rs. 18.48 in 1966-67. This is the highest among the Indian States. The enrolment in Schools for general education increased during the same period from 44.09 lakhs to 45.18 lakhs. There were altogether 1,29,389 teachers working in standard I to IX during the year under review, as against 1,24,822 during the previous year. There seems to be considerable wastage in general education. Out of the 1,75,493 students who appeared for the S.S.L.C. examination in March 1968, only 67,462 passed out.

2.34 There were 107 arts and science colleges in the State in 1967-68. The enrolment in these colleges increased from 112539 to 126651 during the year under review. 19 teachers' training colleges functioned in the State during the year with an enrolment of 2,406.

Health.

2.35 During 1967-68 there were 518 medical and public health institutions in the State with a bed strength of 20,166. The corresponding figures in the previous year were 503 and 19,850 respectively. The above institutions come under the modern system of medicine. There are also 41 Ayurvedic and Homeo hospitals and 236 dispensaries with a bed strength of 611.

2.36. The family planning campaign gained momentum during the year. The number of sterilisation operations conducted increased significantly. In 1967, 49489 men and 10504 women underwent the

operation compared with 33256 men and 6142 women in 1966. The number of IUCD insertions, however, has declined from 43517 in 1966 to 36887 in 1967.

Other Social Services.

2.37 The activities of the Government for the welfare of the backward classes relate mainly to educational concessions, housing, water supply and medical care. In the Pre-S.S.L.C. Classes 291259 students benefited from scholarships. Also 31892 students in post S.S.L.C. classes were given educational concessions. Government of India scholarships were awarded to 5756 students as against 2713 during the previous year.

At the beginning of the year 1968-69, there were 116 water supply schemes under execution in the rural areas. Of these 22 were completed so far.

Employment and Manpower.

2.38 The Draft Outline of the Fourth Five Year Plan placed the number of unemployed as on 31-7-1968 at 7.8 lakhs. This estimate was obtained by projecting the number of persons on the live register of employment exchanges using some ratios obtained from a Sample Survey on employment and unemployment conducted in the State in 1965. The live register figures have increased since then. On 31-12-1968 there were 2.02 lakhs of persons on the register compared with 1.96 lakhs on 31-7-1968. It can be assumed that the total number of unemployed in the State also would have increased proportionately. Even though total unemployment is only of the above order, it may be remembered that underemployment prevails in the state in a very acute form. The 1965 sample survey estimated that about 25.20 percent of the employed were underemployed.

2.39 The employment situation in the State appears to have improved slightly during the first half of 1968. The index of employment in the public and organised private sectors has gone up from 99.6 as on 31-12-1967 to 102.5 as on 30-6-1968. The increase was proportionately more in the private sector.

2.40 A disturbing feature of the employment situation in the State in 1968 was the increasing proportion of graduates among the educated work-seekers. The percentage of such work-seekers increased from 4.7 percent on 30-6-1967 to 5.9 per cent on 30-6-1968. Studies on medical and engineering personnel indicate that the problem of unemployment among the engineers has already become acute and that medical personnel have started facing the problem of unemployment.

Prices and Cost of Living.

2.41 The working class consumer price index for Kerala (1939=100) rose by 53 points during the year 1968 from its 1967 level of 729. The index had shown an increase of 16 points in January and afterwards it began to fluctuate and approached the December 1967 figure in March as well as June. There was again a sudden rise in July and the ascending tempo was kept till October. The rise in the prices of food articles appears to have been the main factor behind this increase in the index. The withdrawal of Government subsidy to the different varieties of ration rice resulted in a rise in the price of rice. The high prices of other consumer items like chillies, onion, etc., also contributed to it.

2.42 The index number of whole prices of most of the agricultural commodities registered increases during the year under review. In the case of rice the index rose by 33 percent from 156 in December 1967 to 207.5 in November 1968, inspite of a decline in open market prices. This was due to a rise in the price of ration rice. Decrease was noticed in the case of the two commodities, viz., molasses and oil seeds. The main oil seed is coconut and the lull in the demand in the Bombay and Calcutta markets for coconut and coconut oil was responsible for this decrease.

2.43 As a result of the restoration of full ration of rice, the open market price of rice began to decline considerably from June 1968. By the end of November, the price declined by 19 percent. The drop in price was found to be more at Trivandrum, Quilon, Alleppey and Kottayam. The price of items in the pulses group also showed decline ranging from 12 to 20 percent.

2.44 The parity index between prices received and paid by farmers shows that the changes in the year 1968 were not favourable to the farmers. While the index of prices received by farmers increased from 210 to 216, prices paid increased faster from 203 in 1967 to 221 in 1968, so that the farmers were placed in a relatively disadvantageous position.

CHAPTER 3

POPULATION AND INCOME

Trends in population.

3.1 The population of Kerala which was 169 lakhs in 1961 is estimated to have risen to 201.6 lakhs in 1968.

3.2 Kerala which occupies only 1.27 per cent of the total area of the Indian Union, accounts for 3.85 per cent of its population. According to the 1961 census, population density in the State is 435 per sq. kilometre as against 138 for all-India. The density of population in the State during 1968 and 1969 is estimated at 519 and 532 respectively. Consequent to the increase in population per capita land in the State has come down from 0.29 hectare in 1951 to 0.23 hectare in 1961.

3.3 The density of population varies considerably among the districts in the State. The coastal districts are most densely populated. Alleppey has the highest density and Kottayam the lowest.

3.4 The density of urban population has, however, shown a downward trend from 2436 persons per sq. km. in 1951 to 2285 persons in 1961. This downward trend is due to the relatively low density of the areas newly recognised as census towns in 1961 and the extension of the jurisdiction of some of the towns to cover low density areas. Density of population in rural areas has risen from 313 persons per sq. km. in 1951 to 380 persons per sq. km. in 1961.

Rate of growth of population.

3.5 During the decade 1951-61, population of Kerala increased by 24.76 per cent as against 21.50 per cent for all-India. According to the 1961 census, urban population forms 15.11 per cent of the total population in the State. Between 1951 and 1961 the urban population in the State increased by 60.52 per cent. During 1951-61, Quilon district showed the highest and Palghat district, the lowest increase in population.

Birth and death rates.

3.6 In the absence of migration on a large scale, fertility and mortality are the two factors which influence population growth. The computed birth rates and death rates during 1951-1960 for Kerala are 38.9 and 16.1 respectively per 1000 of population.

3.7 Kerala is last but one among the States in India in respect of birth rates during the last decade. But in respect of nuptial fertility, Kerala ranks high among the States in India. Only Assam

and Punjab have a higher rate of nuptial fertility. Kerala records a relatively low birth rate. This is mainly due to the high proportion of unmarried women in the age group 15-44 which comes to the order of 22 per cent of the women in that age group as against 7.4 per cent for all-India, 13.2 per cent for Madras and 8.2 per cent for Mysore. The high percentage of late marriages in Kerala has also contributed to the relatively low birth rate in spite of high nuptial fertility. The mean age at marriage in Kerala is highest among the States in India.

3.8 Kerala had a steadily decreasing mortality rate for the last several decades. The expectation of life at birth in Kerala during the decade 1951-'61 was estimated at 48.31 years for both sexes together. This was highest in India, the all-India average itself being only 41.2 years. In 1911-'20 the expectation of life at birth in Kerala was 25.49 years for males and 27.41 years for females. This rose to 46.17 years for males and 50 years for females in 1951-'60. It is, thus, evident that the increase in population in Kerala is not so much due to the increase in birth rates but due to the steady decrease in death rates.

Age and sex composition.

3.9 The consistently high birth rate in the State and the higher incidence of mortality among males as compared to females have resulted in a high percentage of children and a higher sex ratio. According to the 1961 census, 43 per cent of the population in Kerala is below 15 years of age against 41 per cent for all-India. This indicates a higher dependency burden on the adults in Kerala. 52 per cent of the population in the State are in the working age group 15-59 years and 6 per cent in the age group 60 and above. The corresponding percentages for all-India are 53 per cent and 6 per cent respectively.

3.10 According to the 1961 census there are 1022 females for every 1000 males in Kerala. For India as a whole, the sex ratio is only 941 in 1961. The sex ratio in urban Kerala in 1961 is 991 females per 1000 males, while that in the rural areas is 1027.

Working Population.

3.11 According to the 1961 census, out of a total population of 169 lakhs in Kerala, 56.3 lakhs were workers engaged in one industry or the other. This formed 33.3 per cent of the total population. The corresponding percentage for all-India is 43.0.

3.12 The age composition of the working force reveals interesting features. Of the total working force of 56.3 lakhs in 1961 in Kerala, 1.5 lakhs were in the age group 0-14, 40.9 lakhs in the age group 15-59 and 3.9 lakhs in the age group 60 and above. In other words,

in 1961, 2.7 per cent of the total workers in Kerala belonged to the age group 0-14 against 7.7 per cent for all-India, 6.9 per cent of the workers in Kerala were in the age group 60 and above as against 6.5 per cent for all-India and 90.4 per cent of the workers in Kerala belonged to the age group 15-59 against 85.8 per cent for all-India.

3.13 Between 1901 and 1961 working force in Kerala increased only by 97.8 per cent against a population increase of 164.3 per cent. During the decade 1951-61 working force in Kerala increased by 29 per cent corresponding to a population increase of nearly 25 per cent (Appendix 3.6). The proportion of working force to total population (participation rate) rose from 32 per cent in 1951 to 33 per cent in 1961. During 1951-61, the working force has thus grown at a faster rate than population.

3.14 Between 1951 and 1961, working force in the primary sector as a whole registered an increase of 28 per cent against a total population growth of 25 per cent. However, the proportion of workers in this sector to total working force decreased from 55 per cent in 1951 to 54 per cent in 1961 (Appendix 3.8). This decrease in proportion is mainly due to the significant decrease in the case of agricultural workers (cultivators and agricultural labourers) who form nearly 86 per cent of the workers in this sector. The rate of growth of agricultural workers is only 23 per cent and decreasing trend is noticed in their proportions to total working force and population. The rate of growth of workers in the primary sector is lower than that of the overall growth in working force and population.

3.15 The rate of growth of working force in the secondary sector is also lower than that of the overall growth in working force and population. The total sectoral growth is only 23 per cent. The proportion of workers in this sector to total working force also decreased from 22 per cent in 1951 to 21 per cent in 1961 (Appendix 3.8).

3.16 The decennial growth of workers in the tertiary sector is 38 per cent against an overall working force increase of 29 per cent and a population increase of nearly 25 per cent. The working force increase in this sector is most prominent in the category 'Other Services'. The proportion of workers in the tertiary sector also registered a rise from 24 per cent in 1951 to 25 per cent in 1961. The percentage of the workers in this sector to the total population also increased from 7.6 per cent in 1951 to 8.4 per cent in 1961. Lack of remunerative opportunities in the primary and secondary sectors have forced the working population to overflow into the tertiary sector.

3.17 The total growth of male workers during the decade is 27 per cent. As against this, female workers increased by 35 per cent. Male workers who formed 46.7 per cent of the total male population in 1951 rose to 47.2 per cent in 1961. The corresponding female participation increased from 18.1 per cent to 19.7 per cent.

3.18 Category-wise, the proportion of male workers has decreased in all industrial categories except in industrial categories 'Trade and Commerce' and 'Transport, storage and communications' in the tertiary sector. On the other hand the proportion of female workers has increased in all the industrial categories except 'Trade and Commerce' and 'Transport, Storage and communications' where male proportion has increased.

3.19 The above analysis indicates the limited capacity of agriculture in Kerala to absorb new entrants to the labour force and the pressing need to develop the secondary sector. There is a general stagnation in employment generated under manufacturing industries in the State with a marked declining trend in household industries. The services sector shows a substantial increase in employment which is not a desirable trend in an under-developed economy.

State income

3.20 State income estimates are available upto 1964-65 only. Between 1950-51 and 1964-65 State income of Kerala at 1960-61 prices increased by 59.2 per cent (from Rs 334.19 crores in 1950-51 to Rs. 540.54 crores in 1964-65). The corresponding increase in national income was 70 per cent. The annual rate of growth of State income at constant prices between 1950-51 and 1964-65 was 3.4 per cent as against 3.9 per cent in national income.

3.21 Between the years 1950-51 and 1964-65 income in real terms from the agricultural sector increased at an annual average rate of 2.7 per cent and that from industries by 2.4 per cent. The corresponding rate of growth for all-India were 2.9 per cent and 3.9 per cent respectively. The productive sectors, agriculture and industries together increased by 2.6 per cent per annum against 3.2 per cent for all-India. The performance of the productive sectors in Kerala is very much behind the all-India average. The wide gap between the rates of growth of the industries sector in Kerala and India assumes greater significance in the context of the industrial backwardness of the State.

3.22 The annual rate of growth of the Services sector is 4.9 per cent for Kerala and 5.0 per cent for all-India. The services sector thus outpaces the productive sectors in respect of its rate of growth both in Kerala and all-India. This is not a desirable trend

3.23 Though in real terms the rate of growth of net domestic product in Kerala increased at a much slower pace than in India, at

current prices the annual rate of growth is higher in Kerala. This is solely attributable to the much sharper rate of price rise in the State.

3.24 Attempts at planned economic development in the State have surprisingly failed to make any positive impact on the structural composition of the State's economy especially on the productive sectors during the period 1950-51 to 1964-65. Agriculture, which contributed 54.5 per cent to the State income (at constant prices) in 1950-51 contributed 49.6 per cent in 1964-65. The share of "Industries and Mining" has gone down from 16.2 per cent to 14.2 per cent. The share of the combined sectors of agriculture and industries has declined from 70.7 per cent to 63.8 per cent. A similar decline in the relative importance of agriculture and the combined sectors of agriculture and industries is noticed at the all-India level as well. But, the percentage share of the industries sector in all-India remained stationary.

3.25 Services sector continues to play an increasing role in the national and State economies. The share of the services sector in Kerala went up from 29.3 per cent in 1950-51 to 36.2 per cent in 1964-65. The percentage share of services sector in all-India is even higher. It rose from 34.4 per cent in 1950-51 to 40.2 per cent in 1964-65. The total picture that is revealed by this trend is not a desirable one for an under-developed economy, particularly for a backward State like Kerala.

Per capita income

3.26 Per capita income in Kerala in real terms (at 1960-61 prices) was Rs. 248.95 in 1950-51. This rose to Rs. 290.68 in 1964-65 registering a total growth of 16.8 per cent. Annual rate of growth comes to 1.1 per cent. During the same period all-India per capita income in real terms rose from Rs. 275.00 to Rs. 348.00 recording a total growth of 27.5 per cent and an annual rate of growth of 1.7 per cent.

3.27 At current prices, however, per capita income in Kerala increased at an annual rate of 6.2 per cent against 5.9 per cent for all-India between 1955-56 and 1964-65. This higher rate of growth in Kerala at current prices reflects a sharper rate of price rise in Kerala compared to the rest of the country.

3.28 Per Capita income in India maintained a slow but steady increase over each Plan period. But, Kerala presents a different picture. During the First Plan period per capita income in Kerala in real terms increased at an annual rate of 1.2 per cent against 1.5 per cent for all-India. The Second Plan period exhibited a fall to 0.9 per cent as against 1.8 per cent per annum for all-India. During the first four years of the Third Plan, the rate of growth

of per capita income in Kerala rose to 1.3 per cent per annum as against 1.9 per cent for all-India.

3.29 The higher rate of price rise in Kerala presents a deceptively higher rate of growth of per capita income in Kerala at current prices. During the second Plan period per capita income in Kerala at current prices increased at an annual average rate of 5.1 per cent against 4.1 percent for all-India. During the first four years of the Third Plan the annual rate of growth was 7.6 per cent in Kerala against 7.0 per cent for the country as a whole.

3.30 Disparities in the levels of per capita income between Kerala and all-India have increased progressively with every Five Year Plan.

Per Capita Income differentials

Year	Per capita income at constant (1960-61) prices			Per capita income at current prices		
	India* Rs.	Kerala Rs.	Income differential Rs.	India** Rs.	Kerala Rs.	Income differential Rs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1950-51	275.00	248.95	26.05	..	..	..
1955-56	299.00	263.63	35.37	255.00	214.75	40.25
1960-61	326.00	275.96	50.04	326.00	275.96	50.04
1964-65	348.00	209.68	57.32	*429.63	369.58	60.05‡

* Conventional estimates, source; Government of India, Fourth Five Year Plan, a Draft outline, 1966.

** Conventional estimates, Government of India, C.S.O.

‡ Worked out by applying the mid year population for the year furnished by the R.G. to the conventional estimates of national income published by the C.S.O., October 1967.

In 1950-51, per capita income in Kerala in real terms (at 1960-61 prices) was Rs. 248.95 against Rs. 275.00 for all-India. Compared to all-India, per capita income in Kerala was less by Rs. 26.05 in 1950-51. This gap steadily widened over each Plan period and reached a record figure of Rs. 57.32 in 1964-65. The gap at current prices during 1964-65 comes to Rs. 60.05. A wider gap in real terms has been concealed by the sharper rate of price rise in Kerala.

3.31 The table below gives a comparative picture of the per capita income differences between Kerala and the various states in India.

Per capita income differentials, 1964—65
(at current prices)

State	*Per capita income Rs.	Income difference compared to Kerala (+ or—) Rs.	Per capita income Index	
			All-India: 100	Kerala: 100
(1)	(2)	(3)	(5)	(5)
1 Punjab	619	228	146.3	158.3
2 Maharashtra	529	138	125.1	135.3
3 Gujarat	523	132	123.6	132.8
4 Hariyana	513	122	121.3	131.2
5 West Bengal	495	104	117.0	126.6
6 Andhra Pradesh	458	67	108.3	117.1
7 Mysore	441	50	104.3	112.8
8 Madras	436	45	103.1	111.5
All India	423	32	100.0	108.2
9 Assam	394	3	93.1	100.8
10 Kerala	391	..	92.4	100.0
11 Madhya Pradesh	378	(—)13	89.4	96.7
12 Uttar Pradesh	374	(—)17	88.4	95.7
13 Orissa	368	(—)23	87.0	94.1
14 Rajasthan	365	(—)26	86.3	93.4
15 Bihar	292	(—)99	69.0	74.7

*Furnished by the Planning Commission. These estimates are not comparable with the estimates in the previous table as also Appendices 3.9 to 3.16.

Per capita income in Kerala at current prices during 1964-65 was only Rs. 391 compared to the all-India average of Rs. 423. Of the 15 States for which per capita income estimates are presented,

Kerala holds only the 10th place. Punjab with Rs. 619 has the highest income per capita among the States followed closely by Maharashtra (Rs. 529) Gujarat (Rs. 523) Hariyana (Rs. 513) and West Bengal (Rs. 495). Only five States viz. Madhya Pradesh, Uttar Pradesh, Orissa, Rajasthan and Bihar record per capita incomes lower than that of Kerala. Compared to Kerala, per capita income in Punjab is higher by Rs 228, that of Maharashtra by Rs 138, Gujarat by Rs 132, Hariyana by Rs 122 and West Bengal by Rs. 104. This gap in per capita incomes would have been more staggering had the price line of Kerala been on par with the rest of the country.

3.32 The gap in per capita income between Kerala and the more prosperous States is alarmingly conspicuous. Balanced regional development calls for a larger investment effort to achieve a faster rate of growth of income per capita.

Note.—Per capita income estimates referred to paras 3.26 to 3.30 are not comparable with the estimates furnished by the Planning Commission for 1964-65.

CHAPTER 4

AGRICULTURE

4.1 The agricultural economy of the State registered noticeable improvement in 1967-68. This was due partly to the favourable rainfall and partly to the increased area brought under irrigation during the year which together made possible better fructification of Governmental efforts in the development of the agricultural sector and the adoption of high yielding varieties of seed by the cultivators.

4.2 During 1967-68 the total cropped area went up by 5% and the area sown more than once by 18%. The gross irrigated area increased from 5.27 lakh hectares in 1966-67 to 5.72 lakh hectares in 1967-68, that is, an increase over the year of 8.5%. The gross area under paddy went up from 4.24 lakh hectares in 1966-67 to 4.60 lakh hectares. Of the total gross area under paddy, 57% was irrigated during the year as against 53% in the previous year. The consumption of chemical fertilisers too showed remarkable progress in 1967-68. As against 93,318 tonnes of straight fertilizers and 1,09,240 tonnes of mixtures distributed for consumption in the State in 1966-67, the quantities of straight fertilizers and mixtures distributed in the year under review were 97,987 tonnes and 1,16,573 tonnes respectively.

4.3 The production in respect of most of the major crops improved in 1967-68. The production of rice increased from 10.84 lakh tonnes in 1966-67 to 11.24 lakh tonnes in 1967-68 showing an increase of 3.7% over the year. The productivity of rice per hectare was 1389 Kg. in the year as against 1356 Kg. during the previous year. Obviously the increase in productivity is a mark of the better adoption of the improved practices in the cultivation of paddy. This has been made possible through better irrigation facilities, use of high-yielding varieties of seed and favourable rainfall during the year. Coconut, tapioca, arecanut and rubber too registered significant increases in production. However, in respect of tea and pepper there were slight decreases.

4.4 On the agricultural front, the joint farming in rice cultivation experimented in the Andoorkonam Yelah of Kazhakkottam Block under the auspices of the FACT in 1968 was a significant step forward which indicated the need for the reorganisation of paddy cultivation in the State. The success of the Kayamkulam Kayal (Paddy) cultivation in the same year has further highlighted the

importance of common practices in the field of rice cultivation in the State.

4.5 An evaluation study of the package programme in Palghat and Alleppey by the Bureau of Economics and Statistics in 1966-67 has suggested organisation as the missing link in enforcing the breakthrough in agriculture. The disadvantages caused by the smallness of the holdings and the economic backwardness of the farmers could be safely overcome only through joint operations in Agriculture especially in the field of rice cultivation. The Yelah production programme for rice cultivation in the State envisaged in the State's Fourth Five Year Plan is essentially based on these findings and experiments.

4.6 The Government of Kerala introduced in 1968 the Kerala Land Reform (Amendment) Bill with the following objectives:

- (i) to grant more benefits to tenants and Kudikidappukars,
- (ii) to include certain classes of cultivators who do not fall within the definition of 'tenant' within the category of 'deemed tenants.'
- (iii) to provide for the compulsory vesting of the rights of landlords with the Government on a date to be notified by the Government and for the assignment of those rights to the cultivating tenants and,
- (iv) to provide for the constitution of a new fund of not less than Rs. 1 crore called "the Kudikidappukar Benefit Fund" for providing better facilities to Kudikidappukar and to specify the minimum of the amount of the Agriculturist's Rehabilitation Fund as Rs. 2 crores. When enacted the new piece of legislations will be a great step forward in the history of land legislation in the State. It will ensure the rights of the tenants and the kudi-kidappukars.

Land Utilisation

4.7 The total cropped area in the State went up from 26.22 lakh hectares in 1966-67 to 27.57 lakh hectares in 1967-68. The increase over the year was 1.35 lakh hectares (5.2%). This was brought about by an increase in the area sown more than once and by the new area put under the plough. The former accounted for 72% of the additional area as against 28% by the latter. The reclamation of land under miscellaneous tree crops, cultivable waste and fallow lands contributed to the increase in the net cultivated area. The data relating to the land use in Kerala for the years 1967-68 compared with 1966-67 are provided below*

Class of land	area in thousand hectares		
	1967-68	1966-67	Changes over 1966-67
Total Geographical area	3859	3859	..
1 Forests	1056	1056	..
2 Land put to non-agricultural uses	241	230	+11
3 Barren and uncultivable land	92	100	-8
4 Permanent pastures and other grazing land	28	28	..
5 Land under miscellaneous tree crops not included in net area sown	162	182	-20
6 Cultivable waste	98	106	-8
7 Fallow land other than current fallow	30	34	-4
8 Current fallow	23	27	-4
9 Net area sown	2129	2091	+38
10 Area sown more than once	628	531	+97
Total cropped area	2757	2622	+135

* Source: Bureau of Economics & Statistics, Kerala

Area under crops

4.8 In 1967-68, the area under the various principal crops showed remarkable increase over the previous year. Exceptions to this phenomenon were only sugarcane and tea. Between 1966-67 and 1967-68 the area under rice went up by 10.1 thousand hectares, arecanut by 4.8 thousand hectares, bananas and other plantains by 3.8 thousand hectares cashewnut by 4.4 thousand hectares, tapioca by 53.0 thousand hectares and coconut by 29.1 thousand hectares. The area under coffee and rubber went up by 1.3 thousand and 9.5 thousand hectares respectively. On the other hand, sugar and tea marked a slight decline, the former to the order of 0.8 thousand hectares and the latter by 0.5 thousand hectares. The reduction in the sugarcane area was due to growing substitution of the crop mainly by rice. Between 1956-57 and 1963-64 the area under sugarcane showed an increasing trend. But since 1965-66, it has been declining.

4.9 The area under the major crops in Kerala and the changes in their acreages in 1967-68 over 1966-67 are shown below*

Crop	Area in thousand hectares			
	1966-67	1967-68	'Increase (+) or decrease (—) in 1967-68 over 66-67	
			in hectares	percentage
(1)	(2)	(3)	(4)	(5)
Rice	799.4	809.5	+10.1	+(1.3)
Sugarcane	8.8	8.0	—0.8	—(9.1)
Banana and other plantains	45.6	49.4	+3.8	+(8.3)
Arecanut	71.2	76.0	+4.8	+(6.7)
Cashewnut	90.6	95.0	+4.4	+(4.9)
Tapioca	244.6	297.6	+53.0	+(21.7)
Coconut	609.6	638.7	+29.1	+(4.8)
Tea	39.8	39.3	—0.5	—(1.3)
Coffee	25.2	26.5	+1.3	+(5.2)
Rubber	153.4	162.9	+9.5	+(6.2)

* Source: Bureau of Economics & Statistics, Kerala.

4.10 The increases in the areas under most of the major crops are indeed a welcome feature of the agricultural situation in 1967-68. The phenomenal rise in the acreage of tapioca resulting in a bumper crop could stave off the gravity of the acute food deficit in the State to a great extent. But tapioca, showing quick response to manuring, its production could be stepped up without a substantial increase in its area through the adoption of improved agricultural practices. However, so long as manures and fertilisers are in short supply and the lack of infrastructure facilities like irrigation exists, prohibiting the better use of dry land, the only course for the cultivators is to go in for extensive cultivation of tapioca. With high prices prevailing for cash crops, the extension of area under crops like bananas and plantains, arecanut, coconut, cashew and rubber would ensure better income to the farmers.

4.11 Perhaps the most disturbing feature, affecting the cash crop economy of the State, is the steady loss in the area under sugarcane since the past few years. As sugarcane provides the raw materials for three sugar factories in the State, any drop in its supply will adversely affect these processing units. Already there is a dearth in the supply of raw materials to the factories and if this

is to aggravate, it will certainly lead to further strains for the State's economy.

4.12 The areas under pepper ginger, turmeric and cardamom underwent little changes over the year. Similarly groundnut, cotton and tobacco remained almost the same as in 1966-67.

4.13 Based on the all India classification, the percentage area covered by all food crops continued to be at 64% as in the previous year. Rice, pulses, tapioca and fruits and vegetables together accounted for 50% of the total cropped area; the contributions to the aggregate area by rice and tapioca were 29.4% and 10.8% respectively.

Agricultural production

4.14 Though Kerala sustains a large number of food crops as well cash crops, only a few deserve special mention. They in their order of importance are rice, coconut tapioca, arecanut, pepper, tea, bananas and plantains, cashewnut, rubber and coffee. These crops together account for more than 80% of the gross agricultural income in the State. With agriculture contributing 50% of the State income, the vicissitudes in the returns from these major crops will have their own impact on the total economy of the State.

4.15 The production trend of the ten major crops is vividly represented in the Table below:

Production of Major Crops*

<i>Crops</i>	<i>Production (Thousand tonnes)</i>			
	1960-61	1965-66	1966-67	1967-68
(1)	(2)	(3)	(4)	(5)
1 Rice	1068	997	1084	1124
2 Coconut (Million nuts)	3220	3293	3425	3593
3 Tapioca	..	3096	3410	4198
4 Arecanut (Million nuts)	7737	9681	10683	11473
5 Pepper	27	22	21	21
6 Tea	40	39	44	43
7 Bananas & other plantains	328	361	345	374
8 Cashewnut	85	98	102	107
9 Rubber	23	47	50	60
10 Coffee	7	10	11	11

* Source: Bureau of Economics & Statistics, Kerala.

4.16 Of the ten major crops enumerated above, rice, coconut, tapioca, arecanut, bananas including other plantain, cashew and rubber showed appreciable improvement in production during the year under review. In respect of the other crops, production remained almost stable in 1967-68.

4.17 The most heartening feature was that just as the country as a whole had remarkable improvements in its cereal production in 1967-68, the State too had its share of prosperity during the year with a bumper crop. Rice production in the State increased from 10.84 lakhs tonnes in 1966-67 to 11.24 lakh tonnes in 1967-68. The marginal increase over the year was 40 thousand tonnes (3.7%). After two bad harvests in 1965-66 and 1966-67 the State was having a good crop in 1967-68 which stood below only to the record crop of 11.28 lakh tonnes of 1963-64 by a small margin of 4 thousand tonnes. The rise in production during the year under review as contributed by the increase in productivity was to the tune of 2.4%.

