CONTENTS

Page No.

	Introduction	4
	The State's Geography	6
	History	8
	Population Profile	10
	Demographic Characteristics	11
	Demographic Transition	12
	Urbanisation	13
	Migration	14
	Level and Pattern of Economic Development	17
	Employment and Unemployment	18
	Level of Consumption	23
	Infrastructure Development	23
	Power and Energy	24
	Transport	25
	Communications	28
	Financial Infrastructure	28
	Sectoral Development - Agriculture	30
	Sectoral Development - Industry	34
	Social Development	37
	Literacy and Education	38
	Health Status	40
	Housing and Living Conditions	41
	Nutrition	42
	Social Security	43
	Poverty	44
Studies	Role of the State	45
Studies	Kerala - Major Achievements and Failures	50
hi- 68 2024	References	54
	2	

KERALA - THE LAND OF DEVELOPMENT PARADOXES

K.K.George and N.Ajith Kumar

Working Paper No.2

November 1997

Centre for Socio-economic & Environmental Studies

NH By-Pass, Khadi Federation Building, Padivattom, Kochi- 68 2024

Kerala, India. Tel: 0484- 2805107, 2805108

LIST OF TABLES

Table No.	Title	Page No.
1.	Demographic Characteristics of Kerala and India	12
2.	Net State Domestic Product of Kerala at Factor Cost by Industry of Origin (At Current Prices)	18
3.	Distribution of the Workforce in Kerala	20
4.	Unemployment Rates in Kerala and India - 1987-88	22
5.	Index of Area, Production and Productivity of Crops in Kerala in 1995-96	31
6.	Expenditure Ratios of Kerala and All States	46

Introduction

The development experience of Kerala tucked away in the south-western corner of the Indian sub-continent has been rather unique. High level of social development disproportionate to the level of economic growth has been the basic characteristic of this peculiar pattern of development, often referred to as the Kerala model. In terms of all conventional physical quality of life indicators, Kerala is way ahead not only of other Indian states, but also most of the middle income countries. In some respects, it is ahead of even some of the high income countries. But Kerala's per capita income is only three quarters of the per capita income of the country which itself is comparatively low. While Kerala's achievements are widely known, both nationally and internationally, its failures, especially on the economic front, are not that well known. In this paper, we try to take a balanced view of both Kerala's achievements and failures during the last four decades of its existence.

Kerala's development experience is often referred to as a paradox, a paradox of high physical quality of life despite poor economic growth. Of late, this paradox is reformulated as the paradox of economic under development despite high degree of social development (George K.K., 1994). Conventional economic

3

4

wisdom supported by the experience of many fast growing countries indicate that social development triggers of economic growth. But this has not happened in Kerala. The state presents many more such paradoxes. The state's per capita consumer expenditure is more than the per capita state domestic product. Again, despite its high per capita consumer expenditure, the nutritional intake is low. Kerala's health status, according to all mortality rates is the best in the country. But its morbidity rate is also the highest. Development experience elsewhere suggests that land reforms unleashes productive forces in agriculture. The state had implemented one of the most comprehensive and progressive land reforms in India. It has also a well developed rural infrastructure - physical, financial and social. But the state's agriculture is experiencing stagnation. Historically, Kerala economy had developed strong linkages with international markets. The large scale emigration of people had strengthened these linkages. With the opening up of Indian economy, it was expected that this export oriented state with its historic links with outside world will be able to profit from the new opportunities. But the flow of foreign investments, collaborations and technology in the wake of the the liberalisation in the country are almost bypassing the state. In this paper, we make an attempt to explain, to the extent possible, some of these paradoxes.

The State's Geography

To a great extent, Kerala's development pattern is shaped by its geographical setting. The state lies along a 590 kilometre coastline of the Arabian Sea. It is a narrow strip of land, the width of which varies from 35 km to 120 km. Even within this small width, the topography and physical characteristics change distinctly from the east to west. From the Ghats, the land slopes steeply to western border where there is an unbroken coastline. According to the nature of the terrain and other physical features, the state can be divided into three regions longitudinally. The strip of land on the eastern edge is the highland region. The area is covered by dense evergreen forests which occupy nearly 28 per cent of the land area. All the 44 rivers of the state originate in this ghat region. The central region is mid-land plains. The region is full of small hills and wide valleys. This region is rich in agricultural produces. The coastal region is covered by extensive paddy fields, thick groves of coconut trees and picturesque backwaters interconnected with canals and rivers. The availability of water everywhere has led to a settlement pattern which is rather to unique to Kerala. People in the state unlike elsewhere in the country do not live in clusters. The population is widely distributed. This settlement pattern has led to the rural-urban continuum in the state.