4.18 Of late, it has been recognised by the State and also to a certain extent at the all India level that the agricultural inputs, even served as packets, will not by themselves kindle up the dynamism needed to revolutionise Indian agriculture. The missing link that hampers the progress of agricultural sector in the State, especially rice production, is organisation which is at least as relevant as fertilisers and other inputs. The agricultural farms, which are notorious for their smallness, have to be brought under an organisation of farmers with a common programme for agricultural operations, of course retaining the individual ownerships and their rights of harvests. For the proper fructification of the planned efforts, the inputs have to be entrusted to an organisation responsible for their application in all the farms. This is what the standing experience of the package programme in Alleppey and Palghat have taught us and lately the great experiment in Andoorkonam Panchayat in Kazhakuttam Block has demonstrated.

4.19 Compared to 1966-67 the production of coconut went up by 4.9% in 1967-68. The increases in respect of other crops were 23.1% for tapioca, 7.4% for arecanut, 8.4% for bananas and plantains 4.9% for cashewnut and 20.0% for rubber. The phenomenal increase in the production of tapioca was mainly contributed by the extension in the area under the crop. But in the case of rubber, the rise in productivity was the more important factor which accounted for the sharp increase in production during 1967-68.

4.20 Among the less important crops, production of sugarcane declined by 8.9%, pepper by 1.6% and turmeric by 0.6%. However, the production of ginger showed a slight increase of 0.6% over the year. In the case of groundnut, the increase was more significant (4.5%).

Rain fall

4.21 Between 1960-61 and 1965-66, the annual rainfall showed a drastic decline. However, since then it has been picking up. In 1967-68, the annual precipitation was of the magnitude of 2746 mm. compared to 2682 mm. rainfall in 1966-67 and 2209 mm. in 1965-66. An account of the rainfall in Kerala for the last few years is provided below:

Year	Annual rainfall (m m)
1960-61	3734
1965-66	2209
1966-67	2682
1967-68	2746

4.22 It is the timeliness of rainfall rather than the total precipitation that affects the level of agricultural production in the State. The timely appearance of the South West and North East monsoons providing little chance for the occurrence of any significant drought was the special feature about the monthly rainfall in Kerala during 1967-68. However, in July, 1968, the State had one of its severest floods causing considerable damages to life and property. The monthwise details of rainfall in the State for the last three years are furnished in the following Table:

<i>Months</i>	<i>Rainfall (MM)</i>		
	1965-66	1966-67	1967-68
(1)	(2)	(3)	(4)
Ju y	423	538	746
August	305	185	498
September	150	309	156
October	191	408	187
November	145	250	73
December	172	53	37
January	3	17	10
February	7	..	32
March	69	26	95
April	163	70	133
May	86	274	96
June	495	552	683
Total	2209	2682	2746

Irrigation

4.23 In a country like ours where the monsoons are unsteady and even untimely, the success of agriculture depends to a very great extent on the availability of assured water supply. In fact, irrigation is a prerequisite for the adoption of improved agricultural practices.

4.24 In 1967-68; the net area irrigated in the State was 4.11 lakh hectares as against 3.93 lakh hectares in 1966-67. The source wise distribution of irrigated area in the last two years has been as shown below:

Sourcewise irrigation

Source	Net area irrigated Area in '000 hectares)	
	1966-67	1967-68
1 Government canals	179.00	182.96
2 Private Canals	10.16	10.16
3 Tanks	72.28	70.50
4 Wells	5.46	5.46
5 Other sources	393.41	410.51
Total	393.41	410.51

4.25 The gross area under irrigation during the year under review was 5.72 lakh hectares as against 5.72 lakh hectares in the previous year. Of this, paddy covered as much as 4.60 lakh hectares (80%), sugar 0.04 lakh hectares (1%) other food crops 0.56 lakh hectares (10% and the non-)food crops 0.53 lakh hectares (9%). The crop-wise irrigation particulars are provided below:

Cropwise irrigation

Crop	(Gross area in '000 hectares)	
	1966-67	1967-68
1. Paddy	424.12	459.72
2. Sugarcane	4.29	4.29
3. Other food crops	55.69	55.69
4. Non food crops	42.70	52.50
Total	526.80	572.20

4.26 The increase in the gross irrigated area occurred mainly in paddy and to a small extent in respect of certain non-food crops 57% of the area under paddy was irrigated in 1967-68 compared to 53% in 1966-67. Out of 45.40 lakh gross hectares additionally brought under irrigation, as much as 35.60 lakh hectares (78%) were in the field of paddy crop.

Food situation

4.27 The food situation in the State in 1968, though not anything commendable, was less severe compared to the previous year. The total monthly allotment of rice in 1968 were higher than those provided in 1967. The average monthly allotment during the year worked out to be 51,971 tonnes as against 45,101 tonnes in the previous year. Government could issue full ration of 160 gm. of rice per adult per day for 16 weeks and also three-fourth ration of 120 gm. of rice for 11 weeks in 1968. For the rest of the year, the ration of rice was at the rate of 80 gm. per adult per day.

4.28 The imports of rice into Kerala for the years 1965 to 68 were as follows:—

Import of rice	
1965	8.88 lakh tonnes
1966	7.52 „
1967	5.41 „
1968	6.24 „
January 1968	36431 tonnes
February 1968	55025 „
March 1968	45032 „
April 1968	26096 „
May 1968	83911 „
June 1968	63663 „
July 1968	41830 „
August 1968	43530 „
September 1968	54784 „
October 1968	62237 „
November 1968	67491 „
December 1968	43619 „

4.29 Government continued to intensify their efforts for large scale procurement of paddy from internal sources. Assisted by good crops in 1967-68, the quantity of paddy procured during the year under review exceeded all the previous years' records. This is evident from the following figures.

Procurement of Paddy**

(Quantity in tonnes)

<i>Month</i>	1956	1966	1967	1968
January	1834	4314	4404	8091
February	15452	18198	19428	24578
March	11181	14183	17369	15760
April	8928	7465	8765	4932
May	4518	5102	7560	2859
June	340	397	671	2544
July	160	148	352	1550
August	..	15	1587	1400
September	9488	10046	19523	16996
October	14232	15082	27597*	24667
November	6642	6907	6576	10727
December	3321	2524	1442*	2888
Total	76096	84381	115274	116992

** Source: Government of Kerala, Civil Supplies Department.

* Including the paddy purchased under requisition and voluntary sale.

4.30 Supplies of rice for consumption from internal sources in 1967-68 was 10.12 lakh tonnes (ie. 90% of the total production of 11.24 lakh tonnes) as against the requirement of 22.56 lakh tonnes at the rate of 360 gm. (approximately 12 oz) per adult per day for the population in 1968. Accordingly there was a deficit of 12.44 lakh tonnes or 55%. With the import of 6.24 lakh tonnes of rice into Kerala during 1968, the total supplies of rice were stepped up to 16.36 lakh tonnes. The total quantities of rice and wheat distributed through ration shops during January to November 1968 have been 5.83 lakh tonnes of rice and 3.74 lakh tonnes of wheat.

4.31 In January 1968, the Central Government withdraw its subsidy on ration rice. The State Government which was reluctant to shift the burden of the consequent rise in price continued to bear the full cost of the increase for some time expecting that Government of India would reconsider their stand as a special case. But as the pressure of the burden on the slim resources of the State exchequer

become unbearable, the State Government was constrained to shift the same lately on to the consumers.

4.32 Despite an increase in rice production to the order of 3.7% in 1967-68, the food deficit in the State increased from 54% to 55% during the year under review. But with the advent of high yielding variety seeds like I.R. 8 agricultural production is expected to register fast progress in 1968-69 and the coming years. For ensuring the climate favourable for the cultivators to put their mite in order to step up agricultural production, the State Government has introduced the Kerala Land Reforms (amendment) Bill 1968. When enacted and implemented the new piece of legislation will meet the long felt needs of the Kudikidappukar, tenants and other cultivating classes in establishing their rights on land.

4.33 A State farm with the help of Russian collaboration is being set up in Kerala. The site has already been selected at Aralam in Cannanore District. Further an Agro-Industries Corporation has been commissioned already in Kerala. This new organisation will under-take distribution of modern implements like tractors, bull dozers, power tillers, power sprayers and pump-sets to cultivators.

CHAPTER 5

FISHERIES, ANIMAL HUSBANDRY AND DAIRYING

5.1 Kerala, though confronted with acute deficit in cereal supplies, has rich natural bounties in the subsidiary food sector. This sector, comprising mainly fisheries and animal husbandry, has already been put on the path of rapid development. With the initiative of the Government a number of new schemes have been taken up and as a result both fisheries and animal husbandry showed appreciable progress during 1967-68.

FISHERIES

5.2 Compared to the previous year, the total fish production in 1967-68 registered a 4% increase in quantity and a 31% increase in value. As against a total landing of 2.35 lakh tonnes valued at Rs. 7.8 crores in 1966-67, the production during the year under review was 2.53 lakh tonnes valued at Rs. 10.2 crores. The marine fish production which stood at 2.28 lakh tonnes in 1966-67 went up to 2.44 lakhs tonnes in 1967-68 registering an increase of 7% over the year. (for details see Appendix 5.1).

5.3 Of the total sea fish production in 1967-68, oil sardine and other sardines comprised 126.3 thousand tonnes (51.7%), prawns 33.3 thousand tonnes (13.6%) and mackerel 3.8 thousand tonnes (1.6%). Compared to these, the landing in 1966-67 contained sardines 116.0 thousand tonnes (51.0%), prawns 26.1 thousand tonnes (11.5%) and mackerel 9.6 thousand tonnes (4.2%). One remarkable feature is that the prawn catches during the year under review registered an increase of 28% over the previous year. The rise in the prawn landings could be attributed to the greater intensity of efforts by trawlers rather than higher productivity. The species-wise distribution of marine fish landings is provided in Appendix 5.1.

5.4 The average beach price of all marine fish stood at 38 paise per kg. during 1967-68. This exceeded the previous year's average price by 6 paise per kg., i.e. by 18.8%. For the major species, the price of oil sardine was 19 paise per Kg. as against 18 paise per Kg. in 1966-67. The price of prawns increased from 103 paise per Kg. to 115 paise per Kg. and of mackerel from 47 paise per Kg. to 60 paise per Kg. over the year. The rise in the price of raw prawns coupled with a sharp fall in the prices of prawn products in U.S.A. precipitated a temporary slump in prawn trade. This resulted in a couple of marginal firms quitting the prawn processing and exporting industry. But the big offers

received from Japan consequent on the quick action by the Indian industrialists retrieved the difficult situation and pushed up the total export earnings of the country to a remarkably higher level.

5.5 The steady rise in the raw material price of prawn products was primarily due to the cut-throat competition by the exporters for the procurement of raw materials for their industry. The only way to stabilise the price of raw materials and make processing economical is for the exporters to pay attention not merely to the processing but also to the production of prawn.

5.6 The Annual Plan expenditure in the field of Fisheries in 1967-68 was Rs. 268.13 lakhs compared to 222.28 lakhs in 1966-67, the increase in the expenditure being 20.6% over the year. The physical achievements in the mechanisation programme comprised 112 mechanised boats constructed, 77 boats issued to fishermen and 148 fishermen trained during the year. Also in 1967-68, 171 boats were under various stages of construction.

5.7 Of the ice-cum-freezing plants which were under construction in 1966-67, the plants at Azhikode, Alleppey and Quilandy were completed during 1967-68. The construction of the plants at Thalai, Attipra, Willington Island, Meppady and Ponnani was continued during the year under review.

5.8 The Kerala Fisheries Corporation which is a public sector undertaking exported during the year 847 tonnes of frozen shrimp and earned foreign exchange worth of Rs. 71.71 lakhs. In the previous year, the Corporation had exported 407 tonnes of frozen products valued at Rs. 42.84 lakhs. During the Fourth Plan period, the Corporation is expected to shoulder greater responsibilities. As such, the administration and the functioning of the Corporation will have to be streamlined so as to make it better equipped for the task demanded of it.

5.9 The Co-operative movement in the fisheries sector gained considerable momentum during 1967-68. 230 Co-operatives were started anew in 1967-68 as against 53 in 1966-67. Of the new societies, 227 were Malsya Ulpadaka Co-operatives, 2 Regional Marketing Co-operatives and 1 Marketing Federation. At the end of March, 1968, there were 747 fisheries co-operatives—194 Credit, 536 Malsya Ulpadaka and 17 Marketing Societies. The total membership increased from 69,074 to 78,847 over the year under review. Similarly, the paid-up share capital registered a phenomenal growth from Rs. 9.07 lakhs to Rs. 12.45 lakhs. The percentage increases in membership and paid-up share capital were 14 and 37 respectively. The rate of increase in the paid-up share capital was 16% higher than in the previous year. The fishermen co-operatives were given State assistance of Rs. 10.20 lakhs in 1967-68 as against Rs. 4.39 lakhs in 1966-67 as share capital contribution, grants and long-term loans. The long-term loans intended

for the purchase of fishery production equipment amounted to Rs. 7.88 lakhs which exceeded the previous year's loan assistance by 86%.

5.10 The welfare assistance to fishermen included a housing and colonisation scheme and also scholarship to their children. During the year, 30 houses were constructed for fishermen while 121 houses were under various stages of construction. The scholarships advanced to the children of fishermen communities numbered 112 in 1967-68 as against 78 in 1966-67. A grant of Rs. 30,000 was also given to the bereaved families of 32 fishermen who lost their lives while fishing in the sea.

5.11 Investigation for the construction of fishing harbours at Kayamkulam and Kootayi was taken up during the year. The construction of harbours facilities at Vizhinjam, Mopla Bay, Baliapatam, Beypore and Ponnani continued as Centrally sponsored schemes.

5.12 The vessels of the Indo-Norwegian Project and the Off-shore Fishing Station at Cochin have provided valuable information about the fishing potentialities of the Arabian sea. Based on these data, the Central Sub-group on Fisheries of the Working Group on Agriculture for Fourth Five Year Plan has estimated the catch potential of the fishable area within the continental shelf as 182 tonnes of fish per square mile for Kerala. This is the maximum for all maritime States of the Indian Union, the next highest being 137 tonnes for Maharashtra and 95 tonnes for Mysore and Goa. The potentialities of the in-shore waters of Kerala is estimated at 317 tonnes per square mile compared to 170 tonnes for Mysore and 146 tonnes for Maharashtra.

ANIMAL HUSBANDRY

5.13 Organised effort in the development of animal husbandry has made considerable impact on the State's milk supply position. The per capita availability of milk which was only just over an ounce in 1961 has increased to about two ounces in 1966 which, however, is only one fifth of the optimum requirement for a balanced diet. At the all India level the availability of milk is comparatively very high reaching nearly 50% of the optimum. The low per capita availability of milk in the State has been mainly due to (i) a high population concentration, (ii) non availability of essential feeds and fodder and the lack of suitable grazing grounds and (iii) the poor genetic material available.

5.14 The draught bullocks numbered about 8 lakhs, i.e., a pair of draught animal for every 6.25 acres of ploughable land against the recommended norm of one pair for every 10 acres. But between the year 1961 and 1966 the stock of cattle and poultry went up while that of buffalo, sheep and goat declined. The changes in the live stock population in Kerala and the relative position with

India are indicated in the following table. The details are provided in Appendix 5.2.

Live stock population—Kerala

Category	Percentage changes between 1961 and 66	Percentage of India	
		in 1961	in 1966
1. Cattle	+3.78	1.57	1.63
2. Buffaloe	—2.89	0.95	0.89
3. Sheep	—50.00	0.06	0.03
4. Goats	—9.38	2.16	1.84
5. Other livestock	—6.77	1.43	2.25
Total Livestock	—1.22	1.40	1.37
6. Poultry	+8.82	7.79	8.62

5.15 The total Plan expenditure for the development of animal husbandry, dairying and milk supply during the first three Five Year Plan periods was Rs 3.41 crores. The expenditures in 1966-67 and 1967-68 were Rs 90.98 lakhs and Rs 76.35 lakhs respectively.

The two new important plan schemes taken up for implementation during 1967-68 were (i) an intensive Cattle Development Project and (ii) an Egg Powder Factory. The intensive Cattle Development Project with its head-quarters at Alwaye will cover parts of the three districts of Alleppey, Kottayam and Ernakulam forming a compact area. The region will have the six existing key village blocks including the Hill Cattle Development Scheme at Kanjirappally. Also the Cattle Feed Manufacturing Unit located at Malampuzha will form a part of the Intensive Cattle Development Block. Though the implementation will take a few more years, the project when completed, will provide a "compact organisation for stepping up milk production as an integral part of balanced agricultural production programme". The Egg Powder Factory envisaged to be completed by 1970-71 will have a production capacity of one tonne of egg powder per day.

5.16 Kerala which accounts for 1.27% of the area and 3.85% of the population of India supports a high concentration of poultry in the country. The relative position of the State with all-India in the total stock of poultry increased from 7.79% in 1961 to 8.62% in 1966. A large non-vegetarian population has taken to poultry rearing as a subsidiary enterprise; and the growing attention paid

by the State provide the most congenial atmosphere for the development of this industry in the State.

5.17 The State accounts for 20% of the total egg production in India. The export potential is about 20 crores of eggs per annum. Under the Chengannur Egg Collection and Marketing Scheme 20.55 lakhs eggs were collected during 1967-68. The total number of eggs produced in all the farms together, excluding the Broiler Farm, Pettah, was 9,37,279 from 5253 layers in 1967-68 as against 7,24,659 from 4142 layers in 1966-67. The average yield per layer was 178 eggs during the year compared to 175 in the previous year.

5.18 The first stage of the Indo-Swiss Project, started in 1963, for cattle breeding, dairy economy and fodder development at Mattupatty was completed by March 1965. The Project has since entered into its second stage, namely, extension of the cattle breeding programme and the establishment of a trial settlement scheme in Peermade.

5.19 In the field of dairy development, the Nilambur Milk Chilling Centre sponsored as part of the Calicut Milk Scheme was completed and commissioned in 1967-68. The Ernakulam Milk Scheme was commissioned in August 1967. Establishment of Milk Supply Schemes at Kottayam and Alleppey has been under way during the year.

5.20 Dairy development is an essential part of animal husbandry development. The two Departments have to work in close unison for augmenting milk production and its effective distribution. In fact, milk distribution will have to be integrated with dairy development so that milk supplies catch up with the increasing demand.

FORESTRY AND PLANTATIONS

Forests

6.1 Forests occupy about 30% of the total geographical area of the State. About 15% of the natural forests is situated in inaccessible localities and so the exploitation of forest produce is difficult and expensive. These areas are to be opened up with a network of road system capable of using throughout the year.

6.2 About 20% of the natural forests are private owned. These forests are being subjected to over exploitation. Unless Scientific management is practised in private forests, there will be depletion of our forest wealth. During the year under review, extensive planting of eucalyptus, teak, soft wood, anjily and fuel wood species was carried out. 4337 hectares were put under different species of eucalyptus, 1883 hectares under teak, 1165 hectares under soft wood, 720 hectares under fuel wood and 81 hectares under Anjily (Appendix 6.1)

6.3 The out-turn of major and minor forest produce was lower than in the previous year. Logs comprising of teak and other varieties exploited during the year under review form only 54% of the quantity exploited during 1966-67. The quantity of firewood removed is only 35% of the quantity removed during the previous year (Appendix 6.2)

6.4 The receipt from the sale of timber amounted to Rs. 681.5 lakhs and from fuel wood Rs. 10.5 lakhs, giving an increase of Rs. 80.4 lakhs and 2.2 lakhs respectively, over the previous year. The gross receipts from the sale of major and minor forest produce in 1967-68 amounted to Rs. 718.4 lakhs registering an increase of 48.9 lakhs over 1966-67 (Appendix 6.3)

Different schemes under forests are aimed at expanding the cultivation of fast growing species of industrial importance hand in hand with the enrichment of natural forests which are degraded to a considerable extent due to biotic factors. In order to estimate the extent and nature of the State's forest the physical possibilities of their economic exploitation, the growing stock, expected timber yield and the volume increment, a forest resources survey is proposed to be undertaken. A survey on Utilization of Forest Produce is also being undertaken to study the present structure of all forest based industries.

PLANTATIONS

Rubber

6.5 Rubber Plantation Industry in Kerala registered satisfactory progress both in area and production during the year under review. From 171.33 thousand hectares in 1966-67, the area under rubber increased to 181.59 thousand hectares in 1967-68. About 60% of the total area is planted with high yielding planting materials. The number of units of small growers holding increased from 80422 units with an area of 104756 hectares to 91205 with an area of 113408 hectares. Total number of units consisting of holdings and estates increased from 81015 with an area of 161074 hectares to 91802 with an area of 169650 hectares (Appendix 6.4)

6.6 Total tappable area under rubber was 111.4 thousand hectares in 1967-68. This was lower than the tappable area in 1966-67. Average yield per hectare has increased from 483 kg. in 1966-67 to 539.3 kg. in 1967-68.

6.7 Production of natural rubber has registered a record figure during the year under review. From 54818 tonnes in 1966-67, the production increased to 64468 tonnes, giving a percentage increase of 17.6.

6.8 Consumption of all kinds of rubber increased to 109704 tonnes in 1967-68 from 103190 tonnes in 1966-67. The consumption of natural rubber has also increased from 68685 tonnes in 1966-67 to 74518 tonnes in 1967-68. The consumption of synthetic rubber showed a steady increase till 1966-67 and during the year 1967-68 there is a slight fall in the quantity consumed (Appendix 6.6)

6.9 One of the major problems facing the rubber industry during 1968 was the problem of fluctuating prices. Since the majority of the cultivators are small holders any steep and serious fall in the prices will not only affect the position of the cultivators but also the economy of the State in general. The recommendations of the Tariff Commission with regard to rubber prices ruled out important factors in price fixation and were unduly biased by the cost of production of efficient units.

6.10 With regard to imports, it has been pointed out that the requirements of manufacturing industry can be met by indigenous production. So, unless a proper import policy is followed by restricting imports except that of special types of synthetic rubber, even the current prices which the producers are obtaining, may not be sustained.

Tea

6.11 Area under tea cultivation during the year under review was 39,241 hectares, which forms 11.30% of the total area under tea

cultivation in India. Production of tea was 42232 tonnes which formed 11.04% of the total all-India production. The area declined by 0.94% and production decreased by 5.90% over the previous year (Appendix 6.7)

6.12 The average yield per hectare during the previous year was 1133 kg. which is higher than 1076 kg. in the year under review. Details of area under cultivation are given in (Appendix 6.8)

6.13 Total number of tea estates increased from 2536 in 1965-66 to 2539 in 1966-67. Out of this 2291 estates were less than 5 hectares in size. Yield per unit area was highest in size groups of 200-400 hectares (Appendix 6.7)

6.14 Average prices of leaf and dust teas sold at Cochin auctions were Rs. 5.79 and Rs. 5.04 respectively during 1967. The prices in 1966 stood at Rs. 4.80 and Rs. 4.51 respectively.

Coffee

6.15 Total area under coffee cultivation during the year under review was 26468 hectares as against 25152 hectares in 1966-67, the percentage increase being 5.2. Major Coffee producing districts are Kozhikode, Cannanore and Kottayam.

6.16 The trend in production has been a steady rise in Kerala. During the year under review the production was 11.46 thousand tonnes as against 10.51 thousand tonnes during 1966-67. The percentage increase has been 8.3.

6.17 The yield per hectare for the year under review was 433 kg. per hectare as against 418 during 1966-67.

CHAPTER 7

INDUSTRY AND MINING

7.1 The Industrial sector in Kerala witnessed substantial progress in certain limited areas during the year 1968; but the age-old problems of many industries, particularly of traditional industries such as Coir, Handlooms, Cashew and Bidi, continued unabated inspite of earnest attempts by the Government to find viable solution for these problems.

7.2 According to provisional estimates available for September, 1968, the total number of factories in Kerala increased to 3078 (as on 30-9-1968) from the previous year's figure of 2827. Factory employment also registered an increase from 1.95 lakhs in 1966 to 2.02 lakhs in September, 1968. It may be pointed out, in this connection, that in Kerala, of the total working force in the industries sector as a whole, only about 17% are engaged in the factory units.

7.3 An analysis of the data relating to factory sector in Kerala reveals that the State is dominated by traditional and relatively low-technology based industries such as cashew, oil mills, rice and flour mills, handlooms, coir, saw mills, printing and binding, bricks and tiles, etc. Cashew alone accounts for half the total number of factory workers. While traditional and agro-based industries predominate, basic metal industries account for only 1% of the factory workers in the State.

Number of Factories in Kerala, as on 30-9-1968.

<i>Sl. No.</i>	<i>Industry</i>	<i>No. of Factories</i>
1	Canning and preservation (fruits and vegetables, fish and sea foods)	36
2	Rice and Flour mills	115
3	Oil Mills	296
4	Tea factories	127
5	Cashew factories	254
6	Beedi and Cigar	62
7	Cotton Textiles	227
8	Coir	159

9	Umbrellas	15
10	Saw Mills	257
11	Plywood and timber industries (including splints and veneers)	239
12	Printing and Binding	212
13	Rubber and Rubber products (including Tyre retreading)	143
14	Bricks and tiles	232
15	Pharmaceuticals	26
16	Metal products	97
17	General and jobbing Engineering	78
18	Electrical machinery	27
19	Repair of Motor vehicles	147
20	Others	329
Total		3078

* Provisional.

Source: Bureau of Economics and Statistics, Kerala.

7.4 The District-wise distribution of factories in Kerala as on 31-12-1967 indicates the uneven growth of industries as between the various districts or regions within the State.

**District-wise distribution of working factories and
Employment in 1967**

<i>Sl. No.</i>		<i>No. of factories</i>	<i>No. of Employees</i>	<i>Rank in - Employment</i>
(1)		(2)	(3)	(4)
1	Trivandrum	141	10,307	7
2	Quilon	423	89,987	1
3	Alleppey	281	13,120	6
4	Kottayam	262	9,554	8
5	Ernakulam	339	23,819	2
6	Trichur	482	16,994	4
7	Palghat	244	6,936	9
8	Kozhikode	327	18,465	3
9	Cannanore	328	13,166	5
	State	2827	202,348	..

Note: The above figures are provisional.

7.5 As most of the units especially traditional industries employ low technology, the productivity of the industrial units is very low. With the result, low wage rates prevail for the factory workers when compared to other parts of India. A comparative statement of industrial wage rates in the different States for the year separately for workers earning less than Rs. 400 is given in Appendix 7.3. It shows that the average daily earnings of the factory workers in Kerala is among the lowest in India. The traditional industries like coir, handloom and cashew, employing a large percentage of working population account for the low per capita daily earnings.

7.6 The production figures of some of the important industrial products like cement, coffee, salt, plywood, yarn and cloth are given below:

Production figures in selected Industries

<i>Sl. No.</i>	<i>Name of produce</i>	<i>Unit</i>	1964-65	1965-66
(1)	(2)	(3)	(4)	(5)
1	Manufacturing of hydroginated Oil	Quintal -	17,249	17,295
2	Tea	100 Kg.	43,612	43,001
3	Coffee	M. T.	10,143	12,834
4	Salt	Quintal	10	16
5	Yarn	100 Kg.	12,003	11,160
6	Cloth	1000 Mtr.	19,118	19,930
7	Plywood	Sq Metre	25,63,151	24,85,598
8	Cement	M. T.	43,492	46,886
9	Electricity Generator	Million KWH	9,03,658	9,26,359

Joint Stock Companies:

7.7 During 1967-68 (April 1967 to December 1967), sixteen (1 public and 15 private) companies were newly registered. 14 Companies (3 public and 11 private) were struck off, 17 Companies (5 public and 12 private) were liquidated. One public limited company was transferred from this State to another State.

No. of Joint Stock Compnies from 1965-!66 to 1967-68

<i>Year</i>	<i>Public</i>	<i>Pritate</i>	<i>Total</i>
1965-66	379	631	1010
1966-67	356	634	990
1967-68	349	625	974

7.8 There was a reduction of nearly 7.91% in the number of public Joint Stock Companies over the period 1965-66 to 1967-68. But in the case of private Joint Stock Companies there was a net increase of 0.48% during 1966-67 over the period 1965-66, but this number was reduced by 1.42% over the period 1966-67 to 1967-68. On the whole there was a decrease of 3.56% the during the period 1965-66 to 1967-68.

7.9 Even though there was a declining trend in the total number of Joint Stock Companies, it is interesting to note that there was substantial increase with regard to both authorised and paid up capital from 1965-66 to 1967-68 in the public as well as private limited concerns as is seen from the following table:—

Details of authorised capital and paid up capital in the Joint Stock Comapnies during the period from 1965-66 to 1967-68

Year	Authorised Capital			Paid up Capital		
	Public	Private	Total	Public	Private	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1965-66	16836.56	4107.81	20944.37	3352.67	963.06	4315.73
1966-67	17060.56	4164.51	21225.07	3508.86	974.44	4483.30
1967-68*	17180.56	4205.81	21386.37	3600.56	1163.78	4764.34

* 1967-68 relates to April 1967 to December 1967.

Industrial Policy Statement

7.10 The Industrial policy statement of the Government of Kerala offers several incentives for industrialists. Power intensive industries and other industries started outside the existing major industrial belts would qualify for suitable rebates in power tariffs. Industrial units will be insured against possible loss of production due to power failure.—It is proposed to supply free of cost project reports on medium and small scale industries to prospective entrepreneurs. In the case of large industries the Government policy is to assist in obtaining licence and in procuring raw materials besides meeting 75% of the cost of project studies. The land acquisition cost will be recovered from the industries in easy instalments. The Government will also provide guarantees to enable private industrialists to obtain credit from Central or State agencies of institutional credit.

Government owned Industries:

7.11 Forest Industries (Travancore), Alwaye, is engaged in the exploitation of the forests in the concession area required for the Government to raise industrial plantations. During 1966-67 a net profit of Rs. 15.57 lakhs was earned by the Unit.

7.12 Travancore-Cochin Chemicals, Alwaye, produced only 6487 M. Tons of caustic soda in 1966-67 compared to 9599 M. Tons in 1965-66. The production of Sodium hydrosulphite was also adversely affected by power cut and prolonged strike. The actual production of sodium hydrosulphite during the year was 447 M. Tons as against 547 M. Tons in 1965-66. In the context of increasing costs of manufacture, price realisations have been inadequate. The industry has represented to the Government of India for permitting increases in selling prices of caustic soda and the Government have referred the matter to the Tariff Board. The new caustic soda plant in the unit was commissioned on 24-6-1967. The company made a net profit of Rs. 0.39 lakhs as against Rs. 11.54 lakhs in 1965-66. The Fourth-Stage expansion of the unit envisages the following:—

- (i) establishment of an additional unit rated to produce 100 tonnes of caustic soda daily, with facilities for processing Chlorine thus achieving a total rated capacity of 200 tonnes of caustic soda per day;
- (ii) enhancement of the capacity of sodium hydrosulphite plant from 10 tonnes per day to 14 tonnes per day.
- (iii) enhancement of the capacity of sodium sulphide plant from 4.2 tonnes per day to 7 tonnes per day.

7.13 Regular production in the Transformers and Electricals (Kerala) commenced from May 1966. During the year 1966-67 the plant was working below capacity. The company intends to expand its activities by taking up the manufacture of components with the aid of the collaborators, M/s. Hitachi Ltd., Japan. The company showed a net loss of Rs. 27.56 lakhs during the year.

7.14 1966-67 was quite a successful year for the Kerala Premo Pipe Factory. Its products and turnover exceeded the best results obtained by the factory even under the management of the Norwegians. The Premo Pipe's manufacture attained 78.3 percent of the maximum capacity. The net profit of Rs. 1.19 lakhs was obtained without any increase in the price of the product inspite of all round inflation. The company also started trial production of mosaic tiles.

7.15 The Travancore Titanium Products had a share capital of Rs. 93.25 lakhs at the end of 1966 of which the Kerala Government holds shares worth Rs. 59.56 lakhs. During the year ended

31-12-1966 a net profit of Rs 8.73 lakhs was made by the Company. The accounts of United Electrical Industries (Quilon) for the year ended 31-12-1966 show that the working of the company in the year enabled it to make a net profit of Rs 1.36 lakhs. The Tracco Cable Company realised a net profit of Rs 0.88 lakhs during the year ended 31-3-1967 as against Rs 9.98 lakhs in 1965-66.

Kerala State Industrial Development Corporation:

7.16 In the promotion of industries in the State, the Kerala State Industrial Development Corporation has been assigned a very crucial role. The State Government is considering a proposal for the re-organisation of the Corporation by strengthening the technical wing. The idea is to establish a technical cell attached to the corporation and to obtain the services of a technical adviser who will be in-charge of the cell. The corporation will also have separate officers who will be experts in the industrial fields such as rubber, plastics and electronics. The constitution of the cell will be such that it should be able to prepare project reports also when required. Along with the re-organisation of the corporation, the Government has also plans to re-organise the Department of Industries. A Deputy Development Commissioner may be put in charge of the small industries sector. As a follow up programme the intensive campaign for starting small scale industries in the State will be brought under the control of the District Officers.

Traditional Industries

7.17 The Government has embarked on a programme of resuscitation of traditional industries like Coir, Handloom and Cashew industry. Nearly 83% of the industrial labour force are working in traditional industries. These industries are not only important to the State's economy from the point of view of employment, but also from the angle of their foreign exchange earning capacity.

Coir

7.18 Coir sustains about 4 lakhs of workers besides another 8 to 10 lakhs of others who are dependent on them. About 6,37,910 quintals of coir and coir products to the value of Rs. 13.71 crores were exported in 1966-67. The value of exports of coir and coir manufactures in 1967-68 is nearly Rs. 13.55 crores. It is estimated that the total amount spent on coir development by the State and Central Governments during the last 17 years is about Rs. 2.78 crores while the revenue earned by way of foreign exchange, export duty etc., for the same period would be more than 4 to 5 times the amount spent.

7.19 Out of total production of coir and coir products 92% is accounted for by the co-operative sector. There were 543 co-operatives in 1966-67 on which government have invested Rs. 278 lakhs

by way of share capital and working capital loan. The value of goods produced in these societies during the year amounted to Rs. 1.30 crores and the sale to Rs. 2.35 crores.

7.20 The existing cooperatives have taken into their fold about 1.25 lakhs of workers only out of an estimated total of 4.50 lakhs workers. The labour conditions prevailing in the industry is most unenviable. The workers employed in the spinning sector do not earn even a rupee for a day of 12 to 14 hours.

Statement showing targets and achievements under the First, Second and Thir Five Year Plans

	<i>Physical targets</i>			<i>Achievements</i>		
	<i>1st plan</i>	<i>2nd plan</i>	<i>3rd plan</i>	<i>1st plan</i>	<i>2nd plan</i>	<i>3rd plan</i>
1 Primary coir yarn societies	120	275	165	120	196	140
2 Thondu societies	25	6	..	25	6	..
3 Coir-co-operative unions	..	15	..	..	15	..
4 Central coir marketing co-operative	2	1	2	2	1	1
5 Mats and mattings cooperatives	..	2	10	..	2	10
6 Rope manufacturing societies	..	..	1	..	2	1
7 Model coir factory	..	1	1	..	..	..
8 Husk Retting unions	..	..	30	..	..	19
9 Bristle of Mattress Fibre	..	..	2	..	..	2
Manufacturing Societies	..	..	..	..	..	..
	147	300	211	147	222	175

7.21 With a view to reorganising the coir industry on a sound basis the Government of Kerala prepared a Rs. 15.6 crore scheme. The scheme includes programmes for the control of the price of retted husk, strengthening of the co-operative sector, modernising the marketing operations, setting up of an export house for coir and welfare measures for the coir workers.

Hand looms

7.22 Nearly 5 lakhs of people depend in the handloom industry in Kerala. There are about 1.2 lakh looms in the State. Most of the

looms are found in the districts of Cannanore, Trivandrum, Qulon and Palghat. The industry is bedevilled by marketing problems and low productivity. The export of handlooms cloth has suffered a serious set back recently. It is considered that there is good scope for the expansion of existing markets and exploring new ones for our products by intensifying the promotional activities abroad. Nearly 45% of the looms in the State are organised on a co-operative basis. In 1961-62 an apex co-operative society for all the handloom societies in the State was organised. As on 30-6-1965 there were 404 societies with a total membership of 52,500 persons. In 1965-66 a cash credit accommodation of Rs. 50 lakhs was sanctioned to 210 societies. There were 411 handloom societies including 25 industrial co-operatives on 31-3-1968. Nearly 30,000 looms forming about 28% of the total looms are under private ownership. Thus about 73%—45% in the co-operative sector and 28% in the private sector—of the looms are organised while the remaining 27% are scattered all over the State and cannot be easily organised into valuable units. The annual production of handloom cloth in the private sector in 1966-67 was 9.52 lakh metres as against 4.23 lakh metres in the co-operative sector. A phased programme of introduction of powerlooms has been taken up. Nearly 1,000 power looms have so far been installed in the State.

Cashew

7.23 Cashew kernels and shell liquid together bring in about Rs. 45 crores worth of foreign exchange. Cashew tops the list of export products of Kerala and is the second biggest dollar earner for the country. Of the 2.6 lakh tons of nuts required for cashew industry, only about 60,000 tons are locally produced. The major problem confronting the industry relates to procurement of raw materials. About one lakh of workers are dependent on the industry. A tendency is prevalent for the closing down of organised industrial units in the sector. To prevent this the Government may have to enter this field of industry either directly or indirectly. It is therefore proposed to establish a cashew Development Corporation. Details of the scheme are being worked out.

Bidi

7.24 During the year under review, Bidi industry faced a very serious crisis. Bidi industry which employs about one to one and a half lakh workers has been facing a problem of continuously deteriorating employment situation. There were 66 beedi manufacturing units in the State on 1-1-1967. The average daily earnings of a beedi worker is below Rs. 3 per day. The industry is now in a critical position, wherein, several large scale Units, have wound up their activities. This has led to large scale unemployment of

about 15,000 beedi workers in the Cannanore area. The Government has embarked on ameliorative measures to relieve the plight of the beedi workers. Co-operativization of the beedi manufacturing industry is aimed at.

Kerala Small industries Corporation

7.25 The Kerala State Small Industries Corporation is engaged in the purchase and distribution of raw materials for small scale industries, the management and construction of industrial estates, supply of machinery on hire-purchase system and running of production and service units. In 1967-68 also the Corporation continued the distribution of iron and steel and non-ferrous metals as well as raw materials such as sulphur, potassium chlorate and Palm oil. However, owing to the liberalised import policy of the Government of India, whereby non-ferrous metals were directly available to the actual users, there was a fall in the turnover in the raw material distribution section of the Corporation. Raw materials valued at Rs. 30.73 lakhs were purchased by the Corporation and the turnover of the raw materials section of the Corporation amounted to Rs. 38.22 lakhs as against Rs. 50.11 lakhs in 1966-67. In spite of the decreased turnover the Corporation was able to make a profit of Rs. 1.64 lakhs during 1967-68 as against Rs. 1.48 lakhs in 1966-67. Considerable progress was achieved in the distribution of machinery under hire purchase system. As against Rs. 2.88 lakhs worth of machinery distributed during 1966-67 the Corporation was able to supply machinery worth Rs. 10.71 lakhs in 1967-68.

Industrial Estates

7.26 The Industrial Estates programme is one of the positive institutional approaches that have been developed to foster the growth of small industries. Kerala was one of the earliest states in the country to implement the programme of Industrial Estates. The State has now 18 Industrial Estates at the rate of two per district. Out of 18 Industrial estates, only 14 are now functioning. 218 Industrialists have occupied 399 sheds out of the 435 sheds constructed up till now. The Government have so far invested Rs. 138 lakhs and the investment by the private sector has been Rs. 160 lakhs. This has generated a total production worth Rs. 219 lakhs per annum and a total employment of 1800. In August 1967 a committee to enquire into the working of the estates in the state was set up with the Director of Industries and Commerce as Chairman. It is understood that a draft report of the Committee has been submitted to Government. During 1967-68 rent collected from industrial estates in the state amounted to Rs. 3.5 lakhs as against Rs. 2.35 lakhs in 1966-67. The total volume of construction work executed during 1967-68

amounted approximately to Rs. 12 lakhs as against Rs. 14 lakhs in 1966-67.

Rural Industries Project

7.27 The main objective of the rural industries programme is the intensive and rapid industrialisation of rural areas. Of the 45 rural industries projects started in India in 1962 two were located in Kerala, one at Alleppey and the other at Kozhikode. The Kozhikode project covers the blocks of Kozhikode, Chavyoor and Tirurangadi. This project has so far sponsored 129 small scale industries involving a total outlay of about Rs. 1.20 crores. Most of the units are based on locally available raw materials. Of the 129 factories, 94 have already gone into production. It has been estimated that these units have created employment for about 5,060 persons. The employment potential of the project at the end of the Fourth Plan is 12,000. The Kozhikode project has been maintaining very good liaison with the small Industries Service Institutes and the National Research Laboratories in the country for developing various industries. The total amount of loans advanced from the project during the last five years of its working is nearly Rs. 43 lakhs. The amount of loan advanced in 1967-68 was Rs. 8.5 lakhs as against the amount of Rs. 13.2 lakhs in 1966-67. The Alleppey project covers the blocks of Ambalapuzha, Aryad, Kanjikuzhi, Valianad and Pattanacad. An evaluation committee of the Rural Industries Project Committee of the Planning Commission which visited the State pronounced the Kerala projects as the most progressive in India.

New Industrial Projects

7.28 Among the new major industrial ventures for which initial steps were taken in the year under review, special mention should be made of the Titanium Complex which when completed would involve a total investment of Rs. 45 crores. With regard to the Cochin shipyard, it is understood that, after years of prolonged delay and postponement causing heart-burn for the people of Kerala, the Government of India has initiated preliminary action. The revised project is expected to be submitted soon by the Japanese Collaborators, the Mitsubishi Heavy Industries. The State Government is finalising arrangements for the supply of water and electricity to the shipyard area. A scheme to start ship ancillaries is also being examined by the State Government.

Minerals

7.29 The State's mineral wealth consists mainly of beach minerals like ilmenite, rutile, monozite, circon, silliminite, clays (high grade), quartz sand, lime-stone, etc. The following tables give figures for production and sale of sands and different varieties of clays during 1966-67

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CHAPTER 8

POWER

8.1 Since Kerala is endowed with abundant water resources, generation of power through hydro-electric projects is assumed of great importance. It is estimated that about 6% of India's total hydro-power potential is in our State. Even if we commission all the projects now in progress, hardly 35% of our resources would be exploited.

8.2 From the commencement of the Pallivassal Project, there has been a steady and systematic development in power generation. The installed capacity of the State system as on 31-3-1968 was 5,28,500 K.W. whereas it was 3,60,500 K.W. on 31-12-1967.

The Projects in Operation as on 31-12-1968

Project	Basin	Installed capacity ('000 K.W.) as on				
		31-3-66'	31-3-67'	31-3-68'	31-3-69'	31-3-74'
1. Pallivasal	Mudirapuzha (Periyar)	37.5	37.5	37.5	37.5	37.5
2 Sengulam	do.	48.00	48.00	48.00	48.00	48.00
3 Neriamangalam	do.	45.00	45.00	45.00	45.00	45.00
4 Panniar	do.	30.00	30.00	30.00	30.00	30.00
5 Peringalkuthu	Chalakydy	32.00	32.00	32.00	32.00	32.00
6 Sholayar	do.		18.00	36.00	54.00	54.00
7 Sabarigiri	Pamba		150.00	300.00	300.00	300.00
Total		192.5	360.5	528.5	546.5	546.5

8.3 Projects under different stages of execution are noted below:

Project under different stages of execution during the year 1967-68

Project	Basin	Capacity ('000 K.W.)	Expenditure incurred during 1967-68 (Rs. in lakhs)
(1)	(2)	(3)	(4)
1 Kuttiyadi	Kuttiyadi	75.00	153
2 Idikki (1st stage)	Periyar	390.00	657

8.4 With the commissioning of the Sabarigiri project a break through in power generation was achieved and our State became self-sufficient in power. But since the project was completed late in the year the State had to purchase power from other States. In 1967-68, 31.64 million K.W. of power was purchased. A table showing the quantity of power generated and purchased during the years 1962-63 to 1967-68 is given below:

	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
Electricity generated in the State (Million K.W.)	715.55	762.88	795.10	841.94	1083.11	1407.00
Electricity purchased from neighbouring States (Million K.W.)	59.66	78.89	97.20	116.48	77.99	31.64

8.5 The investigation reports of the following projects have been completed.

1. Edamalayar Project.
2. Pandiyar-Punnapuzha Project.
3. Kakkad Project.
4. Idikki Project-II Stage.
5. Silent Valley Project.
6. New-Pallivassal Project.
7. Lower Periyar Project.
8. Perinjankutty Project.
9. Erection of a Thermal Plant.

8.6 Total generation of power during 1967-68 was 1407 million units against a capacity of 2600 million units. In other words only 54% of the generation capacity is being utilised now. Average energy generated per day is calculated as 40 lakh units and they are distributed in the following manner.

<i>Nature of load</i>	<i>Average energy consumed a day (in lakh units)</i>
1 Lights and Fans etc. (Domestic and Commercial)	3.6
2 Industrial L.T.	3.3
3 Industrial H.T.	29.0
4 Irrigation and dewatering	1.4
5 Licences	2.0
6 Miscellaneous	0.7
Total	40.0

8.7 During the year 1967-68, 53 villages were electrified and 40,884 new connections were given. 6,193 Street Lights also were installed during the reference period (Details are given in Appendix).

8.8 In the year 1967-68, one unit having a capacity of 18 M.W. in the Sholayar Project and 3 units of capacity of 50 M.W. each in the Sabarigiri Project were commissioned, raising the total installed capacity of the system to 528.5 M.W. By the end of March 1969, it is expected that the 3rd Unit of the Sholayar Project would start functioning and then the total installed capacity will be 546.5 M.W.

8.9 Details showing the distribution of consumers and connected load are given in the following table:—

Distribution of Consumers and connected load as on 31-3-1968

Category	Number of Consumers	Connected load (K.W.)
1 Light and Fans	353010	199246
2 Heat and Small power	12446	24876
3 Agricultural dewatering	11496	59621
4 Public Water works and Sewage pumping	308	4959
5 Industrial (L.T.)	12010	123642
6 Industrial (H.T.)	338	230984
7 Bulk supply to Licensees	7	63192
8 Public Lighting (No. of Street Lights: 122212)	..	6209
Total	389615	712729

8.10 The major consumer of electric power is industries and they consume about 81% of the total Power generated. But on the revenue side the percentage of their contribution is low (about 45%) as they are enjoying the benefits of subsidy. In the case of domestic consumption, on the other hand, the percentage of energy consumed is low while their share to the total revenue is substantially high. When the domestic consumption of electricity was 4.36% of the total power generated, they contributed 16.72% of the total revenue. The percentage distribution of consumption of power and the revenue collected during the year 1967-68 is given in the following table.

Percentage distribution of Consumption of Energy and receipts

<i>Category of Consumer</i>	<i>Energy consumed (%)</i>	<i>Revenue Collected (%)</i>
1 Domestic heat and small power	0.72	1.80
2 Domestic light and fans	3.64	14.92
3 Commercial heat and power	0.61	1.84
4 Commercial light and fans	3.23	15.78
5 Industrial Power (L.T.)	8.11	14.03
6 Industrial Power (H.T.)	72.77	31.28
7 Public lighting	1.01	4.22
8 Irrigation and dewatering	3.04	3.85
9 Water works	0.31	0.34
10 Bulk Supply	6.13	2.72
11 To Extra State Supply	0.43	1.19
12 Miscellaneous (Revenue from reconnection fee, Meter Hire etc.)	..	8.03
Total	100.00	100.00

8.11 The cost at metre per unit of E.H.T. current is 4.62 Ps. per K.W.H. and that for H.T. current is 7.61 Ps. per K.W.H. The average cost is calculated at 3.56 Ps. per K.W.H.

8.12 In recent years, the financial position of the Kerala State Electricity Board has been showing considerable strain. Although the gross revenue of the Board climbed up from Rs. 7.07 crores in 1965-66 to Rs. 9.42 crores in 1967-68, the total operation and maintenance cost went up considerably from Rs. 2.07 crores to Rs. 4.01 crores during the same period. Thus the net operating income declined from Rs. 3.03 crores in 1965-66 to Rs. 2.77 crores in 1967-68. The return on the capital base of the Board decreased to 2.37 per cent in 1967-68 from the 1965-66 figure of 3.44 per cent. This resulted an increase in the revenue deficit. The Board's interest obligations to the Government increased from Rs. 0.77 crore in 1965-66 to Rs. 2.7 crores in 1967-68.

8.13 It may be noted that the Kerala State Electricity Board promised that in the year 1967-68 they would achieve a return of 6.5 per

cent on the capital base, but the performance has been only 2.37 per cent. There has been considerable pressure from the World Bank and the Government of India to take adequate steps to augment the revenue receipts. After deliberations with the Bank authorities, as a major concession, the Bank has agreed to exclude works in progress in calculating the capital base.

8.14 There is excess capacity in the system and it is not being fully utilised due to want of proper transmission and distribution arrangements. Since the overhead costs have already been incurred, if the installed capacity is fully utilised there will be a sizeable increase in the revenue. Hence it is desirable to take early steps to strengthen the transmission and distribution system.

8.15 Now, our State is in a position to meet fully the power requirement of the people. If the projects now in operation are completed and adequate steps are taken for the improvement of its transmission and distribution system, our State will be in a position to sell power to the neighbouring States.



CHAPTER 9

TRANSPORT AND COMMUNICATIONS

9.1 In the context of a developing economy the transport system has a special role to play. Apart from linking the different areas of the State, it has to meet the growing requirements for the movement of raw-materials and finished goods arising on account of the rapid development of industry and rising levels of consumption and distribution. The transport system of the State consists of

- (1) Sections of Southern Railway, 892 K.M. long.
- (2) A road net-work made up of national and provincial highways, district and village roads of 17600 K.M.
- (3) A unique inland water system of navigable rivers and canals of 1885 K.M.
- (4) Thirteen ports including the major port of Cochin, and the intermediate ports of Calicut and Alleppey.
- (5) Hundred and eleven statute miles of airways with air ports at Trivandrum and Cochin.

Road Transport

9.2 While not much light can be thrown on the activities of the private sector in the road transport industry due to the non-availability of reliable data, a clear account of the activities of the Kerala State Road Transport Corporation can be provided with the aid of information made available by the Corporation.

9.3 The corporation was formed on 1-4-1965. The capital investment of the Corporation as on 1-4-1967 stood at Rs. 629.04 lakhs. In the year 1967-68, an additional contribution of Rs. 44 lakhs towards share capital was made by the Government of Kerala raising their capital investment to Rs. 548.04 lakhs. The Central Government represented by the Southern Railway made a contribution of Rs. 11 lakhs during the year bringing their total contribution to Rs. 136 lakhs. Thus, at the close of the year 1967-68 the capital investment of the Corporation stood at Rs. 684.04 lakhs.

9.4 During the year 1967-68, nationalisation schemes were in progress in the following routes.

- (1) Ernakulam-Kottayam Via Vaikom

Complete nationalisation scheme was modified as a partial exclusion scheme, covering the road sector Ernakulam-Erattupetta via Vaikom, and the scheme was implemented on 11-1-1968 with 38 buses on service.

(2) Kayamkulam—Punalur.

Service with 15 buses started on 20-9-1968 as a partial exclusion scheme.

(3) Trichur—Palghat Via Shoranur, Alathoor, Proceedings in progress.

(4) Trichur Guruvayoor Proceedings in progress.

9.5 It has been the policy of the Corporation to introduce new services not only in the road sector selected for nationalisation but also on other routes depending on the requests from the travelling public. Accordingly in the year under report the Corporation introduced services in 80 new routes.

9.6 Inter-State services were also introduced during the year in the following routes.

- (1) Guruvayoor—Palani
- (2) Palghat—Palani
- (3) Kozhikode—Ooty via Nilambur
- (4) Kozhikode—Ooty via Meppady
- (5) Palghat—Ooty
- (6) Palghat—Coimbatore

9.7 There was a net addition of 105 buses, 7 lorries and 8 other vehicles to the operating fleet of the Corporation. The operating fleet at the close of 1967-68 consisted of 1111 buses, 64 lorries and 56 other vehicles, thus making a total of 1231. The number of bus schedules increased from 768 in 1966-67 to 962 during the year 1967-68. The Corporation vehicles operated 689 lakhs of K.M. as against 700 lakh K.M. in the previous year. The average distance travelled by a passenger has increased from 12.5 K.M. to 12.7 K.M. during the year, and the average earnings per passenger has increased to 37.5 paise in the year as against 36.6 paise in the previous year. The earnings per vehicle on road during 1967-68 was Rs. 261 per day as against Rs. 246 in 1966-67. The number of routes, route K.M., distance operated, and the number of passengers carried by the Corporation for the years ending 31-3-1967 and 31-3-1968 are given in Appendix 9.2.

9.8 The revenue receipts of the Corporation for 1967-68 was Rs. 887.97 lakhs, while for the previous year it was only Rs. 751.66 lakhs. The revenue expenditure of the Corporation increased to Rs. 758.49 lakhs as against Rs. 569.13 lakhs in 1966-67, on account of the increase in the cost of fuel, tyres, tubes, spares and cost of personnel.

9.9 The revenue receipts of the Corporation was Rs. 887.97 lakhs and the revenue expenditure Rs. 758.49 lakhs, leaving a gross margin of Rs. 129.48 lakhs in the year 1967-68. The net margin in the year after providing for depreciation was only Rs. 75.49 lakhs as compared to Rs. 127.47 lakhs in the previous year. Out of this Rs. 39.96 lakhs were provided for the payment of interest at 6¼% to the participating Governments. After providing Rs. 39.62 lakhs for bad and doubtful debts, development rebate, bonus etc., the deficit as on 31-3-1968 came to Rs. 4.08 lakhs as compared to net surplus of Rs. 24.12 lakhs in the previous year (vide Appendix 9.3).

Railways

9.10 The railway system of the State is made up of 553 K.M. of broad gauge and 339 K.M. of meter gauge lines. The total railway mileage in the State has been remaining stationary for a number of years. Within the State the districts of Quilon, Palghat, Calicut, Trichur and Cannanore are more favourably placed with regard to railways than other districts. The region south of Ernakulam and Cochin is served with the meter gauge line and the region north of these by the broad gauge line. This break of gauge involves transshipment of through traffic. Cochin harbour is served by both the gauges. As the main railway line from Trivandrum to Kasaragode lies almost entirely along the coast except for a short section between Ernakulam and Karthikappally, the railway facilities are not within easy reach of the eastern part of the State. Taking into account the needs of the State, the State Government has suggested the following seven items of work for inclusion in the central sector schemes for railway development

- (1) Construction of a broad gauge line from Ernakulam to Trivandrum via Alleppey .
- (2) Doubling the existing line from Cochin to Coimbatore.
- (3) Construction of a link line from Tellicherry to Mysore.
- (4) Construction of a link line from Kottayam to Bodinaykkannur via Peerumedu, Kumaly.
- (5) Doubling the existing railway line from Shoranur to Mangalore
- (6) Construction of a new line from Kuttipuram to Ernakulam via Ponnani, Guruvayoor and Cranganore.
- (7) Melathur—Feroke line.

Inland Navigation

9.11 The back-waters, navigable rivers and canals in the State contribute to a fairly good inland navigation system. The State has a total length of 1885 K.M. of inland water ways. The west coast canal

stretching continuously from Trivandrum to Hosdurg except for a land locked break between Azhikkal and Badagara has a total length of 555 K.M.

9.12 The State Water Transport Department, a new minor department with headquarters at Alleppey was formed on 7-6-1968, by taking over the assets and liabilities of the State Inland Water Transport Service. The activities of the Department is confined to the four districts of Alleppey, Quilon, Kottayam and Ernakulam. The Department is now operating 48 schedules. It has a fleet of 75 boats, most of which are very old, their age ranging from 15 to 40 years. The Department has schemes in the Fourth Plan for the construction of new boats, replacement of engines of old boats and the operation of new schedules.

9.13 The expenditure incurred by the Water Transport Section of the Kerala State Road Transport Corporation continued to be higher than the revenue receipts. While the expenditure for 1967-68 was Rs. 11.67 lakhs, the receipt totalled only 9.10 lakhs. The net deficit for the year was Rs. 2.57 lakhs (vide Appendix 9.4). One new boat 'Gayathri' was built and commissioned during the year under report. to relieve the overloading in the ferry service at Cochin, while an old boat 'Lucky' was sold to public auction. Thus at the end of 1967-68, the Corporation had 12 boats for ferry service with a total seating capacity of 1682.

Ports and Harbours

9.14 The coastal and foreign traffic of the State is handled at the major Port of Cochin, the intermediate Ports of Alleppey and Calicut, and the ten other minor Ports. All these Ports are lacking even the minimum facilities required.

9.15 During the year 1967-68, 364 Steamers and 1500 Sailing Vessels, with an aggregate gross tonnage of 10.98 lakhs touched at the intermediate and minor ports of Kerala. The import and export cargo handled by these ships and sailing vessels, both foreign and coastal during the period under review was 4.79 lakh M.T. The revenue receipts from the intermediate and minor ports during 1967-68 was Rs. 9.65 lakhs as against Rs. 7.20 lakhs in the previous year. The number and tonnage of steamers and sailing vessels that called at the intermediate and minor ports of Kerala, along with the foreign and coastal import and export tonnage of cargo, and the revenue receipts for 1967-68 are given in Appendix 9.5, 9.6 and 9.7.

9.16 The present condition of Cochin harbour continues to hinder the rapid growth of the State's economy in the sectors of trade and tourism. Inadequate facilities and inefficient maintenance hamper even the normal functioning of the harbour. Large cargo ships and passenger liners skip Cochin now-a-days as they cannot enter or leave the harbour which needs dredging.

9.17 Messrs, Indopol Ltd. to whom have been entrusted the feasibility study about the development of the minor ports of Kerala have submitted their reports to Government. They have proposed the development of Needakara, Baypore, Azhikkal and Ponnani into cargo-cum-fishing harbours and Azhikode and Thalai into fishing harbours. In these reports they have given the details of economic justification, phasing of works to be executed, workshops and building yards for repair and construction, organisational set up, etc. The total investment recommended by the company is Rs. 117 crores spread over a period of 15 years. The company have also indicated that before actual work can be undertaken for any of the ports, detailed investigation and model studies will have to be done portwise. Accordingly model studies and deep water developments are proposed to be carried out in the Fourth Plan itself.

CHAPTER 10

EXPORT-IMPORT TRADE

EXPORTS

10.1 Exports from the ports of Kerala during 1967-68 showed an improvement compared to that of the previous year. Export earnings during 1967-68 amounted to Rs 145 crores as against Rs 137 crores during 1966-67. A commodity-wise analysis of the export performance products entering the ports of Kerala reveals that while certain products such as cashew kernels, coffee, marine products, pepper, tea, copra, wood and timber witnessed increases in export value, there was a decline in the exports of cashew shell liquid, ginger, lemongrass oil and rubber manufactures. The performance of the major export earners of Kerala is reviewed in the following paragraphs.