The principal natural resources are tropical agricultural and forest products. Industrial raw materials like cotton, jute, tobacco and sugar cane are not important to the Kerala economy. Instead, plantation crops like rubber, tea, coffee and spices dominate its agrarian scene. In some of these commodities, Kerala has a near monopoly in India.

Major industrial minerals like iron ore, coal and crude oil are not found in Kerala. The only commercially exploitable mineral resources are illmenite, rutile, zircon and silliminite found along the beach shores. High quality kaolin clays, lime stone, graphite and quartz are also found in the state.

History

In a way, Kerala's unique pattern of development is as much a product of its history as it is of its geography. Almost all the present differences between Kerala and the rest of the country in social development can be traced back to the pre-independence period itself. The region was never a part of the large North Indian and South Indian empires. Except for occasional incursions from Tamil kingdoms, the region was left to lead a peaceful existence. The location of the region on the Arabian sea coast permitted trading and cultural relations with outside world. Muziris, the capital city of the Chera empire situated on the coast as also the numerous minor ports attracted traders around the world. These ports developed into centres of entrepot trade between the West and the East. Arabs, Jews and Christians came to Kerala in large numbers first as traders. As will be seen later, there is a larger proportion of Christians and Muslims in the state's population. The symbiosis between different religious groups and cultural streams has led to communal harmony and social stability in the state. The state had never witnessed any major social upheaval witnessed by many other regions of the country.

The region was the first centre for European colonisation in India following the landing of Vasco de Gama in Calicut in 1498AD. Portuguese conquest of the region was followed by the Dutch and the British. However, except Malabar, the other parts of present day Kerala were not directly ruled by the British.

The Penetration of European capital led to the early commercialisation of Kerala's agriculture. The European influence also to an increasing awareness of the need for education and social justice. The European missionaries started a number of schools which were open for lower castes as also girls. The great social reform movements led by Sri Narayana Guru and Ayyankali also led to increased awareness not only of social justice but also economic equality. All these reformers had emphasised the need for education as a means for social and economic emancipation. The left movement which organised peasants and workers also highlighted the need for education. They were also instrumental in bringing about the most comprehensive land reform legislations. The state has the unique distinction of the Communist Party coming to power through electoral process.

The state of Kerala was formed on 1st November 1956 by the integration of the Malabar district and Kasargode taluk of Madras

Presidency with the erstwhile princely states of Travancore and Cochin. The state is divided into fourteen districts.

Population Profile

Though Kerala accounts for only 1.2 per cent of the country's area (38,863 sq.km.), its share in country's population is 3.4 per cent. In 1991, the state's population was 2.91 crores and is projected to have reached 3.09 crores in 1995. Kerala's density of population at 749 per square kilometre is the second highest among Indian states. Four out of the fourteen districts have a population density above 1000.

One of the peculiarities of Kerala is the higher proportion of females in the total population (50.9%). The urban population constitutes only 26.4 per cent of the total as against 25.7 per cent in the country. Another peculiarity of the composition of Kerala's population is the larger share of minority religions. Muslims constitute 22.8 per cent for the population as against 11.7 per cent in the country. The share of Christians in the population is considerably more (18.9%) than in the country (2.3%). Hindus constitute only 56.1 per cent as against 82.8 per cent in the country. Yet another peculiarity of Kerala is the lower presence of Scheduled Castes

and Scheduled Tribes population. They account for only 9.9 per cent and 1.1 per cent of the population.

Demographic Characteristics

In all demographic characteristics, Kerala stands far ahead of other states in India (See Table 1). Besides, there is not much gender difference in demographic characteristics unlike elsewhere in India. As indicated earlier, the sex-ratio in Kerala is in favour of women. This is true of all districts of Kerala except two viz., Idukki and Wynad. One of the possible reasons suggested for this phenomenon is the matrilineal system which prevailed among large sections of the Hindu population as also some sections of Muslims. After a brief decline in the fifties and the sixties, the sex ratio had been increasing steadily in the seventies and eighties. This is in sharp contrast to the all India trend which show sharp decline. In this respect, Kerala's position is only a shade lower than that of Europe and North America. It is significantly higher than that of China because the female infant mortality in Kerala is much lower than in China (Amartya Sen, 1993). Table 1: Demographic Characteristics of Kerala and India

	Year	Kerala	India
Birth Rate	1995	17.7	28.3
Death rate	1995	6.0	9.0
Infant Mortality Rate	1995	16	7.4
Life Expectancy	1989-93	72	59.4
Sex Ratio	1991	1040	929
General Fertility Rate	1987	77.4	133.8
Total Fertility Rate	1987	2.2	4.1
Gross Reproduction Rate	1987	1.1	2.0
Decadal Growth Rate of Population	1981-91	14.3	23.9

Source:1. Economic Survey, Government of India, 1996-97, 2.Statistics for Planning,Government of Kerala, 1993.