Cashew Kernels:

10.2 The year's total exports at 54,968 tonnes were higher by more than 5,000 tonnes compared with the last year. However, this record breaking performance fetching Rs 49.85 crores improvement in total value, was not accompanied by any unit value in the export market. The United States continues to be the biggest buyer of India's cashew, U.S.S.R. being the second major buyer.

10.3 Though the total value of cashew exports from India has shown an encouraging trend, in terms of "market share", India's position in the world market continues to be vulnerable. This is borne out from the fact that while the exports of Indian cashew, to U.S.A. increased during the last six years by about 25%, India's share in total imports of Cashew by the U.S.A. declined from 91% in 1961 to 79% in 1966. Increased demand of the U.S. market for cashew has been met by other countries; Brazil increased her share of the market from 1.2% to 3.7% and Mozambique from 3.8% to 13% during the period. The reasons for the falling share, of India lie in her dependence on foreign sources of supply of raw cashew, especially from the African countries, Kenya and Tanzania. These countries have now started processing their demestically available raw nuts and exporting them to U.S.A. in finished form. This trend not only limits the sources of supply of raw cashew but also poses competition for India in the U.S. market. It is obvious that, from the long-term point of view, it is desirable to reduce the reliance on imported nuts. This calls for concerted efforts to step up indigenous production.

10.4 Cashew export has been facing a problem with regard to packing and packaging. Importers in U.S.A. have been insisting on cardboard packaging. This has been agreed to by Indian exporters. As a consequence, the exporters are now confronted with the task of indigenous production of cardboard with the required strength, viz., 200 lbs. per square inch. Arrangements have already been made for allowing sufficient imports of cardboard packing and box strapping material. In solving other export marketing problems, cashew exporters have not yet achieved any substantial progress, mainly because export business in cashew is speculation-based and many exporters frequently resort to trade practices which dampen the long-term prospects for expansion. It is one of the most unfortunate facets of cashew development in Kerala that a group of speculators and intermediary trading interests have spoilt a business which has, for long, been the pride of Kerala. In other attempts to depress wages and make monopolistic profits, the managements of most of the cashew interest have resorted to "Kudivaruppu", thereby worsening the already difficult conditions in the industry.

Coir and Coir Products:

10.5 A paradoxical situation prevailed in the export market for coir and coir products. While the volume rose by about 800 tonnes, the earnings declined by Rs. 136 lakhs.

10.6 Coir yarn is the most important item of export from India. There was fall in the export of coir yarn during 1967-68 to the order of about 5,800 tonnes as compared to 1966-67. East Germany alone accounted for a decline of about 5,400 tonnes. While some of the East European countries reduced their purchase some others in the same Block, viz., Poland, Hungary and Yugoslavia, increased their imports of yarn from India manifold. The general fall in the demand for coir floor coverings in the West European countries due to the ewitchover to costlier floor coverings made of wool and synthetic fibres also resulted in a reduction in the offtake of coir yarn. Another contributory factor was the recession which has occurred in West Germany during the year. This recession had induced the importers to use up their inventories and to refrain from making fresh imports until existing stocks had been cleared. The tight economic position in U.K. led to destocking in 1967-68. There was no export to Portugal during 1967-68 as the exports to that country were banned by the Government of India.

10.7 Coir mats is another major item of export from India. During the year 1967-68 exports of this commodity were of the order of 13,800 tonnes as against 15,000 tonnes in the previous year. U.K. was responsible for a fall of about 900 tonnes. As mentioned earlier, U.K., our largest trading partner, experienced a difficult economic situation during the period under report. Not only that, but the general stagnation in the trade soon after devaluation of

the Pound Sterling possibly affected the total volume of coir mats exports from India. U.S.A. also lifted lesser quantities of coir mats during 1967-68. Moreover, the Arab-Israel conflict in June 1967 resulted in a decline in the export of coir mattings and rugs to Middle East countries particularly to Iraq, which is a leading market for Indian coir mattings

10.8 Export of coir fibre increased during 1967-68. This was mainly due to increased off-take by East Germany.

10.9 The year 1967-68 witnessed a fall in the export of coir rope also. As against 893 tonnes in 1966-67, only 852 tonnes of coir rope were shipped from India. Exports to Malayasia, our principal market for coir rope, dropped from 212 tonnes in 1966-67 to 64 tonnes in 1967-68. Malayasia, and Singapore use coir ropes for ships calling at their ports. It is reported that synthetic ropes like polypropylene ropes are entering marine usage, thus, posing serious competition to coir ropes.

10.10 Among coir articles, curled coir is a new item of exports from India. Separate figures of exports, of this commodity are available for the period beginning April 1967 only. During 1967-68 curled coir exports amounted to 312 tonnes valued at Rs. 4.31 lakhs. This was marketed in West Germany, Japan, Italy, Spain and Yugoslavia.

10.11 Export of rubberised coir goods is a new development. Separate statistics compiled for 1967-68 indicate that only negligible quantities of this product found markets in overseas countries. The year under review was only the initial period of exports as far as this commodity was concerned. Kuwait and Czechoslovakia were the countries to which the product was nominally shipped during 1967-68.

Pepper:

10.12 Pepper is the most important spice exported from India and it accounts for 40.5% of the total export earnings from spices. Export of pepper has been subject to considerable fluctuations during the last few years. Intense competition from other countries like Indonesia and Malayasia has been largely responsible for the fluctuations in the prices of black pepper. Availability of cheaper supplies from Indonesia has made heavy inroads, limiting the scope for future expansion in sale of Indian pepper in the U.S. market. Unless adequate steps are taken to combat intense competition through appropriate measures by the Government of India and the trade, the prospects for pepper exports will remain bleak. An important step to be taken in an export oriented commodity like pepper is to increase production and improve productivity of pepper cultivation.

10.13 During the year under review 24,644 tonnes of pepper worth Rs. 12.94 crores were exported. This was an improvement upon

the previous year's performance of 20,020 tonnes valued at Rs. 11.27 crores. This increase was mainly due to higher off-take by U.S.S.R. and other East European countries.

10.14 Kerala accounts for 93% of the total production of pepper. Pepper is grown essentially as a homestead crop in the State where it is a common sight to see a few pepper vines trained on the Coconut jack or mango trees in most of the house compounds. In North Kerala pepper is also grown on a pure plantation basis, on the same scale as rubber or tea. The "Tellicherry bold" and "Malabar" are the two important commercial varieties that are well-known in foreign markets. The "Tellicherry variety" is mostly grown in the Districts of Kozhikode and Cannanore and is valued for its big size. The "Malabar" variety is comparatively smaller in size, but has a fruity flavour. This distinguishes it from other varieties of pepper.

10.15 To rectify certain likely defects in the present method of collection of statistics of the production of pepper, the Indian Council of Agricultural Research have initiated a large scale Survey of pepper production, which is being undertaken by the Bureau of Economics and Statistics.

Tea

10.16 Exports of tea have shown a marked improvement in terms of both quantity and value. The total quantity of tea exported during 1967-68 was about 4,6845 tonnes compared to 3842 tonnes in 1966-67 and 40577 tonnes in 1965-66. The substantially better export performance has been the result of combination of factors. There has been a revival of overseas demand for Indian tea and brisk export activity from December 1966 onwards following the revision of the export duty structure in November 1966. There was greater participation of buyers at auctions at Calcutta and Cochin as well as in London. Better crop in India, on the one hand, and lower crop in East Africa in the early part of the year on the other, have also been factors contributing to higher exports of Indian tea and accounting for higher prices obtained at all auction centres. The revision of export and excise duties in May 1967 and February 1968 gave a further fillip to exports particularly of common teas.

10.17 The U.K. continued to be the largest importer of Indian tea. Exports to U.S.S.R., the second biggest market for Indian tea, also increased. There was improvement in exports to a number of other countries such as West Germany, Ireland, Netherlands, U.S.A., Sudan and Tunisia. However, this favourable trend was upset by the devaluation by 20% of the Ceylon Rupee following devaluation of Sterling. This adversely affected the competitiveness of Indian

tea and at the same time reduced the rupee receipts of the producers from the sale of their teas both in London and in India. A package of fiscal and financial measures was announced by the Government of India which came into effect from 1st October 1968. These include reduction in the export duty and excise duty as well as the provision of subsidy for replanting of old tea areas. It is becoming increasingly clear that export incentives and subsidies cannot succeed in promoting exports on sound long-term basis, particularly when our competitors can nullify their effects by resorting to a competitive game. There is obvious need for better understanding, co-operation and co-ordination and between India and Ceylon on all major issues in export marketing of teas. It is heartening to note in this connection that, as a result of a series of talks held between the Governments of India and Ceylon in January and June 1968, it was decided to set up a joint tea consortium for marketing packet teas in selected countries.

SEA FOOD EXPORTS

10.18 The Kerala Coast, covering approximately 580 Kilometres abounds in many commercially important varieties of fish. The sea food industry is mainly export-oriented. Sea food exports have increased considerably in the course of the last few years. From Rs. 2.58 crores at the beginning of the Third Plan, exports increased to Rs. 16.84 crores in 1967-68. Shrimp is the major item of sea food exported. It accounts for about 82% of export earnings. The landings of shrimp have increased in recent years by about 50% and the annual catch is about 80,000 tonnes.

10.19 Until about 1954, drying and salt curing was the only method used for preservation of sea foods. The entire seafood exports of the country consisted of dried marine products. The use of more efficient methods of preservation such as canning and quick freezing are of relatively recent origin in Kerala. A couple of units were set up initially in Cochin for the processing and export of shrimp to U.S.A. In addition to shrimp, lobster tails and froglegs are now increasingly being frozen. In the canning sector of the industry the major single item canned is shrimp and the entire production is exported. Several kinds of fish like, tuna, sardines, mackerel and pomfrets are also now being canned. But there have been no significant exports of these items and practically the entire production is consumed within the country.

10.20 With the adoption of new processing techniques, there has been a drastic change in the composition of sea food exports. Frozen and canned seafoods form 86% of sea food exports and dried marine products form only 14%. To ensure consumer satisfaction, compulsory pre-shipment inspection schemes were introduced by the Government of India in 1966 for frozen and canned shrimp and in 1967

for frozen frog legs. The production is quality controlled at every stage and every consignment of canned and frozen shrimps and frozen frog legs intended for export is now subjected to compulsory preshipment inspection and certification by Government authorities to ensure conformity with the prescribed quality standard. Steps designed to further tighten the quality check by the introduction of compulsory bacteriological inspection schemes and continuous in-plant inspection are under way. A scheme for voluntary preshipment inspection of dried fish is also in operation. Schemes for similar quality control and preshipment inspection for other items are being evolved.

Other Commodities .

10.21 Buoyancy in the exports of cardamom, coffee, oilcake, copra and wood and timber could be discerned during the year under review. This is indicative of improved demand conditions for these products in foreign markets. India is the world's largest producer of cardamom, followed by Gwatemala, Ceylon and Cambodia. Nearly 58% of the Indian production is raised in the plantation of Kerala. Until recently, India enjoyed a monopoly position, which is now being threatened by Gwatemala. The current increase in production and exports may be assigned to the decline in the incidence of the "Katte" a virus disease, which was most widespread in 1963-64, 1964-65 and 1965-66. The Cardamom Board is engaged in efforts to control the disease and to step up the yield from 15 Kg. per acre to 50 Kg. The major export markets for India's cardamom are Kuwait and Saudi Arabia.

10.22 India is the largest producer and exporter of dry ginger, of which the share of Kerala is about 52%. Production increased during the last two or three years. But this has not been reflected in exports. Exports of ginger have, in fact, declined; and this may be attributed to the competition from Sierra Leone, Nigeria and China with their lower priced varieties and from Jamaica with her superior and less fibrous variety.

10.23 In the case of rubber manufactures, the decline may be attributed to the abnormally high indigenous demand for both natural and synthetic products coupled with the restrictive import policy on Malayan rubber.

Imports

10.24 The foreign import through ports in Kerala totalled Rs. 118.46 crores during the year 1966-67 as against Rs. 73.23 crores in 1965-66. The principal items imported were raw cashewnuts and food grains which together constituted 60% of the total imports.

Institutional Basis of Export-Import Business

10.25 With a view to providing a sound institutional base for export promotion of Kerala's products, the Government of Kerala has gone ahead with the proposal to set up a Commercial Corporation in the public sector. This Corporation is expected to undertake overseas marketing of both traditional and non-traditional items of exports. In addition, the Corporation could take up import business in respect of certain essential machinery and raw-materials . A proposal for setting up a specialised agency separately for coir and coir products in the form of an "Export House" is under the consideration of Government.

Export Potential Survey of Kerala

10.26 A comprehensive survey of export potential of Kerala State has been undertaken by the State Planning Board. The Survey covers not only products now entering the export business, but also products for which potential export markets exist provided necessary steps are taken to improve the supply position, and to make available for exports, products of the right design, quality and price. It is hoped that the results of this Survey will throw light on the intricate problems confronting Kerala's exports.

CHAPTER 11

PRICES AND COST OF LIVING

11.1 The year 1968 witnessed further increases in the general price level in Kerala, higher cost of living, and a consequent decline in the real incomes of many sections of the people. Though the magnitude of increases in prices during 1968 was not as severe as that in 1967, this provided no consolation for the vast masses of people who had to suffer from inflationary rise in prices during the three Five Year Plans and the three years of "Plan holiday". In fact, the average working class Consumer Price Index for Kerala rose by 53 points in 1968 compared to 1967. Further, an increase of 15.5 points in 1968 (till November) was registered in the wholesale Price Index of Agricultural Commodities in the State.

11.2 As indicated above, the last eighteen years of planning in India have been years of rising prices. The general index of wholesale prices (All India-base 1952-53 = 100) moved up from 107.2 in April 1957 to 214.9 in November 1967, that is, a rise of 10% per annum on the average. The five years of the Third Plan witnessed, on the whole, an increase of 32% on the wholesale price index for all commodities.

11.3 It is now generally agreed that the continuously increasing price level in the country has been the result of faulty policies followed at the national level, including the policy of deficit financing and unplanned credit creation, and the expanding imbalances and structural deficiencies in the economic system. Inflationary rise in prices affect all the States in the Indian Union, though its incidence may be uneven due to divergences in the regional pattern of demand and supply.

Consumer Price Index Numbers

11.4 The average Working Class Consumer Price Index for Kerala rose from 729 in 1967 to 782 in 1968 (average for the first eleven months), thus accounting for an increase of 53 points. This increase took place despite declining open market price of rice, and certain other food articles. The rise in price of ration rice owing to the withdrawal of food subsidy by Government, and the upward trend in prices of chillies, onion, tea, coffee, milk, etc., were the main contributory factors for the increase in the Consumer Price Index by 53 points. The trend during the period 1961-68 is given in the following table:

Average Working Class Consumer Price Indices for Kerala

Base 1939=100

<i>Year</i>	<i>Average Index*</i>	<i>Annual increase (points)</i>
1961	478	..
1962	484	6
1963	501	17
1964	560	59
1965	614	54
1966	673	59
1967	729	56
1968	782**	53

* Average of the 12 centres excluding Kozhikode.

** Average of the indices of the first eleven months of 1968.

11.5 During the year under review, the All India Working Class Consumer Price Index showed further increases. The index number (1949 = 100) which stood at 209 in 1967 moved upto 215 by September, 1968 as can be seen from the table below:—

Average Working Class consumer Price Index Numbers for India (Base 1949—100)

<i>Year</i>	<i>Average Index</i>
1961	126
1962	130
1963	134
1964	152
1965,	166
1966	184
1967	209
1968 (upto september)	215

Wholesale Price Index for Agricultural Commodities

11.6 In 1968 the wholesale price index of agricultural commodities for the State increased from 200.8 in January to 209.3 in November registering an increase of 5% while the annual increase in 1967 was 14%. During 1968, the increase in the index was not steady and it exhibited fluctuations diminishing by about 3.6% in June and rising by about 5.2% in September from its January level. But the whole-sale price index has come down only in 3 months vis, March, June and July 1968 while it gained in all other months.

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Index numbers of wholesale prices of Agricultural Commodities
(Kerala) Base 1952-53=100)

<i>Sl. No.</i>	<i>Items</i>	1967 <i>December</i>	1968 <i>November</i>	% <i>variation</i>
1	Rice	156	207.5	+33
2	Molasses	299	244.9	-18
3	Condiments & spices	143	156.1	+4
4	Fruits & vegetables	199	228.0	+14
5	Food crops	166	203.8	+23
6	Oil Seeds	316	255.4	-19
7	Plantation crops	117	134.3	+15
8	Non-food crops	256	218.9	-14
9	All Crops	199	209.3	+5

11.7 The wholesale price index for rice registered an increase of 33%. Compared to the unusual increase of 63% in 1967, the index for Molasses has declined by 18% during 1968. Unlike in the previous year, the index for condiments and spices has gone up by 4% and the index of plantation crops by 15%. The index for non-food crops declined by 14%. The price of oil seeds diminished by 19% due to the poor demand for coconut and coconut oil in the Bombay and Calcutta markets. It is reported that our copra has to withstand the keen competition from cheaper Madurai coconut. Moreover, the intensive cultivation of coconut in Madras State is posing a problem to coconut growers in this State.

11.8 The average wholesale price index of agricultural commodities for the State for the last 8 years is given in Appendix 11.4. The general index maintained an upward trend in all these years except in 1963. Since 1961, the index increased by 62%. Compared to 1967, the increase was negligible in the case of non-food crops. The index of food crops (without taking into account of open market price of rice) which stood at 122 in 1961 has risen to 188.9 in 1968 recording an increase of 22 points from 1967.

11.9 It is important to note that the All India wholesale price index, particularly of agricultural commodities, showed a decline in 1968 compared to 1967. The index number which stood at 221.1 (base 1952-53=100) declined to 214.1 in October, 1968. (For details see Appendix 11.5). Thus, while the wholesale price index (all crops) and the index for agricultural commodities, declined at the all India level, wholesale price level in Kerala continued to rise.

Retail Prices of Essential Commodities

11.10 A comparison of retail prices of a few important essential commodities of daily use as prevailed in December 1967 and November 1968 are given in the Appendix 11.6.

11.11 The food position in the State continued to be difficult during the year under review. The distribution of rice and wheat was continued through fair price shops. 50% of the prescribed quota of rice was supplied through fair price shops till the last week of May 1968 except in the third week of April when full ration was given in connection with Vishu and Easter. The stock position of ration rice improved by the beginning of June as a result of the increased arrival of rice from the neighbouring surplus States and Imports. Hence the rice ration quota was raised from 50% to 75% from first week of June 1968 and to full quota of 6 ozs from the last week of the same month. When the stock dwindled, the rice ration was reduced to half the prescribed quota from 29-9-1968. Again, when the stock position showed slight improvement, the rice ration was enhanced to 75% from 27-10-1968 and this rate was continued till the end of the year (except in the last week of December 1968 when full ration was given in connection with Christmas and Ramson).

11.12 The price of medium and fine varieties of rice supplied through fair price shops was increased by 18 paise and 16 paise per Kg. respectively from the beginning of January 1968 as a result of the withdrawal of subsidy. The price of wheat was also increased by 12 ps. per Kg. The State Government also withdrew the subsidy extended to the coarse variety of ration rice from 7-7-1968. As such the price of coarse variety of rice also increased by 27 paise per Kg. from that date. From 23-6-68 onwards the medium variety of wheat was grouped into two varieties "red" and "white". The price of the first group was fixed at 76 paise per Kg. and that of the second group at 96 paise per Kg.

11.13 As a result of the restoration of full ration of rice, the price of rice in the open market began to decline considerably from June 1968. The open market price of rice declined by 19% at the end of November 1968. The drop in price was found to be more at Trivandrum, Qulion, Alleppey and Kottayam. At Trivandrum the price which stood at Rs. 2.48 per Kg. in January 1968 declined to Rs. 1.78 per Kg. by November 1968. At Quilon the price declined from Rs. 2.25 per Kg. to Rs. 1.75 per Kg. At Alleppey the price declined from Rs. 2.21 per Kg. to Rs. 1.78 per Kg. and at Kottayam it fell from Rs. 2.26 per Kg. to Rs. 1.85 per Kg. during the same period.

Other Food Articles

11.14 The price of all items in the pulses group declined to the extent of 12% to 20% by the end of November 1968. The price of coconut and coconut oil also declined by 21% and 19% respectively. The

price of coriander, tamarind and jaggery also declined by about 17% 43% and 22% respectively, due to increased supply of these commodities. Owing to the tight supply position, the price of chillies, tea and coffee went up. The poor arrival resulted in sharp rise in price of onion from July and by the end of November it had registered an increase of 120%. Price of milk (cow's) hardened by 5%. The decline in price of rice in open market has influenced the reduction in price of tapioca by 3%.

COMMODITY REVIEW

Black pepper

11.15 In contrast to 1967, the price of black pepper increased in all the producing centres in the State during 1968. The highest price was reached in September the increase being of the order of 0.4% at Cochin, 9% at Calicut (Nadan & Wynadan) and 4% and 10% at Alleppey (Palai & Thekkan). At Calicut and Alleppey prices maintained the upward trend at the close of the year. The influence of heavy demand from Calcutta and Bombay consequent on export demand from America and Russia in the context of lower supply resulted in the increase in its price. Pepper is being smuggled into Pakistan and China. This has its effect on the prices offered at Calcutta.

Ginger

11.16 A steady increase in the price of ginger was noticed during the year under review. The peak price was reached in August in all the important centres such as Cochin, Calicut, Alleppey and Tellicherry. The increase was of the order of 73% and 76% respectively in Cochin and Calicut. Low production, demand from Aden, America and Switzerland and the attitude of resourceful growers to hold on to the goods as long as possible to realise high price were the dominating factors which resulted in the rise in price in 1968.

Lemon Grass Oil

11.17 There was an unprecedented rise in the price of lemon grass oil during the year 1968. Scarcity coupled with persistent and perennial demand resulted in the rise of its price. The gravity of the supply position can easily be assessed from the fact that transactions were not at all made during certain weeks due to want of the commodity in the market. A good percentage of the area which was previously under lemon grass cultivation has since been diverted for the cultivation of rubber and tapioca anticipating higher returns. This reduced acreage affected lemongrass oil production.

11.18 During the year 1968, (by November) price of lemon grass oil went up by 76% at Cochin and 118% at Calicut. Within a short span of one month from August to September its price at Cochin exorbitantly rose from Rs. 3,083 per quintal to Rs. 4,025 per quintal registering an increase of 31%. If the rise in price continues to be stabilised it is likely that foreigners may be driven to the extent of dispensing with the use of lemon grass oil in preference to synthetic oils. This is a fact which causes concern specially in view of increasing need for export earnings.

Cardamom

11.19 The price of cardamom continued to decline steadily during the year 1968. At Calicut, its important marketing centre, the price had fallen by 25% by November 1968.

Rubber

11.20 Contrary to the situation prevailing in 1967, the price of rubber increased steadily in all the months of 1968, except April, in all the important marketing centres in the State. The order of increase was 47% at Cochin, 44% at Calicut and 19% at Alleppey. Increased demand coupled with decline in production due to continuous rains during June, July and August resulted in the increase in price.

Coir

11.21 Almost a steady increase in the price of coir was registered in all the important marketing centres during the year under review. The increase was of the order of 23% at Cochin for Parur variety, 8% and 16% respectively for Beypore and Quilandy varieties, at Calicut and 24% and 12% for Anjengo and Aratory varieties respectively at Alleppey. The demand for the commodity from Calcutta, Bombay and Rangoon was one of the reasons responsible for the increase in the price of coir.

Tea

11.22 Compared to other months in the year 1968, the price of tea declined during the months May to September in the wholesale market at Mattancherry. An upward trend in the price of tea started developing from October. However, the price in November was also trailing behind its price in January 1968 by 7 paise per Kg. at Mattancherry. In Calicut the price of tea increased sharply from September after it recovered from the losses from March to August. The increase in price during the last quarter of the year was attributed to the change in the variety of the tea which arrived in that market.

11.23 With a view to facilitate augmentation of the export of tea, Government of India have announced certain favourable measures during the year. The rebate on export duty has been raised from

24 paise per Kg. to 35 paise per Kg. effective from 1st October 1968. Further, the special excise duty on tea is also to be abolished from that date. A replantation scheme has also been announced, according to which 40 per cent of the cost of replantation of tea estates would be borne by the Tea Board.

Coffee

11.24 There was a steady rise in the price of coffee at Calicut throughout the year. The variety of coffee changed from September onwards with the result that its price recorded a sharp increase. The price of coffee at Kottayam was found to be steady upto July 1968.

Parity Index

11.25 The parity index is the percentage ratio of prices received to prices paid by the farmers. It is a measure of the farmer's terms of trade. It also indicates how far the rising prices for their products benefit the agricultural classes. Thus the farmer's economic position at any point of time could be assessed by the differential rates of rice in the indices of prices received and paid by farmers.

11.26 The parity indices for 1961 to 1968 are given in the sub joined table:

Index numbers of parity between prices received and paid by Farmers (Kerala)

(Base 1952-53—100)

<i>Year</i>	<i>Price received</i>	<i>Index numbers</i>		<i>Prices paid</i>	<i>Parity</i>
		<i>Domestic expenses</i>	<i>Cultivation cost</i>		
1961	109	122	123	122	90
1962	113	124	136	130	87
1963	110	127	143	135	82
1964	124	143	151	147	84
1965	175	156	171	163	107
1966	184	172	196	183	101
1967	210	186	222	203	103
1968 upto November)	216	199	246	221	98

11.27 The indices given in the last column in the above table indicate that the years 1961 to 1964 and 1968 were not favourable to farmers. However, the situation in 1968 was not so unfavourable to them as it was in the years 1961 to 1964. The indices of domestic expenditure and cultivation cost during the last few years have been increasing steadily. The index of prices paid by farmers which stood at 163 in 1965 rose to 221 in 1968 while the index of prices received by them rose from 175 to 216 only during the same period. This means that since 1965, the cost of cultivation and the domestic expenditure have increased more rapidly than the prices of commodities sold by the farmers.

CHAPTER 12

EDUCATION

12.1 It is true that Kerala stands first in literacy among the Indian States with 46.8% according to 1961 census. In the case of both male and female literacy, Kerala comes first with 55% in the case of males and 38.9% in the case of females. The literacy rates of the districts of Alleppey, Kottayam, Ernakulam, Quilon and Trichur are above the State average. Alleppey District has the highest literacy and Palghat the lowest (vide Appendix 12.2)

12.2 An analysis of the State's expenditure under Revenue Account (1967-68) reveals that one-third was spent on Education. The per capita Government expenditure on education was Rs. 20.18 in 1967-68 as against Rs. 18.48 in 1966-67. The per capita expenditure on education is also the highest in Kerala.

12.3 Expenditure on general education accounts for more than three-fourths of the total Government expenditure on education. Appendix 12.5 presents data relating to the Government expenditure for general school education for the years 1961-62 to 1967-68.

General Education (School standard)

12.4 With the increase in population, the demand for schools is also on the increase. Shift system is in force in many of the schools of the erstwhile Travancore-Cochin area in Standards I, II and III. During the year 1967-68, nearly 49% of the students in the first three-standards were receiving instruction under the shift system. Among the States of the Indian Union, Kerala is the only State which successfully implemented shift system in the lower classes which is likely to be emulated by the other States in the near future. Appendix 12.6 shows the growth of schools in Kerala from 1958-59 to 1968-69. Of the total number of 10,959 schools in the State in 1968-69 the number of schools under private management was 6,848 (62.5%).

12.5 In the case of General Education, the enrolment in schools is increasing steadily. There was 4.4% increase in enrolment during 1967-68 over the previous year. The stage-wise increase in enrolment is furnished in Appendix 12.7. From the following table it can be seen that there is a steady increase in school enrolment during the period 1957-58 to 1967-68.

Enrolment in schools for General Education 1957-58 to 1967-68

<i>Year</i>	<i>Number of Students</i>		<i>(In lakhs) total</i>
	<i>Boys</i>	<i>Girls</i>	
1957-1958	15.91	12.51	28.42
1958-59	16.66	13.50	30.16
1959-60	17.11	14.03	31.14
1960-61	17.87	14.79	32.66
1961-62	18.88	15.74	34.62
1962-63	19.68	16.54	36.22
1963-64	20.74	17.45	38.19
1964-65	21.73	18.37	40.10
1965-66	22.58	10.10	41.68
1966-67	23.71	20.34	44.05
1967-68	24.22	20.96	45.18

12.6 As is evident from the above table, there was rapid increase in enrolment of students. To overcome the pressure of over-crowding, during 1966-67, 75 High Schools and 78 Upper Primary Schools were allowed to work in sessions. The total number of students under sessional system was 91,055 in high schools and 49,219 in upper primary schools.

12.7 There were 1,29,389 teachers working in standards I to X during 1967-68, as against 1,24,822 teachers during 1965-66-

12.8 For the March 1968 S.S.L.C. examination 1,75,493 students appeared out of which only 67,462 passed. Ways and means have to be evolved to minimise wastage in education.

Professional and special education

12.9 Of the 104 Teachers' Training Schools, during 1968-69, 74 are managed by private agencies. The total intake capacity of all the schools was 4,980. The districtwise details regarding the number of Teachers' Training Schools, intake capacity, etc., are given in Appendix 12.8. Three Nursery Training Schools are functioning in the State with an intake capacity of 120.

12.10 There are 17 general polytechnics, excluding the 3 women's polytechnics, working in the State during 1968-69 with an intake capacity of 1826. The intake capacity has been reduced by Government in response to the widespread unemployment among the diploma holders. District-wise distribution of polytechnics and sanctioned intake are furnished in appendix 12.9.

12.11 During 1967-68, there were 3 women's polytechnics with an annual intake capacity of 240. They were given training in secretariat practice and stenography, draughtsmanship in civil engineering, electronics and costume design and dress making.

12.12 During 1968-69, there were 35 Industrial Training Institutes in Kerala out of which 25 were under private management. The intake capacity of these institutes was 8,320. The problem of acute unemployment is facing the Industrial Training Institute trainees also. The districtwise number of Industrial Training Institutes and total number of seats are furnished in Appendix 12.10.

12.13 At present there are 21 junior technical schools in the State with an annual intake capacity of 1260. The 5 Survey Training Schools, one each in the districts of Trivandrum, Kottayam, Ernakulam, Kozhikode and Cannanore impart training in chain survey, higher survey, etc. There were 7 schools for handicapped children, 5 departmental and 2 private during 1967-68.

12.14 During 1967-68, there were 17 general nursing schools and 17 auxilliary nurse-midwifery schools in the State with an annual intake capacity of 614 and 343 respectively. District-wise details are furnished in Appendix 12.11.

HIGHER EDUCATION

12.15 In the field of higher education also, Kerala has made much progress. There were 107 Arts and Science Colleges during 1967-68. The enrolment in the arts and science colleges increased from 1,12,539 in 1966-67 to 1,26,651 in 1967-68. The number of colleges and students admitted during 1967-68 in each district is given in Appendix 12.12.

12.16 There were 6 Engineering Colleges in the State during 1967-68 out of which 3 were run by private management. There were 5,083 boys and 247 girls during 1967-68 in these colleges. As the unemployment position of the civil engineering graduates is increasing, it is time to think of starting new courses taking into consideration the requirements of the industrial sector.

12.17 Much progress has been achieved in the field of health education also by the State. There were 4 Medical Colleges in the State during 1967-68 with an intake capacity of 545 and one Dental College with an intake capacity of 30. In the Medical Colleges the enrolment during 1967-68 was 2,146 boys and 786 girls as against 2,030 boys and 735 girls in 1966-67 recording an increase of 5.7% in the case of boys and 6.9% in the case of girls. During the year 1967-68, the capacity of the Dental College was fully utilised unlike in the previous years as is evident from the following table.

<i>Year</i>	<i>Sanctioned intake</i>	<i>Actual intake</i>
1960-61	20	27
1961-62	30	30
1962-63	30	28
1963-64	30	27
1964-65	30	19
1965-66	30	22
1966-67	30	21
1967-68	30	30

12.18. The annual intake capacity of the Agricultural College is 80 and that of Veterinary College 50. The total enrolment in Agricultural College was 282 boys and 51 girls in 1967-68 as against 249 boys and 37 girls in 1966-67 and in the Veterinary College 221 boys and 15 girls as against 207 boys and 16 girls in 1966-67.

12.19 There were 19 Teachers' Training Colleges in the State during 1967-68 of which 4 were departmental and the rest run by private agencies. During the year 1967-68 the enrolment in Teachers' Training Colleges was 1090 boys and 1316 girls. The district-wise distribution of Training Colleges is given in Appendix 12.13.

12.20 There were two Law Colleges in the State during 1967-68. The enrolment during 1967-68 was 1,145 boys and 83 girls as against 666 boys and 57 girls in 1966-67 registering an increase of 71.9% in the case of boys and 45.6% in the case girls.

12.21 During 1967-68, the enrolment in the Ayurveda College, Trivandrum, was 280 boys and 108 girls as against 249 boys and 37 girls in 1966-67. Besides this there is the Government Ayurveda College at Tripunithura and another private College at Kottakkal. The Homoeo College at Kurichi (Kottayam) is imparting training in Homoeo system of medicine.

CHAPTER 13

HEALTH AND OTHER SOCIAL SERVICES

13.1 Kerala enjoys better health standards when compared to many other States in India. The per capita Government expenditure on health services is higher in Kerala when compared to most of the other Indian States (vide Appendix 13.1).

13.2 The provision of adequate health protection was recognised as one of the urgent needs during the Second Plan. Programmes on Maternity and Child Health, Control of Communicable Diseases, Family Planning, Environmental hygiene and Health Education were given due emphasis. In addition to these the Third Plan aimed at training of Medical and Public Health Personnel and improvement to Medical and Public Health Institutions. Compared to other Indian States, Kerala maintains a higher position with regard to the availability of medical facilities and in eradication and control of communicable diseases. In the preventive side Malaria has been more or less completely eradicated, the State being the first in the country to achieve this. The estimated increase in the expectation of life for males and females during 1951-61 was 6.7 years and 7.3 years respectively.

13.3 There was a steady increase in the number of medical institutions and beds in the State during the Second Five Year Plan. 1860 additional beds were provided in the Third Plan period in the various hospitals and dispensaries in the State. A comparative statement of the bed-population ratio in some of the States towards the end of the Third Plan is given below:

<i>State</i>	<i>Bed-Population ratio</i> (1965-66)
Andhra	0.58
Assam	0.43
Bihar	0.25
Kerala	0.71
Madras	0.78
Mysore	0.55
Orissa	0.36
West Bengal	0.75

13.4 At the end of March 1968 there were 518 medical institutions and 20166 beds in the State enabling to keep a high ratio of one bed for every thousand of population as against the Mudaliar Committee recommendation to achieve 1:1000 bed-man ratio by 1971. The number of Primary health centres in Kerala has already exceeded the total number of Blocks in the State while most of the other States have not so far achieved even a target of one Primary health centre for each Block. A State-wise comparison of the institutional facilities as existed during 1965 is furnished in Appendix 13.2. Data relating to the total number of medical institutions and beds are given below:

<i>Year</i>	<i>Number of institutions</i>	<i>Number of beds</i>
1957-58	369	11959
1958-59	382	12352
1959-60	390	12810
1960s61	397	13978
1961-62	422	14108
1962-63	437	15753
1963-64	456	16681
1964-65	479	17636
1965-66	491	18526
1966-67	503	19850
1967-68	518	20166

13.5 The number of medical institutions is the highest in Ernakulam District while the number of beds in hospitals and dispensaries is the maximum in Trivandrum District. The district-wise distribution of institutions and beds during the last three years is furnished in Appendix 13.3.

13.6 The average number of beds available per lakh of population is the highest at Trivandrum among the districts of the State (vide Appendix 13.4). The categorywise breakup of medical and public health institutions and beds in the various districts of the State is given in Appendix 13.5.

13.7 Even in the midst of growing popularity of modern medicine Ayurveda continues to serve a large section of the population in Kerala. Ayurvedic system of medicine and Homoeopathy are given active encouragement by the State and the movement is afoot to place them on a more scientific basis by the application of modern research methods. At present there are 41 Ayurvedic and Homoeo Hospitals and 236 dispensaries with a bed strength of 611 in Kerala.

13.8 In addition to these Government institutions, there are grant-in-aid institutions and subsidised Ayurvedic institutions functioning in the State. The district-wise distribution of Ayurvedic/Homoeo hospitals and beds is given in Appendix 13.6.

Family Planning

13.9 The Family Planning Programme was introduced in the State in 1955. Facilities are available for sterilisation and I.U.C.D. insertion in all the Primary Health Centres. The total number of sterilisation operation conducted during the last few years is given in the following table:—

Number of sterilisation operations conducted in Kerala

<i>Year</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
1957	521	158	679
1958	1633	1507	3140
1959	4132	2236	3668
1960	3079	1953	5032
1961	3578	2939	6517
1962	4182	2916	7098
1963	10395	2830	13225
1964	17938	3966	21904
1965	36102	6532	42634
1966	33256	6142	39398
1967	49489	10504	59993

13.10 The progress of the programme of I.U.C.D. insertion which was started in the State in July 1965 can be gauged from the figures furnished below:—

<i>Year</i>	<i>Number of I.U.C.D. insertions</i>
1965	23062
1966	43517
1967	36887

Welfare of Backward Classes

13.11 Harijan Welfare Programmes include development activities intended for the uplift of the backward sections of the population who were subjected to various social injustices and severe hardships in the past. During the Third Plan period an amount of Rs. 254.11 lakhs was spent on Harijan Welfare as against a provision of only Rs. 195.00 lakhs. According to 1961 census the total population of scheduled castes and scheduled tribes in Kerala was 14.35 lakhs and

2.13 lakhs respectively. These formed 8.49% and 1.26% respectively of the total population. Their district-wise distribution in terms of percentages is given below:

Percentages of Scheduled Castes and Scheduled Tribes to total population-districtwise

<i>District</i>	<i>Scheduled Castes</i>	<i>Scheduled Tribes</i>
Trivandrum	9.29	0.56
Quilon	11.70	0.20
Alleppey	9.20	0.03
Kottayam	9.11	1.23
Ernakulam	8.10	0.54
Trichur	10.43	0.36
Palghat	11.92	1.15
Kozhikode	5.51	2.67
Cannanore	2.44	3.99
KERALA	8.49	1.26

13.12 Literally Harijans were and are economically and socially backward when compared to other sections of the population. In spite of the various types of concessions and encouragement given by the Government to backward communities in the field of education, they still remain backward. According to 1961 census, literacy among Scheduled Castes and Scheduled Tribes in Kerala is only 24.44% and 17.26% respectively as against 46.8% for Keralites in general. Literacy among scheduled castes and scheduled tribes in the various districts of the State is given below:

Literacy Among Harijans

<i>District</i>	<i>Literacy rates</i>	
	<i>Scheduled Castes</i>	<i>Scheduled Tribes</i>
Trivandrum	26.94	23.32
Quilon	25.84	24.27
Alleppey	36.76	47.09
Kottayam	32.07	31.09
Ernakulam	26.03	38.57
Trichur	23.95	22.97
Palghat	9.97	4.46
Kozhikode	18.90	13.36
Cannanore	18.12	15.67
KERALA	24.44	17.26

13.13 The activities of the Government for welfare of backward classes relate mainly to educational concessions, housing, water supply and medical care. Details of educational concessions to scheduled castes, scheduled tribes and other backward communities during 1966-67 and 1967-68 are given in Appendix 13.7. In pre-metric classes (excluding Palghat District) 291259 students were benefited during 1966-67. During 1967-68, 31892 students in post-matric classes were given educational concessions as against 29879 students in 1966-67. Government of India scholarships were given to 5756 students in 1967-68 as against 2713 during the previous year.

13.14 With a view to determining the backwardness of citizens who are to be classified as backward under the Kerala State and Subordinate Rules, the Government of Kerala constituted a committee on October 17th 1967. The work of the committee was in progress during 1968.

Water supply and Sanitation

13.15 There is huge backlog to be cleared in regard to water supply and sewerage projects in Kerala. According to the report of the National Water Supply and Sanitation Committee (1961) Kerala ranks 13th in respect of urban water supply. Only 24% of the urban population in Kerala has adequate water supply as against 34% of the All India average (vide Appendix 13.8). There are nine spillover urban water supply schemes which have to be completed during the Fourth Five Year Plan. New schemes have also been proposed for inclusion in the Fourth Plan.

13.16 In respect of urban sewerage Kerala ranks only 14th among the States in India. The position of the various Indian States with regard to sewerage facilities is furnished in Appendix 13.9.

CHAPTER 14

EMPLOYMENT AND MANPOWER

14.1 The problem of unemployment and underemployment is of a more serious nature in Kerala State than in other parts of the country. Acute unemployment in the State is the outcome of a number of factors like accelerated rate of growth of population, high density, excessive pressure on land and slow pace of industrial development.

14.2 No comprehensive, reliable and up-to-date data regarding the employment situation in the State are available except the results of a Sample Survey conducted in the State during November-December, 1965. The only regular source of information on unemployment is the Live Register of the Employment Exchanges. But the information available from this source is subject to a number of limitations mainly on account of the fact that the registration of job seekers is not compulsory and that employed persons also are known to register themselves with the Exchanges. The Sample Survey referred to above revealed that 18.6% of the registrants were actually employed and that among the unemployed only 20.53% were registered with the Employment Exchanges. The number of unemployed and underemployed persons estimated on the basis of the results of the Sample Survey and the data available on the Live Registers of the Employment Exchanges is presented in the following paragraphs.

Unemployment

14.3 According to the Sample Survey, it is found that, at the end of 1965, out of the total labour force of 60.2 lakhs, 54.7 lakhs were employed and 5.5 lakhs were unemployed. The number of unemployed as revealed by the Survey was likely to be an underestimate since the Survey was undertaken during a period of intense agricultural activity. The Draft Out-line of the State's Fourth Plan, using the Live Register figures, estimated the number of unemployed as on 31-7-1968 to be 7.8 lakhs. According to the Live Registers, the total number of unemployed as on 31-12-1968 stood at 2.02 lakhs registering an increase of about 3 per cent during the six months. The number of unemployed persons in the State as on 31-12-1968 can also be expected to have gone up correspondingly. The estimated number of unemployed persons at the end of each year from 1965 to 1968 is given below. It is seen that during a three year period the number of unemployed increased by 47.3%.

Unemployment—December 1965—December 1968

<i>Date</i>	<i>Total on the Live Register (in lakhs)</i>	<i>Estimate No. of unemployed on the Live Register (in lakhs)</i>	<i>Estimated No of unemployed (in lakhs)</i>
31-12-1965	1.41	1.15	5.5
31-12-1966	1.57	1.28	6.2
31-12-1967	1.79	1.46	7.1
31-7-1968	1.96	1.60	7.8
31-12-1968	2.02	..	..

14.4 Even though unemployment as estimated above was only 7.8 lakhs of persons in 1968, there remains the more serious problem of acute underemployment particularly in the unorganised sectors of production. In the 1965 Sample Survey conducted in the State it was found that 25.20 per cent of employed were underemployed in the sense that they worked 42 hours or less during a week and were available for additional work. Any assessment of the volume of unemployment should take account of this phenomenon also.

14.5 The quarterly indices of employment for the public and organised private sectors also reveal that the employment situation during the period 1966 and 1967 did not show any significant improvement. The combined quarterly indices have in fact remained more or less constant. This indicates that very little additional employment was generated in the organised sector of economic activity. The data presented below show that the index of employment in the public sector has steadily increased while the index of employment in the organised private sector has decreased indicating that there was expansion only in Government Services and that there was a corresponding decline in the organised private sector:

Indices of Employment (Base 31-3-1966=100)

<i>Period</i>	<i>Public</i>	<i>Private</i>	<i>Combined</i>
31-3-1966	100.0	100.0	100.0
30-6-1966	101.5	99.9	100.2
30-9-1966	101.9	100.2	100.8
31-12-1966	103.3	96.6	99.1
31-3-1967	103.1	96.5	98.9
30-6-1967	103.5	97.3	99.6
30-9-1967 *	104.3	98.0	100.1
31-12-1967	104.9	96.4	99.6
31-3-1968	105.5	97.7	100.6
30-6-1968	106.4	100.3	102.5

*Revised Figures.

Number of Work-seekers

14.6 Live Register figures in spite of their limitations can be taken as an indication of unemployment at least in the short-run. It is seen that the number of registrations increased from 140,350 in 1965 to 161,609 in 1968 thereby registering an increase of about 15.1%. An analysis of the number of placements reveals that about 10 to 14% of the total registrants get placements through the Employment Exchanges. Further, over the years the percentage of placements has decreased.

No. of Registrations and Placings

Year	No. of Registrations	No. of placings	Monthly average No. of employees using Employment Exchanges	Placings as percentage of registrations
1961	105,885	14,526	238	13.7
1962	151,883	18,822	322	12.4
1963	141,878	18,187	366	12.8
1964	137,379	14,024	337	10.2
1965	140,350	18,378	434	13.1
1966	137,030	16,904	464	12.3
1967	154,918	15,617	506	10.0
1968	161,609	15,658	492	9.7

14.7 The District-wise number of work-seekers on the Live Register as at the end of December 1967 and December 1968 is give below:

District-wise No. of work-seekers—December 1967—December 1968.

District	No. of Work-seekers as on		Percentage increase over the previous Year
	31-12-1967	31-12-1968	
(1)	(2)	(3)	(4)
1 Trivandrum	46,125	52,513	13.8
2 Quilon	22,570	26,229	16.2
3 Alleppey	15,410	19,193	24.5
4 Kottayam	13,336	15,406	15.5
5 Ernakulam	27,465	27,491	0.1
6 Trichur	13,352	12,969	2.9
7 Palghat	9,414	10,191	8.3
8 Kozhikode	21,091	23,699	12.4
9 Cannanore	10,716	14,185	31.8
Kerala	179,479	201,876	12.5

14.8 It may be seen from the above that the increase in registration is highest in Cannanore District followed by Alleppey District. The number of registrations depends upon various factors such as the accessibility to Employment Exchanges and the number of vacancies notified to each Employment Exchange. Hence it will not be quite correct to interpret the intensity of unemployment of persons in each district from the data given above.

Occupational distribution of job-seekers:

14.9 The analysis of occupational distribution of work-seekers on the Live Register as at the end of December 1967 and December 1968 is given below:

Occupational distribution of Work-seeker Dec. 1967—Dec. 1968

<i>Occupational division</i>	<i>December 1967</i>				<i>December 1968*</i>			
	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>% to total work-seekers</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>	<i>% to total work-seekers</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0. Professional, Technical and related workers	9683	13494	23177	12.91	9572	15319	24891	12.33
1. Administrative executive and managerial worker	530	229	759	0.42	555	274	829	0.41
2. Clerical and related workers	6801	6699	13500	7.52	8140	8699	16839	8.34
3. Sale workers	22	6	28	0.02	37	7	44	0.02
4. Farmers, Fishermen & related workers	772	864	1636	0.91	856	684	1540	0.76
5. Miners, Quarrymen & related workers	12	..	12	0.01	19	..	19	0.01
6. Workers in Transport and communication occupations	6618	370	6988	3.89	7990	444	8434	4.18
7&8 Craftsmen production process workers	14157	1136	15293	8.52	16503	1336	17839	8.84

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Workers not elsewhere classified									
9. Service, Sports and recreation workers		4058	6941	10999	6.13	5066	7864	12930	6.41
10. Workers not elsewhere classified by occupation		76433	306541	07087	59.67	79224	39287	118511	58.70
Total		119086	60393	179479	100.00	127962	73914	201867	100.00

* Provisional.

14.10 The variations in the percentage distribution of work-seekers in different occupational divisions are not very significant. However, the percentage of "workers not elsewhere classified" decreased from 59.67 to 58.70 and that of professional, technical and related workers from 12.91 to 12.33 during the period December 1967 to December 1968. The percentage of clerical and related workers increased from 7.52 to 8.34 while that of craftsmen and production process workers and workers not elsewhere classified increased from 8.52 to 8.84. An analysis of the occupational data reveals that the proportion of skilled work-seekers increased during the year. The number of "workers not elsewhere classified" increased by 10.7% while the number of professional, technical and related workers increased by 7.4% and clerical and related workers by 24.7%.

Educated Work-seekers:

14.11 Data regarding the number of educated work-seekers as at the end of June 1967, December 1967 and June 1968 are given below:

Educated Work-seekers—June 1967, December 1967 and June 1968

<i>Educated Work-seekers</i>	30-6-1967		31-12-1967		30-6-1968	
	<i>No.</i>	<i>% to total</i>	<i>No.</i>	<i>% to total</i>	<i>No.</i>	<i>% to total</i>
1. S. S. L. C.	89762	92.1	83616	90.3	93525	90.3
2. Pre-Degree	3111	3.2	3558	3.8	4001	3.8
3. Graduates	4052	4.2	4822	5.2	5359	5.2
4. Post-graduates and above	510	0.5	631	0.7	594	0.7
Total	97435	100.0	92627	100.0	103479	100.0

14.12 An analysis of the trends in the number of educated work-seekers shows that the total number of educated work-seekers increased by 6.2%. Even though the absolute number of S.S.L.C. holders increased, the percentage of that category of work-seekers to the total educated work-seekers decreased from 92.1% to 90.3%. The number of educated work-seekers (Pre-Degree and above) to the total increased from 7.9% to 9.7%. The general increase in the number of educated work-seekers (Pre-Degree and above) may be due to larger output from higher educational institutions.

Unemployment among Technically and Professionally qualified Personnel:

14.13 No firm data regarding the stock of critical categories of manpower like Engineers, Doctors, Agricultural personnel and Teachers in the State are available. Only rough estimates regarding the unemployment of these personnel are available. Information on the trends of inter-State mobility of those personnel is also lacking so that it is extremely difficult to assess the availability of such personnel.

14.14 Some studies undertaken recently reveal that there is a high degree of unemployment among technically and professionally qualified personnel in the State, particularly so in the case of graduate engineers, diploma holders in engineering and T.T.C. holders. The annual out-turn of technically and professionally qualified personnel is growing out-pacing the demand. It is estimated that at the beginning of the Fourth Five Year Plan (1969-74) there would be a backlog of about 2100 unemployed graduate engineers and about 4300 unemployed diploma holders in engineering. A stage has now been reached when the Government is not in a position to absorb all the medical graduates as soon as they get qualified. Unemployment among T.T.C. holders is also becoming serious. It is roughly estimated that at the beginning of the Fourth Plan there would be about 6000 unemployed T.T.C. holders in the State. Serious unemployment prevails among the agricultural personnel also.

14.15 There is every chance of an increase in the number of unemployed engineers, teachers etc., if the present rate of intake in the engineering and other institutions is continued. This is a serious problem and calls for purposive action both by Government and priority institutions in the field of education and a more realistic and scientific manpower planning. All possible attempts should be made to maintain a dynamic balance between the supply and demand for the highly educated personnel.

Underemployment:

14.16 At the end of June, 1968, it was estimated that out of the total labour force of 64.57 lakhs, 7.8 lakhs were unemployed. Of

the remaining 56.8 lakhs who were employed it was found that 25.2% were underemployed in the sense that they worked 42 hours or less during the week and reported that they were available for additional work. Assuming that the above ratio of underemployed workers will hold good for the year 1968, it may be roughly estimated that there would be about 14.3 lakhs underemployed workers in the State by the end of 1968.

APPENDIX

TABLES

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APPENDIX—1.1

Sector-wise Trends in net National Product (Revised Series)

(Rs. Crores)

Group	(Rs. Crores)						Annual average percentage change during the 3rd plan	
	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66		1966-67
1. Agriculture, forestry, logging and fishing	6954	7117	6959	7099	7761	6704	6703	-0.4
		(+2.3)	(-2.2)	(+2.0)	(+9.0)	(-13.6)	(-0.01)	
2. Mining and quarrying, large scale manufacturing, construction and electricity, gas and water supply	2694	2894	3097	3403	3607	3655	3740	+6.3
		(+7.4)	(+7.0)	(+9.0)	(+6.0)	(+1.3)	(+2.3)	
3. Transport and Communication and trade, storage, hotels and restaurants	1884	2014	2130	2291	2436	2487	2551	+5.7
		(+6.9)	(+5.8)	(+7.6)	(+6.3)	(+2.1)	(+2.6)	
4. Banking and insurance, real estate and ownership of dwellings. public administration and defence and other Services	1993	2108	2253	2423	2558	2747	2912	+6.6
		(+5.8)	(+6.9)	(+7.5)	(+5.6)	(+7.4)	(+6.0)	
5. Net National product at factor cost	13453	14037	14329	15101	16219	15441	15706	+2.9
		(+4.3)	(+2.1)	(+5.4)	(+7.4)	(-4.8)	(1.7)	
6. Per capita net national product (in Rs.)	310.0	316.0	314.2	323.4	339.2	315.3	313.1	+0.4
		(+1.9)	(-0.6)	(+2.9)	(+4.9)	(-7.0)	(-0.7)	

Figures in the brackets indicate percentage changes over the previous year.

Source : Report on Currency and Finance, 1967-68. P.76.

APPENDIX—1.2

**Index Numbers of Industrial Production
and % Variation over the Previous Years
(Base—1960=100)**

	1961		1962		1963	
	<i>Index</i>	<i>% age increase</i>	<i>Index</i>	<i>% age increase</i>	<i>Index</i>	<i>% age increase</i>
Manufacturing	109.1	9.1	119.5	9.53	129.1	8.03
Cotton Textiles	104.8	4.8	104.4	—0.38	105.5	1.05
Woollen Textiles	99.3	—0.7	119.1	19.94	195.0	63.73
Jute Manufactures	89.1	—10.9	110.8	24.35	118.8	7.22
Manufacture of wood & cork	95.5	—4.5	109.9	15.08	120.6	9.74
Paper & Paper products	105.8	5.8	109.4	3.40	130.2	19.01
Rubber products	112.9	12.9	121.8	7.88	135.5	11.25
Chemicals & Chemical products	113.4	13.4	121.8	7.41	134.0	10.02
Petroleum Refineries products	106.0	6.0	114.6	8.11	133.1	16.14
Non-metallic mineral products	106.9	6.9	116.3	8.79	130.3	12.04
Basic metal	118.7	18.7	143.0	20.47	171.7	20.07
Metal products except machinery	112.4	12.4	116.3	3.47	130.4	12.12
Machinery except electrical machinery	121.2	21.2	150.2	23.93	181.3	20.71
Electrical machinery apparatus, appli- ances etc.	110.6	10.6	130.3	17.81	153.0	17.42
Transport equipment	116.7	16.7	149.9	28.45	156.7	4.54
Electricity	116.3	16.3	130.7	12.38	150.9	15.46
General	109.2	9.2	119.7	9.62	129.7	8.35

Source : Reserve Bank of India. Report on Currency and Finance, 1967-68.

1964		1965		1966		1967	
<i>Index</i>	<i>% age increase</i>	<i>Index</i>	<i>% age increase</i>	<i>Index</i>	<i>% age increase</i>	<i>Index</i>	<i>% age increase</i>
141.3	9.45	150.6	6.58	150.8	0.13	147.8	-1.99
112.8	6.92	111.6	-1.01	106.5	-4.57	104.9	-1.50
162.4	-16.72	136.4	-16.01	129.6	-4.99	122.5	-5.48
115.1	3.11	120.3	11.52	100.4	-16.54	104.1	3.69
128.4	6.47	235.1	83.10	201.7	-14.21	218.1	8.13
137.3	5.45	147.1	7.14	160.0	8.77	167.1	4.44
143.0	5.54	159.4	11.47	160.2	0.50	171.4	6.99
145.6	8.66	153.9	5.70	166.7	8.32	172.2	3.30
146.7	10.22	156.3	6.54	195.9	25.34	234.2	19.55
138.6	6.37	149.2	7.65	149.1	-0.07	155.8	4.49
174.4	1.57	180.0	3.21	186.4	3.56	178.1	-4.45
145.8	11.81	205.6	41.02	209.6	1.95	192.1	-8.35
215.7	18.97	238.8	10.71	281.8	18.01	290.1	2.95
174.2	13.86	204.4	17.34	224.9	10.03	243.4	8.23
192.1	22.59	204.3	6.35	164.5	-19.48	139.5	-15.20
173.6	15.04	190.9	9.97	207.8	8.85	230.7	11.02
140.9	8.64	150.9	7.10	152.4	0.99	150.9	-0.99

APPENDIX—1.3

Aggregate External Assistance

(\$ Million)

	<i>Loans</i>	<i>Grants</i>	<i>P.L.480/665 Aid & Third country Currency Assistance</i>	<i>Total</i>
	(1)	(2)	(3)	(4)
<i>Authorisations</i>				
1. Upto the Second Plan	3,163	545	2,411	6,119
2. During Third Plan	4,943	278	947	7,168
3. During 1966-67	1,504	104	524	2,132
4. During 1967-68	603	21	324	948
Total	10,213	948	4,206	15,367
<i>Utilisation</i>				
1. Upto the Second Plan	1,788	485	1,155	3,428
2. During Third Plan	4,009	223	1,792	6,024
3. During 1966-67	900	126	480	1,506
4. During 1967-68	1,062	71	415	1,548
Total	7,759	905	3,842	12,506

Source : Report on Currency and Finance. (1967-68) P. 39.

APPENDIX—1.4

Inflow of foreign investments into the Private Sector during 1956—62

(Rupees in Crores)

	1956	1957	1958	1959	1960	1961	1962
A. Private Sources (net inflow)	23.8	20.8	2.5	10.2	51.7	28.1	29.7
1. Gross inflow	30.2	26.8	28.1	25.7	63.2	35.6	38.7
(i) Retailed earnings	19.2	9.5	9.1	14.6	14.1	15.8	7.8
(ii) Cash inflow	3.1	5.8	4.8	3.3	6.2	4.0	5.0
(iii) Non-cash inflow	8.5	11.4	14.2	7.8	43.0	15.8	25.8
2. Outflow	7.0	6.0	25.5	15.5	11.5	7.5	9.0
B. Official Sources (net inflow)	12.1	32.9	26.2	10.6	(—)1.4	16.8	10.7
(i) Gross inflow	12.1	32.9	26.4	12.6	5.2	25.1	22.8
(ii) Outflow	..	..	0.2	2.6	6.6	8.3	12.1
C. Gross inflow into the private sector	42.9	59.7	54.5	38.3	68.4	50.7	61.5
D. Gross outflow	7.0	6.0	25.7	18.1	18.1	15.8	21.1
E. Net inflow into the Private sector	35.9	53.7	28.7	20.2	30.3	44.9	40.4

N.B.— 1. Figures exclude foreign investment in banking and insurance companies.

2. The inflow has been computed, wherever possible, by eliminating valuation changes.

Source : Reserve Bank of India Bulletin (April 1966, P-264).

APPENDIX—1.5

Index Number of Wholesale Prices (Base 1952—53=100)

<i>Last week of</i>	<i>Food articles</i>	<i>Liquor & tobacco</i>	<i>Fuel, Power Lights & lubricants</i>	<i>Manufac- tures</i>	<i>All Commodities</i>
(1)	(2)	(3)	(4)	(5)	(6)
1962-63	123.5	117.0	137.5	129.5	127.4
1963-64	141.0	119.4	140.4	133.0	138.9
1964-65	153.7	138.4	148.2	141.2	151.0
1965-66	175.3	127.5	160.3	157.3	174.0
1966-67	217.9	127.7	172.9	167.5	202.7
1967-68	226.5	156.5	186.7	162.6	200.6

APPENDIX—1.6

Index Numbers of Wholesale Prices of Food Articles—(Base : 1952-53=100)

	Weight	End of March			% Variation of			% Variation of	
		1966	1967	1968	(2) over(1)	(3) over(2)	1966-67 over 1965-66	1967-68 over 1966-67	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Food Articles :									
1. Cereals :	504	175.3	217.9	226.5	+24.3	+3.9	+18.4	+21.2	
(a) Rice	193	156.2	194.2	201.5	+24.3	+3.8	+17.8	+20.8	
(b) Wheat	113	157.6	181.6	207.7	+15.2	+14.4	+21.6	+19.9	
(c) Jowar	53	136.1	190.1	185.8	+39.7	-2.3	+14.7	+27.4	
(d) Bajra	10	194.7	215.3	200.4	+10.6	-6.9	+0.9	+14.3	
2. Pulses	5	183.0	252.8	209.0	+38.1	-17.3	+12.8	+16.0	
3. Milk and Ghee	42	155.4	234.4	222.6	+50.8	-5.0	+21.8	+41.0	
4. Edible Oils	84	163.4	199.2	219.5	+21.9	+10.2	+12.8	+18.8	
5. Sugar	47	266.1	313.6	226.8	+17.9	-27.7	+29.8	-6.1	
6. Gur	18	161.0	174.0	199.6	+8.1	+14.7	+6.6	+12.7	
	30	147.6	276.3	444.6	+87.2	+60.9	+30.5	+117.1	

Source: Report on Currency and Finance for the year 1967-68. P. 6.

APPENDIX—1.7

Index Numbers of Wholesale Prices of Industrial Raw Materials and Manufactures

(Base : 1952—53=100)

	Weight	End of March			% Variation of			% Variation of	
		1966	1967	1968	(2)over(1)	(3)over(2)	1966-67 over 1965-66	1967-68 over 1966-67	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Industrial Raw Material	155	210.0	236.3	196.0	+12.5	-17.1	+20.9	-4.2	
1. Fibres	61	189.5	192.5	185.4	+1.6	-3.7	+16.1	-5.2	
(a) Cotton Raw	32	128.4	149.6	163.3	+16.5	+9.2	+7.8	+14.0	
(b) Jute Raw	23	278.1	252.2	216.8	-9.3	-14.0	+21.5	-20.7	
Oilseeds	60	263.8	315.0	225.2	+19.4	-28.5	+24.9	-5.1	
(a) Groundnuts	27	253.8	298.4	190.3	+17.6	-36.2	+28.8	-16.0	
Manufactures	290	157.3	167.5	162.6	+6.5	-2.9	+9.2	+1.5	
1. Intermediate Products	41	184.5	221.7	199.1	+20.2	-10.2	+18.7	+3.5	
2. Finished Products	249	152.9	158.6	156.6	+3.7	-1.3	+7.4	+1.2	
(a) Cotton Manufactures	91	146.8	153.9	157.4	+4.8	+2.3	+6.6	+4.0	
(b) Jute Manufactures	37	165.1	146.1	130.2	-11.5	-10.9	+33.8	-13.9	
(c) Oil cakes	10	238.3	290.8	244.5	+22.0	-15.9	+16.4	+3.5	

Source : Report on Currency and Finance for the year 1967-68. P-7.

APPENDIX—1.8

Working Class Consumer Price Index—(Base 1949=100)

<i>Monthly average or months</i>	<i>All items</i>
Financial year	
1955-56	96
1956-57	107
1957-58	112
1958-59	118
1959-60	123
1960-61	124
1961-62	127
1962-63	131
1963-64	137
1964-65	157
1965-66	169
1966-67	191
1967-68	213

APPENDIX—3.3

**Registered birth and death rates per 1000 of population,
Kerala**

<i>Reference year</i>	<i>Birth rate</i>	<i>Death rate</i>
1956	23.0	7.4
1957	23.8	9.6
1958	24.6	7.6
1959	26.2	7.8
1960	23.9	6.9
1961	25.0	7.2
1962	22.7	6.3
1963	22.4	6.0
1964	23.3	5.8
1965	22.3	5.3
1966	22.5	5.4
1967	20.7	4.9

Source : Bureau of Economics & Statistics, Kerala.

APPENDIX—3.4

Sex-ratio in Kerala 1901-61

<i>Census year</i>	<i>Number of Females per 1000 Males</i>		
	<i>Rural</i>	<i>Urban</i>	<i>All</i>
1901	1008	953	1004
1911	1012	957	1008
1921	1016	957	1011
1931	1028	963	1022
1941	1032	978	1027
1951	1033	991	1028
1961	1027	991	1022

Source : Census of India, 1961, Vol. VII, Kerala, Part IA(i), General Report pp 82&85.

APPENDIX—3.5

Workers and non-workers in India and Kerala 1961 classified by broad age groups (Percentage distribution)

<i>Details</i>	<i>Age Groups</i>					<i>Total</i>
	0—14	15—34	35—59	60+	<i>Age not stated</i>	
I. Population						
1. India	41.0	32.0	21.3	5.6	0.1	100.0
2. Kerala	42.6	31.0	20.6	5.8	Neg.	100.0
II. Workers.						
1. India	7.7	49.3	36.5	6.5	Neg.	100.0
2. Kerala	2.7	49.7	40.7	6.9	„	100.0
III. Non-workers						
1. India	66.1	19.1	9.8	5.0	„	100.0
2. Kerala	62.6	21.6	10.5	5.3	„	100.0

Neg:—Negligible.

APPENDIX—3.6

Distribution of working force 1951 and 1961 by sex and industrial category

<i>No.</i>	<i>Categories (I.S.I.C.) Description</i>	<i>Sex</i>	1951	1961	1951-61 <i>percentage variation</i>
(1)	(2)	(3)	(4)	(4)	(6)
I. As cultivator		P	1012308	1272778	125.73
		M	798652	992651	124.29
		F	213656	280127	131.11
II. As agricultural labourer		P	1114783	1345133	120.66
		M	709392	792729	111.75
		F	405391	552404	136.26
III. In Mining quarrying, livestock, forestry, fishing, hunting, plantations, orchards allied activities		P	264124	436940	165.43
		M	217517	333972	153.54
		F	46607	102968	220.93
IV. At household industry		P	470830	527794	112.10
		M	170237	188612	110.79
		F	300593	339182	112.84
V. In manufacturing other than household industries		P	409849	540777	131.95
		M	324203	403941	124.60
		F	85646	136836	159.77
VI. In construction		P	57955	87967	151.79
		M	54540	81898	150.16
		F	3415	6069	177.72
VII. In trade & commerce		P	289214	397386	137.40
		M	263105	364183	138.42
		F	26109	33203	127.17
VIII. In transport storage & communication		P	138892	152513	109.81
		M	129960	144913	111.51
		F	8932	7600	85.09
IX. In other services		P	601707	869045	144.43
		M	449522	644139	143.29
		F	152185	224906	147.79
I to IX Total No of workers		P	4359662	5630333	129.15
		M	3117128	3947038	126.62
		F	1242534	1683295	135.47

Note:— For 1961, The Census figures are adjusted for comparability;
Source : Working Force Estimation, 1951 and 1961, Kerala, Bureau of
Economics & Statistics, Kerala 1968

APPENDIX—3.7

Percentage distribution of working force 1951 and 1961 by sex and industrial category

<i>No.</i>	<i>Category (I S I C) Description</i>	<i>Sex</i>	1951	1961	<i>Difference between Cols. 4&5 +increase —decrease</i>
(1)	(2)	(3)	(4)	(5)	(6)
I. As cultivator		P	23.22	22.61	—0.61
		M	25.62	25.15	—0.47
		F	17.20	16.64	—0.56
II. As agricultural labourer		P	25.57	23.89	—1.68
		M	22.76	20.08	—2.68
		F	32.63	32.82	+0.19
III. In mining, quarrying, livestock forestry, fishing, hunting & plantation		P	6.06	7.76	+1.70
		M	6.98	8.46	+1.48
		F	3.75	6.12	+2.37
IV. At household industry		P	10.80	9.37	—1.43
		M	5.46	4.78	—0.68
		F	24.19	20.15	—4.04
V. In manufacturing other than household industry		P	9.40	9.60	+0.20
		M	10.40	10.23	—0.17
		F	6.89	8.13	+1.24
VI. In construction		P	1.33	1.56	+0.23
		M	1.75	2.08	+0.33
		F	0.27	0.36	+0.09
VII. In trade and commerce		P	6.63	7.06	+0.43
		M	8.44	9.23	—0.79
		F	2.10	1.97	—0.13
VIII. In transport, storage & communications		P	3.19	2.71	—0.48
		M	4.17	3.67	—0.50
		F	0.72	0.45	—0.27
IX. In other services		P	13.80	15.44	+1.64
		M	14.42	16.32	+1.90
		F	12.25	13.36	+1.11
I to IX Total number of workers		P	100.00	100.00	..
		M	100.00	100.00	..
		F	100.00	100.00	..

Note :—For 1961 the census figures are adjusted for comparatively.

Source : Working Force Estimates 1951 and 1961, Kerala, Bureau of Economics & Statistics Kerala, 1968.

APPENDIX—3.8

Percentage distribution of working force—1951 and 1961 by sex and sector

<i>Sectors</i>	<i>Categories</i>	<i>Sex</i>	1951	1961	<i>Difference between Cols. 4&5 +increase —decrease</i>
(1)	(2)	(3)	(4)	(5)	(6)
Primary Sector	I + II	P	48.79	46.50	—2.29
		M	48.38	45.23	—3.15
		F	49.82	49.46	—0.36
Do.	I + II + III	P	54.85	54.26	—0.59
		M	55.36	43.70	—11.66
		F	53.57	55.58	+2.01
Secondary Sector	IV + V + VI	P	21.53	20.54	—0.99
		M	17.61	17.09	—0.52
		F	31.36	28.64	—2.72
Tertiary Sector	VII + VIII + IX	P	23.62	25.20	+1.58
		M	27.03	29.22	+2.19
		F	15.07	15.78	+0.71
Total workers	I to IX	P	100.00	100.00	
		M	100.00	100.00	
		F	100.00	100.00	

Source : Working Force Estimation, 1951 and 1961, Kerala, Bureau of Economics & Statistics, Kerala, 1968

APPENDIX—3.9

Estimates of State domestic product (Kerala) at factor cost by industry origin
(at 1960-61 prices)

(Rs. crores)

Year	Agriculture	Mining & Industries	Services	Net domestic product (State income)	Per capita income	
					Rs.	Index
					50-51 as base	55-56 as base
1950-51	182.18	54.05	97.96	334.19	100.0	94.4
1955-56	214.81	60.74	119.74	395.29	105.9	100.0
1960-61	240.99	68.30	152.86	462.16	110.9	104.7
1961-62	237.49	68.98	161.99	468.46	109.9	103.8
1962-63	243.39	70.35	172.69	486.43	111.6	105.4
1963-64	255.18	71.63	180.92	507.72	114.0	107.6
1964-65	263.79	75.80	192.31	531.89	116.8	110.2
1965-66	258.63	78.21	203.70	540.54	116.1	109.6

Source: Bureau of Economics and Statistics, Kerala.

APPENDIX—3.10

Estimates of State domestic product (Kerala) at factor cost by Industry origin
(AT CURRENT PRICES)

(Rs. Crores)

Year	Agriculture	Mining and Industries	Services	Net domestic Product (State Income)	Per Capita Income	
					Rs.	Index 55-56 as base
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1955-56	161.17	58.15	102.68	322.00	214.75	100.0
1960-61	240.99	68.30	152.86	462.16	275.96	128.5
1961-62	253.89	75.16	165.16	494.21	288.62	134.4
1962-63	259.82	80.33	179.85	520.00	297.04	138.3
1963-64	284.50	83.48	188.94	556.93	311.17	144.9
1964-65	372.16	93.34	210.76	676.26	369.58	172.1

Note:—The estimates are prepared by the Bureau of Economics and Statistics, Kerala and are not strictly comparable with the per capita income estimates presented in chapter 3 in the Table on per capita income differentials, the figures for which are furnished by the Planning Commission.

APPENDIX—3.11

Conventional estimates of domestic product at factor cost by industry origin
(All-India)
(At 1948-49 Prices)
(Rs. Abja)

Year	Agriculture	Mining and Industries	Services	Net domestic Product	Net national product (National Income)	Per Capita Income	
						Rs.	Index
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1950-51	43.4	14.8	30.5	88.7	88.5	247.50	100.0
1955-56	50.2	17.6	37.0	104.8	104.8	267.8	108.2
1960-61	59.0	21.1	47.7	127.8	127.3	293.30	118.5
1961-62	59.1	22.1	50.1	131.3	130.6	294.98	119.2
1962-63	57.9	23.0	53.0	133.9	133.1	293.55	118.6
1963-64	59.7	24.4	56.5	140.6	139.7	300.85	121.6
1964-65	65.1	25.3	60.7	151.1	150.0	315.44	127.5
1965-66	57.2	26.6	64.0	147.8	146.6	301.03	121.6
1966-67	57.3	27.2	66.7	151.2	149.5	299.68	121.1

Abja=100 crores.

Note: The estimates presented are at 1948-49 prices and are therefore not comparable in absolute terms with the Kerala estimates at 1960-61 constant prices presented in Appendix 3.9.

APPENDIX—3.12

Conventional estimates of domestic product (All-India) at factor cost by industry origin
(AT CURRENT PRICES) (Rs. Abja)

Year	Agriculture	Mining and Industries	Services	Net domestic product	Net national Product (National Income)	Per Capita Income		
						Rs. 1950-51 as base	1955-56 as base	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1950-51	48.9	15.3	31.3	95.5	95.3	266.50	100.0	104.5
1955-56	45.2	18.5	36.1	99.8	99.8	255.00	95.7	100.0
1960-61	68.9	26.0	47.0	141.9	141.4	326.00	122.3	127.8
1961-62	69.6	28.8	50.3	148.7	148.0	334.28*	125.4	131.1
1962-63	70.0	30.8	54.0	154.8	154.0	339.65*	127.4	133.2
1963-64	81.7	33.3	58.0	173.0	172.1	370.63*	139.1	145.3
1964-65	105.3	36.7	63.4	205.4	204.3	429.63*	161.2	168.5
1965-66	93.9	40.5	70.2	204.6	203.4	417.66*	156.7	163.8
1966-67	112.7	44.7	75.5	232.9	231.2	463.46*	173.9	181.7

Abja: = 100 crores.

*Worked out by applying the mid year population for the respective years furnished by the R. G. to the corresponding National Income Estimates published by the C. S. O., October 1967.

**Indices of net Domestic/National/Per Capita product by industry origin at constant prices
(Base 1950-51=100)**

	Region	Year									
		1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1. Agriculture	Kerala@	100.0	117.9	132.3	130.4	133.6	140.1	144.8	142.0	N.A.	
	India†	100.0	115.7	135.9	136.2	133.4	137.6	150.0	131.8	132.0	
2. Mining & Industry	Kerala	100.0	112.4	126.4	127.6	130.2	132.5	140.2	144.7	N.A.	
	India	100.0	118.9	142.5	149.3	155.4	164.9	171.0	179.7	183.8	
3. Agriculture, Mining & Industries Combined	Kerala	100.0	116.6	130.9	129.7	132.8	138.3	143.8	142.6	N.A.	
	India	100.0	116.5	137.6	139.5	139.0	144.5	155.3	144.0	145.2	
4. Services	Kerala	100.0	122.2	156.1	165.4	176.3	184.7	196.3	208.0	N.A.	
	India	100.0	121.3	156.4	164.3	173.8	185.3	199.0	209.8	218.7	
5. Net Domestic Product	Kerala	100.0	118.3	138.3	140.2	145.6	151.9	159.2	161.8	N.A.	
	India	100.0	118.2	144.1	148.0	151.0	158.5	170.4	166.6	170.5	
6. Net National Product	India	100.0	118.4	143.8	147.6	150.4	157.9	169.5	165.7	168.9	
7. Per Capita Income	Kerala	100.0	105.9	110.9	109.9	111.6	114.0	116.8	116.1	N.A.	
	India	100.0	108.2	118.5	119.2	118.6	121.6	127.5	121.6	121.1	

@At 1960-61 prices, Bureau of Economics and Statistics, Kerala.

†At 1948-49 prices, conventional estimates, C.S.O.

APPENDIX—3.14

Net domestic product by industry origin at constant prices percentage distribution

Sector	Region	Year										
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
		1950-51	1955-56	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67		
1. Agriculture	Kerala†	54.5	54.3	52.1	50.7	50.0	50.3	49.6	47.8	N.A.		
	India‡	48.9	47.9	46.2	45.0	43.2	42.5	43.1	38.7	37.9.		
2. Mining and Industries	Kerala	16.2	15.4	14.8	14.7	14.5	14.1	14.2	14.5	N.A.		
	India	16.7	16.8	16.5	16.8	17.2	17.3	16.7	18.0	18.0		
3. Agriculture, Mining and Industries combined	Kerala	70.7	69.7	66.9	65.4	64.5	64.4	63.8	62.3	N.A.		
	India	65.6	64.7	62.7	61.8	60.4	59.8	59.8	56.7	55.9		
4. Services	Kerala	29.3	30.3	3.1	34.6	35.5	35.6	36.2	37.7	N.A.		
	India	34.4	35.3	37.3	38.2	39.6	40.2	40.2	43.3	44.1		
5. Net Domestic Product	Kerala	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	N.A.		
	India	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
6. Net National Product	India	99.8	100.0	99.6	99.5	99.4	99.4	99.3	99.2	98.9		

†At 1960-61 prices, Bureau of Economics and Statistics, Kerala.

‡At 1948-49 prices, Conventional estimates, C.S.O.

APPENDIX—3.15

Per capita income at current prices

Sl. No. (1)	State (2)	1960-61 (3)	1961-62 (4)	1962-63 (5)	1963-64 (6)	1964-65 (7)
1	Andhra Pradesh	296.00	319.00	329.00*	354.31†	N.A.
2	Assam	311.10	327.40	323.20	357.20	393.80
3	Bihar	202.87	209.64	218.44	241.19	279.37
4	Gujarat	339.00	359.00	351.00*	379.00*	424.00†
5	Kerala	275.96	288.62	297.04	311.17	369.58
6	Madhya Pradesh	299.20	320.80	316.00	349.70*	405.30*
7	Madras	335.00	359.00	365.00	398.00	435.00
8	Maharashtra	392.00	389.00	428.00	487.00	524.00*
9	Mysore	290.10	300.19*	309.61*	356.03†	391.67†
10	Orissa	254.99	259.48	252.26*	N.A.	N.A.
11	Punjab & Haryana	388.00	401.00	416.00	483.00	586.00
12	Rajasthan	323.00	343.00	342.00	336.00	394.00*
13	Uttar Pradesh	245.88	256.63	260.89	288.42	365.12*
14	West Bengal	318.00	328.00	335.00*	361.00@	388.00†
	[A.	310.00	322.30	332.90	376.10	427.10
	B.	326.00	334.28	339.65	370.63	429.63

*Provisional

A. Revised Estimates, C.S.O.

B. Conventional Estimates, C.S.O., per capita income estimates under this series for 61-62 to 1964-65 is worked out by applying the mid-year population for the respective years furnished by the R.G. to the conventional estimates of national income for the corresponding years released by the C.S.O. in their white paper, October 1967.

Note:—Estimates of per capita income presented for the individual states are prepared by the respective State Statistical Bureaux and are not comparable with the per capita income estimates for the respective years furnished by the Planning Commission for 1964-65 and presented in chapter 3 under per capita income differentials.

†Quick Estimate.

APPENDIX 3.16

Per capita income at constant prices

(Rupees)

Sl. No.	State	1960-61	1961-62	1962-63	1963-64	1964-65	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Andhra Pradesh	254.49	NA	NA	NA	NA	At 52-53 Prices
2	Assam	253.50	265.50	254.70	270.80	278.60	At 48-49 "
3	Bihar	196.44	199.49	202.06	203.78	208.51	At 48-49 "
4	Gujarat	339.00	362.00	351.00*	353.00*	370.00*	At 60-61 "
5	Jammu & Kashmir	252.60	256.79	258.70	258.06	259.24	At 55-56 "
6	Kerala	275.96	273.58	277.86	283.67	290.68	At 60-61 "
7	Madhya Pradesh	263.40	263.80	250.90	260.10	271.70	At 52-53 "
8	Madras	335.00	349.00	354.00	364.00	374.00	At 60-61 "
9	Mysore	241.57	244.20*	248.99*	255.94†	260.62†	At 56-57 "
10	Maharashtra	350.00	338.00	339.00	348.00	357.00	At 55-56 "
11	Orissa	244.89	248.07	241.08*	NA	NA	At 58-59 "
12	Punjab & Hariyana	357.00	358.00	357.00	367.00	395.00	At 52-53 "
13	Rajasthan	241.00	252.00	251.00	240.00	252.00@	At 54-55 "
14	Uttar Pradesh	245.88	246.62	241.08	236.58	255.23*	At 60-61 "
15	West Bengal	320.00	311.00	304.00*	328.00@	337.00†	At 51-52 "
	INDIA	310.00	316.00	314.20	323.40	339.20	At 60-61 "
	A	326.00	326.00	323.00	331.00	348.00	

* Provisional † Quick Estimates @ Preliminary.

A. Revised Estimate, C. S. O., October 1967.

B. Conventional Estimates.

Source: IV Five Year Plan, A Draft Outline, Government of India, 1966.

Note: Estimates of per capita income for the individual States are prepared by the respective State Statistical Bureau.

APPENDIX 3.17
Per-capita income differentials (at current prices)

State	1960-61*		1964-65**						
	Per capita income	Income difference compared to Kerala (+ or -) Rs.	Per capita income index All India Kerala 100	Per capita income Rs.	Income difference compared to Kerala (+ or -) Rs.	Per capita income index All India Kerala 100	Per capita income index Kerala :100		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 Maharashtra		468.54	153.68	140.0	148.8	529.00	138.00	125.1	135.3
2 West Bengal		464.51	149.65	138.9	147.5	495.00	104.00	117.0	126.6
3 Punjab		461.31	146.45	134.9	146.5	619.00	228.00	146.3	158.3
4 Haryana		393.39	78.53	117.6	124.9	513.00	122.00	121.3	131.2
5 Gujarat		334.54	19.68	100.0	106.3	523.00	132.00	123.6	133.8
6 Madras		334.09	19.23	99.9	106.1	436.00	45.00	103.1	111.5
7 Assam		333.34	18.48	99.6	105.9	394.00	3.00	93.1	100.8
8 Kerala		314.86	..	94.1	100.0	391.00	..	92.4	100.0
9 Mysore		304.71	(-)10.15	91.1	96.8	441.00	50.00	104.3	112.8
10 Uttar Pradesh		297.35	(-)17.51	88.9	94.4	374.00	(-)17.00	88.4	95.7
11. Andhra Pradesh		287.01	(-)27.85	85.8	91.2	458.00	(+)67.00	108.3	117.1
12. Madhya Pradesh		285.35	(-)29.51	85.3	90.6	378.00	(-)13.00	89.4	96.7
13. Orissa		276.22	(-)38.64	82.6	87.7	368.00	(-)23.00	87.0	94.1
14. Rajasthan		267.43	(-)47.43	79.9	84.9	365.00	(-)26.00	86.3	93.4
15. Bihar		220.69	(-)94.17	66.0	70.1	292.00	(-)99.00	69.0	74.7

*Source: National Council of Applied Economic Research

†Source: Planning Commission, Government of India.

NOTE—Estimates for the two periods are framed by two different agencies and are therefore not strictly comparable.

APPENDIX 4.1

Average monthly rainfall (in milli metres) in Kerala during the year 1967-68.

<i>District</i>	<i>July</i>	<i>August</i>	<i>Septem-ber</i>	<i>Octo-ber</i>	<i>Novem-ber</i>	<i>Decem-ber</i>	<i>Janu-ary</i>	<i>Febru-ary</i>	<i>March</i>	<i>April</i>	<i>May</i>	<i>June</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Trivandrum	217.2	138.6	222.2	308.6	51.6	18.8	13.9	15.0	112.4	144.3	40.2	474.4	1757.4
Quilon	554.4	353.6	224.5	245.2	81.8	78.2	30.7	67.4	133.5	147.5	99.0	597.7	2613.5
Alleppey	1092.0	519.7	187.4	205.6	70.4	75.8	35.2	44.0	137.3	130.9	114.3	793.1	3405.7
Kottayam	424.6	410.7	122.7	223.8	65.7	32.4	5.7	51.9	125.0	132.2	84.8	671.4	2350.9
Ernakulam	692.5	631.8	191.7	207.4	102.7	25.3	4.2	47.7	115.5	152.2	174.7	710.5	3056.2
Trichur	743.1	678.4	125.7	172.7	65.8	40.4	..	44.8	74.1	109.9	114.5	726.7	2896.1
Palghat	750.2	444.3	89.2	134.6	102.7	39.8	..	8.9	66.8	133.8	75.5	467.7	2313.5
Kozhikode	1029.2	597.6	99.3	101.4	60.0	15.4	..	2.8	61.3	110.1	86.0	757.7	2920.8
Cannanore	1213.5	711.3	140.4	81.8	56.0	7.4	..	4.6	25.2	139.3	73.0	950.6	3403.1
State average	746.3	498.4	155.9	186.8	73.0	37.0	10.0	31.9	94.6	133.4	95.8	683.3	2746.4

APPENDIX—4.2

Total Area and Classification of Area in each District of Kerala during the year ending 30th June 1968

(Area in hectares)

District	Classification of area						
	Total Geographical area according to village papers	Forests	Land put to non-agricultural uses	Barren and uncultivable land	Permanent Pastures & other grazing land	Land under miscellaneous tree crops not included in net area sown	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Trivandrum	216096	44538	15665	670	550	216	
Quilon	469051	210857	15580	10850	1300	2000	
Alleppey	186790	513	12510	950	250	7221	
Kottayam	626225	252964	16235	15130	3500	3156	
Ernakulam	317428	55212	21300	5140	2000	3994	
Trichur	294262	132376	15890	2100	500	1160	
Palghat	510424	99663	61935	20800	5000	24303	
Kozhikode	661586	193746	31370	13090	2700	29012	
Cannanore	576661	65932	50345	23100	12000	90800	
Total	3858523	1055811	240830	91830	27800	161862	

(Area in hectares)

37/400

District	Classification of area							Total cropped area
	Cultivable waste	Fallow land other than current fallow	Current fallow	Net area sown	Area sown more than once			
(1)	(8)	(9)	(10)	(11)	(12)	(13)		
Trivandrum	677	741	466	152573	87377	239950		
Quilon	2449	1246	1384	223385	111054	334439		
Alleppey	1037	1517	494	162298	67715	230013		
Kottayam	6910	872	1815	315643	33998	354641		
Ernakulam	8646	2505	2255	216376	56374	272750		
Trichur	2761	437	1860	137178	82829	220007		
Palghat	19631	3966	5044	270082	88941	359023		
Kozhikode	22978	4012	5093	359575	54029	413604		
Cannanore	23467	14360	4922	291735	41277	333012		
Total	98556	29656	23333	2128845	628594	2757439		

APPENDIX 4.3

Area and Production of the various Food Crops in Kerala

<i>Crops</i>	1966-67			1967-68		
	<i>Area Hectares</i>	<i>Production (Tonnes)</i>	<i>Average yield (Kg./Hect.)</i>	<i>Area (Hects.)</i>	<i>Production (Tonnes)</i>	<i>Average yield (Kg./Hects)</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Food crops</i>						
Rice	799438	1084062	1356	809544	1123897	1388
Pulses	43547	17071	392	42632	13173	308
Sugar-cane (gur)	8773	54902	5618	8033	49973	6221
Pepper	99695	21406	215	99702	21064	211
Ginger	11793	11054	937	11795	11117	942
Turmeric	4443	3747	843	4443	3725	838
Cardamom	47026	1606	34	47026	1606	34
Betelnuts	71231	10683*	149976	76044	11473*	150873
Bananas & other						
Plantains	45589	344896	7565	49418	374282	7573
Cashewnut	90559	101607	1122	94990	106578	1121
Tapioca	244647	3409668	13937	297646	4198357	14105
Other Food Crops	210081	..	..	221517	..	..
Total Food Crops	1676822	..	..	1762790	..	..

APPENDIX 4.4

Statement showing the offtake of rice and wheat monthwise—for the year 1965, 1966, 1967, 1968

Month	Offtake of rice in tonnes				Offtake of wheat in tonnes			
	1965	1966	1967	1968	1965	1966	1967	1968
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
January	65243	60950	72555	39586	21918	31337	17510	40229
February	64808	55799	62394	38203	28165	21412	13289	37246
March	72378	66816	67409	38061	28542	20816	14941	43701
April	71727	71833	66135	45511	25346	18881	16557	48397
May	76024	75612	55008	38908	30136	21886	26012	48569
June	75364	74790	53578	60436	28507	27965	38526	41197
July	91492	78607	44290	77095	26284	32816	51859	24597
August	96159	78750	39522	75638	25775	33477	60702	24106
September	78877	73153	36719	69551	22168	26313	50360	20768
October	70274	72937	37109	41828	22449	23376	51936	24314
November	69049	71986	36879	57712	24025	20829	54182	20796
December	75005	67273	41496	..	28560	23448	58740	..
Total	906400	848506	613094	58259	311875	302556	454614*	373920*

* Excludes of the off take for December

APPENDIX 5.1

Marine Fish landings in Kerala

<i>Species</i>	1967-68		1966-67	
	<i>Quantity</i> (<i>'000 tonnes</i>)	<i>%</i>	<i>Quantity</i> (<i>'000 tonnes</i>)	<i>%</i>
(1)	(2)	(3)	(4)	(5)
1 Oil Sardine	114.3	46.8	96.9	42.6
2 Other Sardine	12.0	4.9	19.1	8.4
3 Mackerel	3.8	1.6	9.6	4.2
4 Prawns	33.3	13.6	26.1	11.5
5 Shark & dog fish	4.2	1.7	1.8	0.8
6 Skate and rays	0.5	0.2	0.5	0.2
7 Cat fish	8.0	3.3	8.2	3.7
8 Seer fish	0.5	0.2	0.8	0.4
9 Silver bellies	3.0	1.2	7.1	3.1
10 White bait	0.8	0.3	2.0	0.8
11 Soles	5.3	2.2	4.4	2.0
12 Bonito or tunny	0.5	0.2	1.7	0.7
13 Pomfrets	1.7	0.7	1.0	0.4
14 Lactarius	6.3	2.6	1.4	0.6
15 Ribon fish	2.5	1.0	4.3	1.9
16 Others	47.4	19.5	42.6	18.7
Total	244.1	100.0	227.5	100.0

APPENDIX 5.2

Livestock Population, Kerala*(No. in lakhs)*

<i>Category</i>	1961			1966		
	<i>Kerala</i>	<i>India</i>	<i>%</i>	<i>Kerala</i>	<i>India</i>	<i>%</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Cattle	27.53	1756.72	1.57	28.57	1755.20	1.63
2 Buffaloe	4.85	511.37	0.95	4.71	528.65	0.89
3 Sheep	0.24	402.63	0.06	0.12	418.20	0.03
4 Goats	13.12	608.13	2.16	11.89	647.35	1.84
5. Other livestock	1.24	86.24	1.43	1.12	49.66	2.25
Total livestock	46.98	3365.09	1.40	46.41	3399.06	1.37
6 Poultry	91.06	1169.14	7.79	99.09	1149.15	8.62

APPENDIX 6.1

Area under Different Species*(In hectares)*

<i>Name of Species</i>	<i>Achievements</i>				
	1963-64	1964-65	1965-66	1966-67	1967-68
Teak	2504	2967	3470	2545	1883
Soft wood	1227	1226	1669	1165	1165
Anjili	..	..	..	..	81
Fuel	75	77	76	689	720
Eucalyptus	1782	2049	2487	2161	4337

Source: Forest Department

APPENDIX 6.2

Out-turn of Timber and Firewood

Sl. No.	Item	Unit	1960-61	1964-65	1965-66	1966-67	1967-68
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	A Round logs	C.M.	223158	284662	437677	504442	268403
	(i) Teak	C.M.	33587	30346	27875	36549	46672
	(ii) Others	C.M.	189571	254316	409802	467893	221731
	B. Sawn & Squared timber	C.M.	151	56	3474	129	125
	(i) Teak	C.M.	56	43	11	8	122
	(ii) Others	C.M.	105	13	3463	121	3
2	Round Poles	Nos.	252340	249581	251019	422985(Cm.)	284658
3	Fire wood	Tonnes	182253	137570	163255	257160	7878
4	Sandal wood	kgs.	7380	57137	76427	116171	105000
5	Outer slabs	Nos.	112	102	..	435	87
6	Teak Kappukal	Nos.	..	350	..	11659	2481
7	Ivory	kgs.	709.9	773.1	165.4	318	685

Source: Forest Department

APPENDIX 6.3

Revenue from Forests

<i>Year</i>	<i>Receipts from the sale of Timber</i>	<i>Fuel</i>	<i>Minor produce</i>	<i>Other receipts</i>	<i>Gross receipts</i>	<i>Refunds</i>	<i>Net receipt</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1960-61	406.1	5.1	15.1	12.0	438.3	6.3	432.0
1964-65	482.7	6.9	10.7	26.9	527.2	3.6	523.6
1965-66	525.2	7.0	12.7	29.0	573.9	3.5	570.4
1966-67	601.1	8.3	(*)	60.1	669.5	3.9	665.6
1967-68	681.5	10.5	3.6	42.8	718.4	4.3	714.1

*The receipts from minor produces during 1966-67 are accounted under other receipts in col. (5)
Source: Forest Department

APPENDIX 6.4

State-wise Distribution of Rubber Holdings and Estates at the end of 1967-68

States	Small growers (Holdings)				Large growers (Estates)				Total	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Number of units	Area	Average area of a unit	Number of units	Area	Average area of a unit	Number of units	Area	Average area of a unit	
1. Kerala	91205	113408	1.24	597	56242	94.21	91802	169650	1.85	
2. Madras										
3. Mysore	1526	3558	2.33	57	8384	147.09	1583	11942	7.54	
4. Andaman & others										138
Total	92731	116966	1.26	654	64626	98.82	93385	181592	1.94	

Source: Rubber Board

APPENDIX 6.5

Area under improved Varieties of Rubber in India

<i>Year</i>	<i>Area under improved varieties (000 hectares)</i>	<i>Total area under rubber ('000 hectares)</i>	<i>Percentage of col. 2 to col. 3</i>
1956-57	23.06	94.88	24
1960-61	46.56	129.91	36
1961-62	54.26	140.88	39
1962-63	58.71	147.15	40
1963-64	66.32	152.95	43
1964-65	70.19	155.33	45
1965-66	82.61	164.71	50
1966-67	93.63	171.33	55
1967-68	105.32	181.59	58

Source: Rubber Board

APPENDIX 6.6

Consumption of Rubber in India

<i>Year</i>	<i>Consumption of natural rubber</i>	<i>Consumption of synthetic rubber</i>	<i>Consumption of reclaimed rubber</i>	<i>Total consumption</i>	<i>Production of natural rubber</i>	<i>Gap between total consumption and production of natural rubber</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1958-59	35767	3477	4102	43346	24169	19177
1959-60	40491	4964	4969	50424	24173	26251
1960-61	48148	7397	5353	60998	25697	35301
1961-62	48410	10186	6046	64642	27446	37196
1962-63	53553	10723	6850	71126	32239	38887
1963-64	61155	11959	6982	81096	37487	43609
1964-65	61057	15285	9369	85711	45616	40095
1965-66	63765	24553	9774	95092	50530	44562
1966-67	68685	23592	10913	103190	54818	48372
1967-68	74518	23324	11862	109704	64468	45236

Source: Rubber Board

APPENDIX 6.7

**Area under cultivation, total Production and average yield per hectare of Tea
in each States of India during 1965-67**

Sl. No.	State	Area in hectares as on 31st March			Production in '000 Kg.			Average yield per hectares (in Kg.)		
		1965	1966	1967*	1965	1966	1967*	1965	1966	1967*
1	Assam	169659	172305	174134	181888	189221	189928	1072	1038	1091
2	West Bengal	85031	85648	86393	86979	87015	96584	1023	1016	1118
3	Tripura	5502	5537	5479	2646	2634	2687	48	476	490
4	Bihar	476	476	476	39	55	56	82	116	118
5	Uttar Pradesh	1972	1972	1972	612	451	676	310	229	343
6	Punjab	3763	3763	3763	1012	996	835	269	257	222
7	Himachal Pradesh	420	420	420	70	45	34	167	107	81
8	Madras	33207	33709	33943	47343	48455	47305	1426	1437	1394
9	Mysore	1811	1811	1836	2218	2259	2162	1225	1247	1178
10	Kerala	39921	39615	39241	43567	44882	42232	1091	1133	1076
Total:		341762	345256	347257	366374	375983	382499	1072	1089	1100

*Provisional

Source: Tea Statistics, 1967-68.

APPENDIX 6.8

**Area and Production of Tea according to the Sizes of Estates in Kerala
during 1967-68**

<i>Sl. No.</i>	<i>Size of Estate (Hectare)</i>	<i>No. of Estates</i>	<i>Area in Hectares</i>	<i>Production in Kg.</i>	<i>Average yield per Hectare (Kg.)</i>
(1)	(2)	(3)	(4)	(5)	(6)
1	Up to 5 hectares	2291	1402	N.A.	N.A.
2	Above 5 hectares & below 50 hectares	100	1506	475396	326
3	Above 50 hectares & below 100 hectares	30	2269	4184514	522
4	Above 100 hectares & below 200 hectares	32	4666	5038693	1080
5	Above 200 hectares & below 400 hectares	64	18456	23833756	1291
6	Above 400 hectares	22	10764	12734572	1183
	Total	2539	39063	43316931	1109

Source: Tea statistics 1967-68

APPENDIX 6.9

**District-wise area and production of Coffee during 1966--67 &
1967!68**

<i>District</i>	1966-67		1967-68	
	<i>Area in hectares</i>	<i>Production M.T</i>	<i>Area in hects.</i>	<i>Production (M.T.)</i>
Trivandrum	3	2	3	2
Quilon	127	3	127	16
Alleppey	..	..	..	..
Kottayam	2039	551	2041	943
Ernakulam	246	57	252	59
Trichur	..	..	..	..
Palghat	3330	1974	3351	1986
Kozhikode	16335	6662	17253	7036
Cannanore	3072	1264	3441	1416
Total	25152	10513	26468	11458

APPENDIX 7.1

Factories in Kerala as on 30-9-1968

<i>Sl. No.</i>	<i>Industry</i>	<i>No. of factories</i>
1	Canning and preservation of fruits and vegetables	6
2	Canning and preservation of fish and other sea foods	30
3	Rice and flour mills	115
4	Sugar	3
5	Oil mills	296
6	Tea factories	127
7	Cashew factories	254
8	Starch and other food articles except beverages	36
9	Beedi and cigar	62
10	Cotton textiles	227
11	Knitting	13
12	Coir	159
13	Other textiles	5
14	Umbrellas	15
15	Saw mills	257
16	Plywood	11
17	Other timber industries including splints and veneers	228
18	Paper mills	2
19	Paper board, straw board and other paper products	5
20	Printing and binding	212
21	Rubber and rubber products including tyre retreading	143
22	Artificial manures	12
23	Pharmaceuticals	26
24	Soap	8
25	Other chemicals including matches	58
26	Petroleum and refineries	10
27	Bricks and tiles	
28	Glass	232
29	Pottery, china and earthenware	9
30	Cement	1
31	Basic metal industries	31

<i>Sl. No.</i>	<i>Industry</i>	<i>No. of factories</i>
32	Metal products	97
33	Agricultural implements	10
34	General and jobbing engineering	78
35	Other machinery except electrical machinery	26
36	Electrical machinery	27
37	Marine engines building and repairing	10
38	Repair of motor vehicles	147
39	Manufacture of bicycles	6
40	Other industries not classified above	82
	Total	<hr/> 3078 <hr/>

@ Provisional

Source: Bureau of Economics & Statistics, Trivandrum.

APPENDIX—7.2

District-wise distribution of working factories in Kerala as on 31-12-1967

Major Groups	Trivandrum		Quilon		Alleppey		Kottayam		Ernakulam	
	A	B	A	B	A	B	A	B	A	B
(1)	(2)		(3)		(4)		(5)		(6)	
1. Canning and preservation of fruits and vegetables	..	..	..	..	1	100	1	22	..	..
2. Do. fish and other sea foods	..	..	1	71	4	161	..	..	14	1591
3. Rice & flour mills	..	..	..	..	..	..	..	..	1	20
4. Sugar	..	..	..	..	2	636	..	..	..	..
5. Oil mills	19	97	16	148	81	598	11	52	34	215
6. Tea factories	..	..	..	..	..	..	..	..	..	..
7. Cashew Factories	12	4221	205	79993	6	6392	..	..	4	1461
8. Starch & other food articles (except beverages)	7	254	14	561	9	162	84	3985	4	257
9. Beedi & Cigar	..	..	..	..	..	..	..	..	2	15
10. Cotton textiles	7	1181	1	965	..	..	..	..	6	1488
11. Knitting	1	9	..	..	..	..	..	..	..	..
12. Coir	1	10	..	..	115	3706	1	16	13	572
13. Other Textiles	1	8	..	..	..	..	..	..	1	1015
14. Umbrellas	..	..	..	..	3	24	..	..	1	17
15. Sawmills	2	11	20	313	2	6	17	166	38	562
16. Plywood	..	..	1	101	..	..	5	413	1	15
17. Other timber industry including splints & veneers	7	140	35	956	7	239	14	430	20	703
18. Paper mills	..	..	1	618	..	..	..	..	..	..
19. Paper board and straw board and other paper products	..	..	..	..	3	68	1	9	..	..

Major Groups	Trichur		Palghat		Kozhikode		Cannanore		Total	
	A	B	A	B	A	B	A	B	A	B
	(7)	(7)	(8)	(8)	(9)	(9)	(10)	(10)	(11)	(11)
1. Canning and preservation of fruits and vegetables	3	425	..	..	2	18	..	..	7	565
2. Do. fish and other sea foods	1	12	..	..	4	57	..	..	24	1892
3. Rice & flour mills	27	451	53	446	8	199	3	19	92	1135
4. Sugar	..	..	1	96	..	..	..	..	3	732
5. Oil mills	66	482	9	84	10	39	5	40	251	1755
6. Tea factories	..	..	..	..	2	75	..	..	2	75
7. Cashew factories	7	2051	..	..	3	1464	4	1285	241	96867
8. Starch and other food articles (except beverages)	1	93	3	139	26	1905	9	429	157	7785
9. Beedi and Cigar	4	116	15	510	4	95	18	451	43	1187
10. Cotton textiles	5	2347	2	435	22	1910	176	7077	219	15403
11. Knitting	1	84	..	..	2	83	5	276	9	552
12. Coir	..	..	..	..	12	939	..	..	142	5243
13. Other Textiles	1	1291	..	..	..	..	..	..	3	2314
14. Umbrellas	3	47	..	..	9	295	..	..	16	383
15. Sawmills	47	681	19	147	65	1633	32	607	242	4126
16. Plywood	2	195	1	44	..	..	3	806	13	1574
17. Other timber industry including splints & veneers	35	673	33	1304	24	771	18	632	193	5848
18. Paper mills	..	..	..	..	..	..	1	14	2	632
19. Paper board and straw board and other paper products	1	42	1	40	..	..	2	190	8	349

Major Groups	Trivandrum		Quilon		Alleppey		Kottayam		Ernakulam	
	A	B	A	B	A	B	A	B	A	B
(1)	(2)		(3)		(4)		(5)		(6)	
20. Printing and binding	30	1140	11	299	18	164	31	734	33	649
21. Rubber & Rubber products including tyre retreading	9	232	17	392	3	247	41	1153	16	698
22. Artificial manure	..	..	..	..	..	..	3	150	5	3450
23. Pharmaceuticals	2	42	1	24	1	45	..	..	2	78
24. Soap	..	..	..	..	..	..	2	890	1	27
25. Other chemicals including matches	1	370	9	194	4	25	2	58	14	1420
26. Petroleum and refineries	..	..	3	22	..	..	..	..	5	723
27. Bricks & Tiles	1	20	42	2203	4	87	3	75	19	943
28. Glass	..	..	..	..	1	50	..	..	1	311
29. Pottery, China & earthenware	..	..	2	361	..	..	..	..	..	..
30. Cement	..	..	..	..	..	..	1	294	..	..
31. Basic metal industries	4	65	3	575	3	39	1	9	11	1166
32. Metal products	3	179	21	584	3	38	9	90	22	523
33. Agricultural implements	1	8	..	..	..	..	..	..	2	88
34. General and jobbing engineering	4	366	5	805	5	105	10	310	22	534
35. Other machinery except electrical machinery	4	91	1	37	..	..	1	8	2	2147
36. Electrical machinery	1	2	3	392	1	42	4	157	9	812
37. Marine engines building and repairing	..	..	3	179	..	..	..	..	6	836
38. Repair of motor vehicles	15	1539	5	138	2	87	17	382	16	597
39. Manufacture of bicycles	2	69	2	35	..	..	..	..	2	25
40. Other industries not classified above	7	253	1	21	3	99	3	151	12	861
Total	141	10307	423	89987	281	13120	262	9554	339	23819

Note:—The above figures are provisional.

A. No. of factories.

B. No. of employment.

Major Groups	Trichur		Palghat		Kozhikode		Cannanore		Total	
	A	B	A	B	A	B	A	B	A	B
	(7)	(8)	(9)		(10)		(11)			
20. Printing and binding	34	542	12	320	22	843	13	182	204	4873
21. Rubber & Rubber products including tyre retreading	16	310	5	90	21	261	3	95	131	3478
22. Artificial manure	10	231	2	95	2	33	..	..	10	3633
23. Pharmaceuticals	..	..	2	95	2	283	..	..	20	798
24. Soap	..	..	3	244	..	..	..	..	6	1161
25. Other chemicals including matches	30	379	11	254	2	20	1	50	64	2770
26. Petroleum and refineries	..	..	1	7	..	..	..	..	9	752
27. Bricks & Tiles	19	4892	9	602	22	4197	6	558	225	13577
28. Glass	..	..	..	..	..	..	..	..	2	361
29. Pottery, China & earthenware	1	58	1	16	3	111	..	..	7	546
30. Cement	..	..	..	..	..	..	..	..	1	294
31. Basic metal industries	4	47	2	64	3	249	1	28	32	2242
32. Metal products	14	256	20	962	5	48	3	34	100	2714
33. Agricultural implements	1	9	5	292	..	..	1	20	10	417
34. General and jobbing engineering	19	521	5	100	8	280	3	23	81	3044
35. Other machinery except electrical machinery	8	111	5	36	2	75	1	15	24	2520
36. Electrical machinery	4	60	6	106	2	69	2	58	30	1698
37. Marine engines building and repairing	..	..	..	..	..	..	..	..	9	1015
38. Repair of motor vehicles	25	422	16	103	33	722	11	145	140	4225
39. Manufacture of bicycles	..	..	..	..	..	..	..	..	6	129
40. Other industries not classified above	3	66	6	310	7	1791	7	392	49	3684
Total	482	16994	244	6936	327	18465	328	13166	2827	202348

APPENDIX—7.3

WAGES AND EARNINGS*

(Earnings of Factory Employees* Earnings less Rs. 400 per month 1961-66)

State/Union Territory	Total annual earnings (000s)					
	1961	1962	1963	1964	1965	1966
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra Pradesh	136853	119175	145101	141631	147604	187911
2. Assam	63343	64353	65223	72126	77345	103424
3. Bihar	274917	284781	301304	318608	365476	388871
4. Gujarat	496308	526037	517306	593687	670558	728879
5. Hariyana	..	..	..	..	..	104879
6. Jammu & Kashmir	..	..	..	3307	1499	3562
7. Kerala	75932	87330	84954	77475	98975	108114
8. Madras	358546	410814	424260	457297	647144	695983
9. Madhya Pradesh	63230	74640	90901	134474	178159	166635
10. Maharashtra	1132731	1236712	1322933	1452065	1682615	1885110
11. Mysore	123591	98620	180770	210237	265235	212495
12. Orissa	24478	42659	22319	49266	71512	94444
13. Punjab	106541	128560	145163	180438	226954	121385
14. Rajasthan	12369	33378	51104	42124	43526	55951
15. Uttar Pradesh	299668	375855	382893	433048	526347	543576
16. West Bengal	848609	928186	1001191	1122951	1244094	1274724
All—India (including Union Territories)	4123342	4536888	4864876	5390285	5837657	7237242

*Including employees in Defence Factories but excluding those in Railway workshops

P=Provisional

Source : Annual Return under the Payment of Wages Act, 1936.

State/Union Territory	Per capita daily earnings					
	1961	1962	1963	1964	1965	1966
(1)	(8)	(9)	(10)	(11)	(12)	(13)
1. Andhra Pradesh	4.18	3.38	3.77	3.23	3.75	4.17
2. Assam	3.41	3.34	3.68	3.62	4.80	5.61
3. Bihar	5.51	5.38	5.63	5.37	6.18	6.42
4. Gujarat	5.37	5.46	5.34	5.83	6.69	7.41
5. Haryana	..	..	..	..	..	5.92
6. Jammu & Kashmir	..	..	..	3.02	3.14	3.87
7. Kerala	2.89	2.90	3.08	3.15	3.54	4.75
8. Madras	4.39	4.87	4.78	4.95	6.30	6.63
9. Madhya Pradesh	5.45	6.33	5.66	6.43	5.70	6.77
10. Maharashtra	5.41	6.04	6.12	6.52	7.29	8.18
11. Mysore	4.19	4.24	4.83	5.31	5.93	6.03
12. Orissa	3.57	3.86	3.81	5.20	5.24	5.57
13. Punjab	4.05	4.13	4.06	4.58	5.47	4.28
14. Rajasthan	2.49	4.31	4.09	4.41	4.95	4.44
15. Uttar Pradesh	4.26	4.56	4.63	4.99	5.55	5.83
16. West Bengal	4.69	4.79	5.05	5.45	5.99	6.60
All-India (including Union Territories)	4.79	5.01	5.11	5.42	5.66	7.14

P=Provisional

APPENDIX—7.4

Kerala State Industrial Development Corporation—Industry-wise Assistance Sanctioned till

31-3-1968

(Rs. in lakhs)

Sl.No.	Type of Industry	No. of applications	Financial Assistance sanctioned				Total
			Loans	Under writing	Direct subscription	Guarantee	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Cotton Textiles	10	59.25	38.50	1.00	139.21	237.96
2	Electrical lamps	2	15.00	..	..	90.00	105.00
3.	Iron & Steel products	4	40.00	25.00	10.00	3.00	78.00
4.	Non ferrous Metals and Alloys	1	38.00	34.00	..	..	72.00
5.	Inorganic Heavy chemicals	2	30.00	..	29.91	..	59.91
6.	Electrical cables and wires	2	10.00	25.00	10.00	10.00	55.00
7.	Industrial Instruments	3	6.90	5.00	9.36	..	21.26
8.	Rubber goods	1	..	9.00	..	..	9.00
9	Ceramics	1	..	7.35	7.35
10	Miscellaneous Chemicals	1	..	7.00	7.00
11	Vegetable oils	1	2.00	..	4.00	..	6.00

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Source : Kerala State Industrial Development Corporation Ltd., 7th Annual Report, (1967-68).

APPENDIX 7.5

Kerala State Industrial Development Corporation**DISTRICT-WISE STATEMENT OF LOANS DISBURSED FROM
CORPORATION FUNDS AS ON 31-3-1968**

<i>Sl. No.</i>	<i>Name of District</i>	<i>Amount Disbursed</i>	
		<i>No.</i>	<i>Amount Rs.</i>
1	Trivandrum	17	49,25,622
2	Quilon	39	48,05,225
3	Kottayam	36	82,07,860
4	Alleppey	23	37,52,925
5	Ernakulam	28	99,19,826
6	Trichur	13	39,54,000
7	Calicut	9	63,14,257
8	Palghat	3	20,68,906
9	Cannanore	8	27,70,000
10	Taluks that have merged with Madras	3	2,90,000
	Total	179	4,70,08,621

Source: Kerala State Divisional Development Corporation 7th Annual Report (1967-68)

APPENDIX 7.6

KERALA STATE INDUSTRIAL DEVELOPMENT CORPORATION
District-wise Statement of Loans Disbursed as on 31-3-1968 from
Agency Funds

<i>Sl. No.</i>	<i>Name of District</i>	<i>Amount Disbursed</i>	
		<i>No.</i>	<i>Amount Rs.</i>
1	Trivandrum	18	6,86,855
2	Quilon	26	8,00,310
3	Alleppey	23	11,30,989
4	Kottayam	29	14,15,464
5	Ernakulam	32	14,41,295
6	Trichur	47	25,17,449
7	Palghat	13	6,61,574
8	Calicut	11	5,28,500
9	Cannanore	11	3,84,164
	Total	210	95,66,600

Source: Kerala State Industrial Development Corporation, 7th Annual Report (1967-68)

APPENDIX 7.7

Kerala State Industrial Development Corporation

PERFORMANCE AS ON 31-3-1968

(Rs. in lakhs)

<i>Sl. No.</i>	<i>Item</i>	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	<i>Total</i>
1	Resources (cumulative)	25.00	95.00	169.01	212.10	309.01	374.60	462.61	462.61
2	Assistance Sanctioned during the year	..	136.06	125.75	103.30	116.93	146.80	178.16	807.00
3	Total operations during the year	..	40.23	47.20	119.06	111.37	97.36	186.36	601.58
4	Financial assistance cleared during the year	..	25.96	32.50	102.00	105.09	83.91	156.61	506.07
5	Promotional activities during the year	..	0.30	12.70	17.06	1.43	13.45	29.75	74.69
6	Investments during the year	..	13.97	2.00	..	4.85	..	..	20.82

Source: Kerala State Industrial Development Corporation Limited 7th Annual Report (1967-68).

APPENDIX 7.8

KERALA FINANCIAL CORPORATION

Industry-wise classification of Loans Disbursed during the year 1967-68 From Corporation Funds

<i>Sl. No.</i>	<i>Type of Industry</i>	<i>Amount Rs.</i>
1	Food Manufacturing Industries except Beverage Industries	1,50,000
2	Tea Manufacturing	2,50,000
3	Cold Storage	43,15,000
4	Cotton Textiles	10,00,000
5	Linoleum & Similar Products	5,00,000
6	Paper Board and Straw Board	10,00,000
7	Matches	2,93,906
8	Chinaware & Pottery	38,000
9	Metal Containers	34,000
10	Manufacture of Ice	2,00,000
11	Transport Industry	63,648
	Total	78,44,554

Source: Kerala Financial Corporation, Fifteenth Annual Report 31-3-1968.

APPENDIX—7.9

Kerala Financial Corporation—Loans disbursed till 1967-68

I. CORPORATION LOANS

(Amounts—Rs. lakhs)

<i>Year</i>	<i>Loan sanctioned (cumulative)</i>	<i>Loan disbursed (cumulative)</i>	<i>Loan outstanding (cumulative)</i>	<i>Net profit (Before taxation)</i>
1954-55	37.15	33.90	33.90	3.70
1955-56	80.40	62.29	61.88	4.34
1956-57	114.72	87.23	83.90	4.89
1957-58	120.99	98.11	89.19	4.86
1958-59	159.46	133.32	118.50	5.25
1959-60	179.98	150.44	127.09	5.51
1960-61	215.35	172.97	138.38	5.32
1961-62	228.71	197.94	146.55	5.32
1962-63	281.71	229.78	162.04	5.06
1963-64	303.91	265.75	171.56	5.08
1964-65	310.28	288.15	175.70	5.92
1965-66	438.63	333.09	195.41	7.25
1966-67	532.70	391.64	230.37	7.64
1967-68	614.05	470.09	289.51	8.66

II. AGENCY LOANS

(Amount—Rs. lakhs)

<i>Year</i>	<i>Loan sanctioned (cumulative)</i>	<i>Loan disbursed (cumulative)</i>	<i>Loan outstanding (cumulative)</i>
1960-61	16.48	6.95	6.95
1961-62	36.07	19.55	19.18
1962-63	40.24	30.54	29.04
1963-64	50.26	40.54	34.33
1964-65	56.18	18.45	36.10
1965-66	74.00	64.45	44.17
1966-67	89.98	79.43	52.00
1967-68	119.29	95.67	59.40

Source : Kerala Financial Corporation, Fifteenth Annual Report,
31-3-1968.

APPENDIX—7.10

Kerala Financial Corporation—Amount disbursed to Small Scale Industries under the Agency Agreement with the Govt. of Kerala during the year ended 1967-68

<i>Sl.No.</i>	<i>Industry type</i>	<i>Amount disbursed</i>
(1)	(2)	(3)
1.	Automobile Engineering	8,698
2.	Brass and metal Industries	24,500
3.	Bi-cycle and cycle parts manufacture	56
4.	Carpentry workshops and furniture marts if furniture is manufactured and marketed by the mart	49,119
5.	Dolls and Toys manufacture	40,000
6.	Electrical appliances manufacture	18,189
7.	Engineering Manufacturing Industries	62,082
8.	Foundries	74,000
9.	Fruit canning & preservation of fruit products	29,750
10.	Ice Factory	1,92,000
11.	Leather Industry	99,900
12.	Match Factory	88,000
13.	Manufacture of splints & veneers	201
14.	Manufacture of starch & sago	14,220
15.	Pharmaceutical Industry	75,282
16.	Printing	92,400
17.	Plastic Industry	9,500
18.	Rubber retreading dipped goods & moulded goods	2,58,500
19.	Steel metal Industry	1,38,107
20.	Umbrella manufacturing and Fittings	14,000
21.	Varnishes & paints manufacture	39
22.	Manufacture of cement articles	54,000
23.	Making of textile garments by mechanised units	15,000
24.	Manufacture of Rubber crepe sole	99,500
25.	Power Laundry & Dry cleaning Industry	13,600
26.	Ayurvedic Medicine & Manufacturing Industry	15,000
27.	Cashew Industry (procuring & packing in consumer packs)	35,001
28.	Tile manufacturing Industry	1,157
29.	Industries not included in the revised list	1,647
30.	Dramatic Theatres	1,00,000
	Total	16,23,448

Source : Kerala Financial Corporation, Fifteenth Annual Report, 31-3-1968.

APPENDIX—8.1

Statistics relating to Kerala Power System as on 31-3-1968

Sl. No.	Description	At the beginning of			At the end of the 3rd Plan
		First Plan	Second Plan	Third Plan	
(1)	(2)	(3)	(4)	(5)	(6)
1	Centres electrified	158	902	1849	1935
2	Consumers	28119	79575	174993	324111
3	Street Lights installed	7905	25489	82645	106996
4	Generation Capacity (KW)	28500	85500	147500	192500
5	Maximum demand (KW)	24400	62900	125700	187700
6	Units generated (Million units per annum)	150.98	349.78	581.82	842.00
7	Units purchased	16.84	1.46	50.34	116.48
8	Puncha load (KW)	8700	12057	20111	38208
9	Total connected load (KW)	69569	142353	308015	509851
10	Per capita consumption per annum (Un it)	13.00	18.50	30.10	44.57

Sl. No.	Description	During			Target for	
		1966-67	1967-68	1968-69	1968-69	The Fourth Plan (1969-74)
(1)	(2)	(7)	(8)	(9)	(10)	
1	Centres electrified	34	53	60	525	
2	Consumers	24620	40884	50000	250000	
3	Street Lights installed	9023	6193	8100	50000	
4	Generation Capacity (KW)	168000	168000	18000	1011500	
5	Maximum demand (KW)	212000	240000	290000	576000*	
6	Units generated (Million units per annum)	1083.11	1406.55	1850.00	3105†	
7	Units purchased	77.99	31.64	..	..
8	Puncha load (KW)	16734	N.A.	..	..
9	Total connected load (KW)	116259	86619	..	..
10	Per capita consumption per annum (Unit)	47.28	60.5	..	..

* Including 100000 KW. for Madras State.

† Including 125 Million units for Madras.

N.A. Not available.

APPENDIX 9.1

Statement showing the number of Motor vehicles in the State as on 31-3-1968

Sl. No.	District	Goods vehicles	Stage carriages	Taxi Cabs	Cars	Motor cycles	Auto rickshaws	Tractor trailer	Others	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Trivandrum	1444	1501	746	4831	2361	3	337	602	11825
2	Quilon	942	258	726	2274	661	..	13	3	4877
3	Alleppey	608	377	593	2034	736	7	26	10	4391
4	Kottayam	1371	809	548	3133	789	29	135	108	6922
5	Ernakulam	1904	453	1332	5405	2410	137	96	..	11737 ¹⁶¹
6	Trichur	842	419	862	2334	876	1	20	..	5354
7	Palghat	730	353	544	1603	522	28	456	..	4236
8	Kozhikode	1688	659	310	3004	971	291	285	98	7306
9	Cannanore	828	379	287	1812	337	178	65	10	3896
Total		10357	5208	5948	26430	9663	674	1433	831	60544

Source: Transport Commissioner, Trivandrum.

APPENDIX 9.2

Routes and distance and number of passengers

Sl. No.	District	No. of routes as on		Route k.m. as on		Gross distance operated during		Number of passengers carried	
		31-3-67	31-3-68	31-3-67	31-3-68	1966-67	1967-68	1966-67	1967-68
1	Trivandrum Central	160	179	7143	7763	15757113	18289628	39487304	46550987
2	Trivanrum City	308	363	3678	4319	6641940	7730230	40424900	45948700
3	Quilon	32	48	1870	2284	6051738	6922418	16795437	20836626
4	Kottarakara	37	49	1277	1495	3677683	4026107	11050836	13045655
5	Kottayam	59	90	3335	4917	10397719	12167719	22468676	29754108
6	Alleppey	32	37	1599	1760	7125762	6881162	20544762	22127760
7	Ernakulam	23	32	1244	1830	4592194	5210312	9555752	11450643
8	Alwaye	37	43	1237	1428	4564683	5016920	15827383	16413942
9	Trichur	13	23	1195	2293	4567507	5552764	7519624	8569965
10	Kozhikode	15	21	2520	2848	5907395	6849399	5481837	6363679
11	Works shops & other Officers	..	..	..	..	258676	275139	..	..
12	Total	695	854	23231	29421	69942410	78921828	189156511	221062065

Source: Office of the State Transport Corporation, Trivandrum.

APPENDIX 9.3

Revenue and expenditure of the Transport Corporation
(*Rs. in lakhs*)

<i>Item</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Net surplus</i>
1960-61	294.18	281.01	+10.17
1961-62	361.95	330.39	+31.56
1962-63	434.20	394.70	+39.50
1963-64	476.90	448.26	+28.64
1964-65	553.88	529.68	+24.20
1965-66	631.21	590.66	+40.55
1966-67	751.66	727.54	+24.12
1967-68	887.98	892.06	-4.08

Source : State Transport Corporation, Trivandrum

TABLE 9.4

**Revenue and expenditure statement of the water transport section
of the State Transport Corporation**

(Rs. in lakhs)

<i>Year</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Net surplus</i>
1960-61	5.80	7.50	—1.70
1961-62	5.36	7.30	—1.94
1962-63	5.83	7.55	—1.72
1963-64	6.06	7.86	—1.80
1964-65	6.92	9.45	—2.53
1965-66	8.78	9.30	—0.52
1966-67	9.71	10.39	—0.68
1967-68	9.10	11.67	—2.57*

Source : State Transport Corporation, Trivandrum.

* Provisional

APPENDIX--9.5

Number and tonnage of steamers and sailing vessels called at the intermediate and minor ports of Kerala during the year 1967-68

Sl.No.	Ports	Steamers		Sailing vessels		Total	
		Number	Tonnage	Number	Tonnage	Number	Tonnage
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Alleppey	C ..	..	..	..	..	..
		F 102	435809	..	..	102	435809
2	Calicut	C 149	212179	992	95086	1141	307265
	(including Beypore)	F 67	185488	13	1683	80	187171
3	Trivandrum	C ..	..	..	..	..	..
		F 1	4131	..	..	1	4131
4	Quilon	C ..	..	..	..	..	..
		F 19	96293	..	..	19	96293
5	Kovilthottam	C ..	..	8	1058	8	1058
		F 2	8695	..	..	2	8695
6	Ponnani	C ..	..	46	3913	46	3913
		F ..	..	..	..	..	..
7	Badagara	C 23	14845	18	2265	41	17110
		F ..	..	..	..	..	..

Sl. No.	Ports	Steamers		Sailing vessels		Total		
		Number	Tonnage	Number	Tonnage	Number	Tonnage	
		(3)	(4)	(5)	(6)	(7)	(8)	
8	Azheekkal	C	1	1256	236	17880	237	19136
9	Tellicherry	C	..	..	..	..	..	..
		C	..	..	63	7062	..	..
10	Cannanore	F	..	..	..	..	..	..
		C	..	..	85	10333	85	10333
		F	..	..	..	..	..	..
11	Kasargod	C	..	..	39	968	39	968
		F	..	..	..	..	..	..
	Total.	C	173	228280	1487	138565	1660	366845
		F	191	730416	13	1683	204	732099
		T	364	958696	1500	140248	1864	1098944

Source : State Port Offices.

C. Coastal.

F. Foreign.

T. Total

APPENDIX 9.6

Foreign and Coastal Import and Export Tonnage of Cargo handled at the intermediate and Minor Ports of Kerala during 1967-68

Sl.No.	Ports	Imports			Exports		
		Coastal	Foreign	Total	Coastal	Foreign	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Alleppey	..	7,103	7,103	..	20,646	20,646
2	Calicut (including Beypore)	27,633	1,73,500	2,01,138	1,05,805	15,587	1,21,392
3	Trivandrum	..	9,308	9,308	..	..	..
4	Quilon	..	47,838	47,838	..	4,142	4,142
5	Kovilthottam	..	..	..	..	18,800	18,800
6	Ponnani	1,181	..	1,181	..	..	..
7	Badagara	3,178	..	3,178	3,856	..	3,856
8	Azheckal	9,332	..	9,332	9,210	92	9,302
9	Tellicherry	8,080	..	8,080	1,307	..	1,307
10	Cannanore	10,887	..	10,887	1,163	..	1,163
11	Kasaragod	1,122	..	1,122	1	..	..
Total		61,418	2,37,749	2,99,167	1,21,342	59,267	1,80,609

Source : State Port Officer.

<i>Sl. No.</i>	<i>Ports</i>	<i>Total</i>		
		<i>Coastal</i> (9)	<i>Foreign</i> (10)	<i>Total</i> (11)
1	Alleppey	..	27,749	27,749
2	Calicut (including Beyypore)	1,33,443	1,89,087	3,22,530
3	Trivandrum	..	9,308	9,308
4	Quilon	..	51,980	61,980
5	Kovilthottam	..	18,800	18,800
6	Ponnani	1,181	..	1,181
7	Badagara	7,034	..	7,034
8	Azheckal	18,542	92	18,634
9	Tellicherry	9,387	..	93,87
10	Cannanore	12,050	..	12,050
11	Kasaragod	1,123	..	1,123
	Total	1,82,760	2,97,016	4,79,776

APPENDIX 9.7

Revenue from the Intermediate and the Minor Ports of Kerala

<i>Sl.No.</i>	<i>Ports</i>	<i>Revenue during 1966-67 (Rs.)</i>	<i>Revenue during 1967-68 (Rs.)</i>	<i>Percentage increase or decrease</i>
(1)	(2)	(3)	(4)	(5)
1	Alleppey	1,51,040	1,64,982	(+)9
2	Calicut (including Beypore)	4,05,447	5,97,913	(+)47
3	Trivandrum	9,762	11,811	(+)21
4	Quilon	73,048	66,311	(-)9
5	Kovilthottam	..	14,600	..
6	Ponnani	1,996	3,592	(+)80
7	Badagara	11,615	14,686	(+)26
8	Azheekal	46,289	68,908	(+)49
9	Tellicherry	10,094	12,026	(+)19
10	Cannanore	10,313	13,991	(+)36
11	Kasaragod	476	604	(+)27
Total		7,20,080	9,69,424	(+)35

Source : State Port Office.

APPENDIX 11.1

Working class consumer price index numbers of different Centres in Kerala

Sl. No.	Name of Centre	Consumer price Indices for the years									
		1961	1962	1963	1964	1965	1966	1967	1968 (Jan. to Nov.)		
1	Trivandrum	474	487	500	553	605	675	728	789		
2	Quilon	403	507	509	567	637	686	731	785		
3	Punalur	473	503	516	562	598	644	698	750		
4	Alleppey	461	466	492	549	598	668	734	785		
5	Changanacherry	468	472	485	554	624	691	747	795		
6	Kottayam	470	485	495	557	625	689	750	809		
7	Alwaye.	479	488	511	582	628	676	731	780		
8	Ernakulam	493	489	517	577	632	698	749	797		
9	Trichur	484	491	510	575	628	699	749	798		
10	Chalakyudy	489	489	507	580	629	686	750	806		
11	Munnar	477	463	472	510	552	604	656	714		
12	Sherthalai	..	462	496	552	610	664	725	773		
13	Kozhikode	501	512	529	606	665	736	793	854		
	Kerala *	478	484	501	560	614	673	729	782		

* State average for 12 centres excluding Kozhikode.
 Base for Kozhikode is average prices for the year ended 1936=12
 Base for other Centres is August 1939=100

APPENDIX 11.2

Statement showing the Consumer Price Index Numbers for selected Centres in the State for the year 1968

Sl. No.	Centre	Janu-ary	Febru-ary	March	April	May	June	July	August	Septem-ber	Octo-ber	Novem-ber
1	Trivandrum	785	775	765	768	771	766	786	806	816	823	817
2	Quilon	780	774	764	769	769	762	783	803	811	815	808
3	Punalur	743	737	727	732	736	728	750	768	774	777	773
4	Alleppey	779	773	762	766	770	765	789	804	809	812	804
5	Changanacherry	788	781	776	781	782	775	797	814	820	822	814
6	Kottayam	797	790	785	791	792	783	810	834	839	842	833
7	Alwaye	774	765	756	758	761	753	782	805	809	812	803
8	Ernakulam	787	781	774	778	779	769	798	821	825	831	825
9	Trichur	785	781	775	775	778	772	800	825	829	836	827
10	Chalakudy	793	786	781	787	786	779	809	832	838	844	836
11	Munnar	695	696	685	691	694	697	723	740	742	748	739
12	Sherthalai	768	758	749	753	758	752	779	794	798	802	792
13	Kozhikode	840	837	835	839	840	829	859	878	880	885	874
	Kerala*	773	766	758	762	765	758	784	804	809	814	806

*State average for 12 centres excluding Kozhikode.

Base for Kozhikode is average prices for the year ended June 1936=100

Base for other centres is August 1939=100

APPENDIX 11.3

Consumer Price Index Numbers—Working class

1968

Centre	January	February	March	April	May	June	July	August	Sept.
All India	220	217	213	214	212	214	213	216	218
Cuttack	252	251	248	243	244	245	242	241	244
Gauhati	208	208	213	229	234	233	227	224	227
Jabalpur	218	222	214	213	213	215	217	221	229
Ludhiana	202	201	200	205	206	204	205	209	..
Madras City	221	218	217	218	215	214	211	215	220
Trichur	219	218	216	216	217	216	223	230	232
Bombay	169	165	165	169	165	167	166	166	167
Bangalore	177	173	172	174	177	178	179	180	184
Calcutta	168	169	167	168	169	169	172	174	174
Delhi	175	174	173	174	174	174	178	180	..
Nagpur	171	169	158	164	165	166	161	165	165

(Year 1949=100)

(Year 1960=100)

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Source:-RBI monthly Bulletin.

APPENDIX 11.4

Wholesale Price Index of Agricultural Commodities (Kerala)

(Base: 1952-53 = 100)

<i>Group</i>	1961	1962	1963	1964	1965	1966	1967	1968 (av. upto Nov.)
Rice	131	128	124	150	135	149	155	1790
Molasses	81	98	157	143	117	153	256	294.5
Condiments & spices	125	156	111	140	178	158	179	180.8
Fruits & Vegetables	95	93	89	114	154	167	185	213.4
Food Crops	122	125	117	142	145	153	167	188.9
Oil Seeds	141	153	159	156	230	244	272	275.4
Plantation Crops	112	100	108	109	114	130	118	121.8
Non-food crops	132	128	144	142	195	209	226	229.0
All Crops	126	130	127	142	163	174	188	203.5

APPENDIX 11.5

All India Index Numbers of Whole Sale Prices by Groups
(Base 1952-53=100)

<i>Sl.No.</i>	<i>Year</i>	<i>All crops</i>	<i>Agricultural commodities</i>	<i>Food</i>	<i>Industrial raw materials</i>	<i>Manufactures</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1961	125.8	124.1	119.5	147.7	127.2
2	1963	132.5	126.8	132.7	137.3	130.3
3	1965	161.3	164.7	166.0	180.7	145.7
4	1966	183.2	189.8	189.1	219.4	159.9
5	1967	211.6	221.1	237.8	227.5	166.4
6	1968 (Upto October)	209.4	214.1	236.2	210.4	165.2

Source : RBI monthly bulletin.

APPENDIX—11.6

Statement showing Retail Prices of Essential Commodities in Kerala

Sl.No.	Commodity	Unit	Average price for		Percentage variation
			12/67	11/68	
1	Rice (C.M.)	Kg.	2.44	1.96	—20
2	Dhall	„	2.70	1.84	—32
3	Redgram	„	1.62	1.42	—12
4	Green gram	„	1.88	1.63	—13
5	Black gram	„	1.99	1.60	—20
6	Coconut oil	Litre	6.10	4.92	—19
7	Corriander	Kg.	2.34	1.94	—17
8	Chillies	„	3.01	3.09	+3
9	Onions	„	0.41	0.90	+120
10	Tamarind	„	3.36	1.91	—43
11	Jaggery (candgur)	„	2.33	1.82	—22
12	Cocoanut	100	56.65	44.89	—21
13	Tapioca	Kg.	0.33	0.32	—3
14	Tea	„	6.90	7.39	+7
15	Coffee	„	8.83	9.08	+3
16	Milk (Cow's)	Litre	1.37	1.44	+5
17	Firewood	M. ton	56.97	56.54	—1

APPENDIX—12.1

Literacy rates in the various States—1961

<i>States</i>	<i>Percentage of literates</i>		
	<i>Men</i>	<i>Women</i>	<i>Persons</i>
1. Andhra Pradesh	30.2	12.0	21.2
2. Assam	37.3	16.0	27.4
3. Bihar	29.8	6.9	18.4
4. Gujarat	41.1	19.1	30.5
5. Jammu & Kashmir	17.0	4.3	11.0
6. Kerala	55.0	38.9	46.8
7. Madhya Pradesh	27.0	6.7	17.1
8. Madras	44.5	18.2	31.4
9. Maharashtra	42.0	16.8	29.8
10. Mysore	36.1	14.2	25.4
11. Orissa	34.7	8.6	21.7
12. Punjab	33.0	14.1	24.2
13. Rajasthan	23.7	5.8	15.2
14. Uttar Pradesh	27.3	7.0	17.6
15. West Bengal	40.1	17.0	29.3
16. INDIA	34.4	12.9	24.0

APPENDIX—12.2

Literacy in Kerala by Districts 1961 (in Lakhs)

<i>Districts</i>	1961 (<i>actuals</i>)					
	<i>Male</i>	<i>% to the total male population</i>	<i>Female</i>	<i>% to the total female population</i>	<i>Person</i>	<i>% to the total population</i>
1. Trivandrum	4.64	53.3	3.27	37.3	7.91	45.3
2. Quilon	5.62	57.8	4.18	43.2	9.80	50.5
3. Alleppey	5.70	63.8	4.60	50.1	10.30	56.9
4. Kottayam	5.51	62.4	4.29	50.5	9.80	56.6
5. Ernakulam	5.38	57.8	4.02	43.3	9.40	50.6
6. Trichur	4.33	55.2	3.62	42.3	7.95	48.5
7. Palghat	3.59	42.1	2.46	26.6	6.05	34.1
8. Kozhikode	6.65	51.1	3.98	30.2	10.63	40.6
9. Cannanore	4.54	52.0	2.81	31.0	7.35	41.3
10. STATE	45.96	55.0	33.23	38.9	79.19	46.19

APPENDIX—12.3

**Per capita Government Expenditure on Education in Kerala
(1957-58 to 1967-68)**

<i>Year</i>	<i>Per capita expenditure</i>
1957-58	6.30
1958-59	8.14
1959-60	8.92
1960-61	9.56
1961-62	10.70
1962-63	10.75
1963-64	11.56
1964-65	12.35
1965-66	15.19
1966-67	18.48
1967-68	20.18

APPENDIX—12.4

Per Capita Government Expenditure on Education in various States

	<i>States</i>	<i>Per capita expenditure (Rs.)</i>	
		1966-67	1967-68
1.	Andhra Pradesh	7.98	8.22
2.	Assam	10.55	10.94
3.	Bihar	4.29	4.54
4.	Gujarat	8.95	11.12
5.	Jammu & Kashmir	14.56	N.A.
6.	Kerala	18.48	20.19
7.	Madhya Pradesh	8.68	10.48
8.	Madras	11.97	14.09
9.	Maharashtra	9.01	11.77
10.	Mysore	10.60	11.52
11.	Orissa	7.02	8.11
12.	Punjab & Hariyana	12.91	N.A.
13.	Rajasthan	9.28	11.13
14.	Uttar Pradesh	5.54	6.05
15.	West Bengal	9.14	10.01

APPENDIX— 12.5

**Government Expenditure for General School Education in Kerala
1961-62 to 1967-68**

<i>Year</i>	<i>Expenditure for General Education (Rs. in crores)</i>	<i>Percentage to total expenditure on education</i>
1961-62	16.83	91
1962-63	17.11	89
1963-64	18.46	88
1964-65	19.88	86
1965-66	25.23	91
1966-67	30.18	85
1967-68	32.50	80

APPENDIX—12.6

**Schools in Kerala for General Education by Type or Management
1958-59 to 1968-69**

<i>Year</i>	<i>Lower Primary Schools (including J.B.S.)</i>		<i>Upper Primary Schools (including S.B.S.)</i>		<i>High Schools (including P.B.S.)</i>		<i>All Schools</i>					
	<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1958-59	2794	3984	6778	528	1363	1891	242	631	873	3564	5978	9542
1959-60	2787	3974	6761	533	1374	1907	245	624	879	3565	5972	9537
1960-61	2719	3987	6706	530	1402	1932	244	644	888	3493	6035	9526
1961-62	2823	3910	6745	576	1409	1985	276	653	929	3687	5972	9659
1962-63	2985	3919	6904	711	1574	2285	312	701	1013	4008	6194	1202
1963-64	2928	3991	6919	705	1581	2286	315	705	1020	3948	6277	10225
1964-65	2898	4032	6930	758	1680	2438	345	801	1146	4001	6513	10514
1965-66	2904	4050	6954	761	1696	2447	345	806	1151	4010	6542	10552
1966-67	2864	4089	6953	777	1666	2473	391	884	1275	3852	6669	10521
1967-68	2864	4076	6940	776	1093	2469	395	887	1282	3855	5656	10511
1968-69	2876	4163	7039	796	1744	2540	439	941	1380	4111	6848	10959

APPENDIX—12.7

Standardwise strength of pupils in Kerala 1966-67 and 1967-68

<i>Standard</i>	1966-67	1967-68
I	789821	788328
II	674357	697587
III	629918	635872
IV	551475	576558
Sub-Total I—IV	2645571	2698345
V	441869	457357
VI	354380	371310
VII	303362	310710
Sub—Total V—VII	1099613	1139377
VIII	272888	280501
IX	227171	234240
X	159706	165120
Sub-total VIII—X	659765	679861
Grand total	4404949	4517583

APPENDIX 12.8

Number of Teachers Training Schools, Intake capacity and number of seats 1968-69

<i>Sl. No.</i>	<i>District</i>	<i>Number of Teachers Training Schools</i>			<i>Intake Capacity</i>		
		<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>
1	Trivandrum	3	6	9	180	300	480
2	Quilon	2	13	15	120	600	720
3	Alleppey	4	14	18	210	480	690
4	Kottayam	3	10	13	180	480	660
5	Ernakulam	4	12	16	240	480	720
6	Trichur	2	8	10	60	420	480
7	Palghat	3	4	7	180	210	390
8	Kozhikode	5	5	10	240	270	510
9	Cannanore	4	2	6	240	90	330
	State	30	74	104	1650	3330	4980

APPENDIX 12.9

Polytechnics (excluding Women's Polytechnics)
in Kerala 1968-69

<i>Sl. No.</i>	<i>Districts</i>	<i>Number of Polytechnics</i>			<i>Intake capacity (Sanctioned)</i>		
		<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>
1	Trivandrum	4	..	4	192	..	192
2	Quilon	..	1	1	..	144	144
3	Alleppey	..	2	2	..	288	288
4	Kottayam	1	..	1	96	..	96
5	Ernakulam	1	..	1	192	..	192
6	Trichur	1	2	3	96	240	336
7	Palghat	2	..	2	146	..	146
8	Kozhikode	1	1	2	198	96	294
9	Cannanore	1	..	1	138	..	138
	State	11	6	17	1058	768	1826

APPENDIX 12.10

Industrial Training Institutes in Kerala 1968-69

<i>Sl. No.</i>	<i>Districts</i>	<i>Number of I.T.Is.</i>			<i>Intake capacity</i>		
		<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>
1	Trivandrum	2	4	6	1400	320	1720
2	Quilon	1	3	4	580	352	932
3	Alleppey	1	8	9	532	636	1168
4	Kottayam	1	2	3	540	72	612
5	Ernakulam	1	6	7	808	288	1096
6	Trichur	1	..	1	912	..	912
7	Palghat	1	..	1	748	..	748
8	Kozhikode	1	1	2	352	16	368
9	Cannanore	1	1	2	732	32	764
	S tate	10	25	35	6604	1716	8320

APPENDIX 12.11

Nursing Schools in Kerala 1967-68

Sl. No.	Districts	General Nursing Course			Auxiliary Nurse-midwifery Course			Govt. Total	Private Total	Govt. Private Total	Govt. Total	Private Total	Govt. Private Total
		No. of General Nursing Schools	Intake Capacity	No. of Auxiliary Nurse-midwifery Schools	Intake capacity								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Trivandrum	2	..	2	140	..	140	2	2	4	35	30	65
2	Quilon	1	1	2	40	25	65	1	1	2	25	15	40
3	Alleppey	1	2	3	35	27	62	1	3	4	25	45	70
4	Kottayam	1	2	3	50	25	75	1	2	3	30	28	58
5	Ernakulam	1	2	3	92	30	122	1	..	1	25	..	25
6	Trichur	1	1	2	50	15	65	1	..	1	30	..	30
7	Palghat	1	..	1	45	..	45	..	..	..	..	..	..
8	Kozhikode	1	..	1	40	..	40	1	..	1	25	..	25
9	Cannanore	..	..	..	..	..	..	1	..	1	30	..	30
State		9	8	17	492	122	614	9	8	17	225	118	343

APPENDIX 12.12

District-wise number of arts and Science Colleges in Kerala and number of students 1967-68

<i>Sl. No.</i>	<i>Districts</i>	<i>Number of Colleges</i>			<i>Number of Students</i>		
		<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>
1	Trivandrum	4	11	15	5853	11738	17591
2	Quilon	..	11	11	..	19491	19491
3	Alleppey	..	12	12	..	13311	13311
4	Kottayam	..	17	17	..	21325	21325
5	Ernakulam	2	15	17	2651	16191	18842
6	Trichur	..	11	11	..	12419	12419
7	Palghat	3	4	7	3698	2538	6236
8	Kozhikode	2	8	10	2064	7987	10051
9	Cannanore	2	5	7	2501	4884	7385
10	State	13	94	107	16767	109884	126651

APPENDIX 12.13

**District-wise number of training colleges in Kerala and Intake capacity
1967-68**

<i>Sl. No.</i>	<i>Districts</i>	<i>Number of training Colleges</i>			<i>Intake capacity</i>		
		<i>Govt.</i>	<i>Private</i>	<i>Total</i>	<i>Govt.</i>	<i>Private</i>	<i>Total</i>
1	Trivandrum	1	2	3	200	240	440
2	Quilon	Nil	2	2	..	240	240
3	Alleppey	Nil	3	3	..	360	360
4	Kottayam	Nil	4	4	..	510	510
5	Ernakulam	Nil	1	1	..	100	100
6	Trichur	1	1	2	119	120	239
7	Palghat	Nil	1	1	..	120	120
8	Kozhikode	1	1	2	148	118	266
9	Cannanore	1	..	1	120	..	120
10	State	4	15	19	587	1808	2395

APPENDIX 12.14

Expenditure on Education under the Three Five Year Plans (India)*(In crores of Rupees)*

	<i>1st Plan</i>	<i>2nd Plan</i>	<i>3rd Plan</i>
Elementary Education	85	95	209
Secondary Education	20	51	88
University Education	14	48	82
Other Education schemes	14	27	29
Total	133	221	408

APPENDIX 13.1

Per capita Government Expenditure on Health Services 1967-1968

<i>State</i>	<i>Estimated per capita Expenditure</i>
	Rs.
1 Andhra	4.23
2 Assam	4.35
3 Bihar	2.47
4 Gujarat	4.34
5 Kerala	5.93
6 Madhya Pradesh	3.57
7 Madras	4.44
8 Maharashtra	5.12
9 Mysore	3.81
10 Orissa	3.76
11 Rajasthan	7.13
12 Uttar Pradesh	2.42
13 West Bengal	5.30

APPENDIX 13.2

Medical Institutions and Beds—1965

<i>State</i>	<i>Number of Hospitals</i>	<i>Number of Dispensaries</i>	<i>Beds</i>
Andhra	311(P)	160(P)	28473
Assam	77	724	5922
Bihar	157	712	17183
Jammu & Kashmir	26	573	3814
Kerala	115	216	17183
Madhya Pradesh	196	526	14549
Madras	..	..	18610
Maharashtra	388(P)	992	35871
Mysore	178	605	21098
Nagaland	29	31	701
Orissa	183	302	8588
Punjab	179	469	15421
Rajasthan	387	301	12077
Uttar Pradesh	826	996	30873
West Bengal	265	517	33167

(P) Provisional

APPENDIX 13.3

District wise Distribution of Medical Institutions and Beds

<i>District</i>	<i>Institutions</i>			<i>Beds</i>		
	1965-66	1966-67	1967-68	1965-66	1966-67	1967-68
Trivandrum	60	60	60	4144	4224	4274
Quilon	49	50	52	1166	1251	1260
Alleppey	48	48	51	2221	2495	2525
Kottayam	51	51	53	1332	1353	1403
Ernakulam	68	68	68	2397	2429	2446
Trichur	53	54	53	2802	2816	2863
Palghat	58	60	63	984	1136	1192
Kozhikode	56	61	66	2265	2767	2804
Cannanore	48	51	52	1215	1379	1399
Kerala	491	503	518	18526	19850	20166