Demographic Transition

The state seems to have reached the third stage of demographic transition characterised by low mortality rates and low fertility rates though it has not reached the high levels of per capita income, industrialisation and urbanisation usually associated with this phase of demographic transition. The decadal growth rate of population after picking up in the fifties and sixties have been coming down steadily. The growth rate had declined drastically in the eighties to 14.3 per cent against the all India average of 23.9 per cent. In three districts of Kerala, viz., Alleppey, Kottayam and Pathanamthitta, the growth rate in the eighties was less than ten per cent. In fact in Pathanamthitta district, the growth rate was just 5.6 per cent.

The General Fertility Rate in Kerala is just 77 as against 134 in the country. There has been steep decline in this rate from the seventies. From 125 in 1971, it came down to just 77 in 1987. Gross Reproduction Rate in the state is just 1.1 against 2.0 for the country. This rate came down from 2.2 in 1971 to 1.1 in 1987. Total fertility rate is just half that of the country. This rate came down from 4.1 in 1971 to 2.2 in 1987. In fertility rate, Kerala witnessed the sharpest decline in the South Asian region. The rate in Kerala is lower than that of China and was achieved without any compulsion (Amartya Sen, 1994). Fertility rate of the state is also lower than that of upper middle income group of countries (Gita Sen, 1992).

Urbanisation

Kerala remained a much less urbanised society till the eighties. The percentage of urban population showed only very small increases in the fifties, sixties and the seventies. But the ratio of urban population increased steeply from 18.7 per cent to 26.4 per cent in 1991,thereby surpassing the country's average (25.7%).

Of the total 109 towns, 95 have population less than one lakh. These towns together account for only one third of the state's urban population. Of the 14 towns with population above one lakh, ten are district headquarters. Though there are three municipal corporations, only Cochin has population exceeding one million.

Unlike in the rest of India, the rural urban divide in Kerala is not very sharp. Due to the availability of water everywhere, the houses are distributed widely. The settlement pattern is such that there is a ruralurban continuum. The rural-urban distinction has been further blurred by the development of physical infrastructure and availability of social amenities in the villages. Most of the basic facilities are available within 2-5 kilometres. All villages are electrified. They are also connected by telephones. There is not much difference in social development and demographic characteristics between rural and urban areas.

Migration

The high density of population, the slow growth of economy and the rising rates of unemployment have been compelling Malayalees to migrate not only to other regions of the country but also to all parts of the world. The scale of migration is so large that it is often referred to as the Malayalee diaspora. Before independence, the destination of migrants were Sri Lanka, Malaysia, Singapore and Burma. In the post-independence period, Europe, North America and Africa were the favourite destinations. The oil boom in the West Asian countries from the seventies led to a massive boom in migration. In taking advantage of the Gulf boom, the historic trade, religious and cultural links with the Arab countries helped.

Though migration plays a major role in the economy, the estimates of their number and the volume of their remittances are not precise. According to the Report of the Census of Housing and Employment Survey, a total of three lakh Malayalees working in other states in 1980 (Government of Kerala, 1987). According to another survey by the state government, there were 3.01 lakh migrants to the Gulf countries alone in the early eighties. It is estimated that 40 to 50 per cent of the migrants from India to the Gulf countries are from Kerala. The estimates place the number of migrants during the major part of the eighties at 0.5 million (Gopinathan Nair, 1994). A recent survey placed the number of Gulf migrants in 1992 at 6.41 lakhs (B.A.Prakash, 1996). In 1987-88, the volume of remittances that reached the state is placed at Rs.1014 crores. Between 1975-76

and 1987-88, an amount of Rs.7215 crores is estimated to have reached Kerala (Gopinathan Nair, 1994).

The present Kerala economy is often described as a money order economy. The importance of Gulf remittances to Kerala can be understood from the fact that 43.3 per cent of the aggregate bank deposits in the state at the end of 1994 are NRE deposits (Reserve Bank of India, 1996). The share of these deposits has only been increasing. It was only 24.6 per cent in March 1985. In no other state except Goa, the percentage share of NRE deposits was higher than that of Kerala. The state today accounts for 17.1 per cent of the total NRE deposits in the country.

The remittances from the immigrants play an important role in Kerala economy today. In fact, it is these remittances which are keeping the economy going. It has boosted the consumption levels in the state as a result of which the per capita consumer expenditure exceeds the per capita sdp. It has relieved to some extent the unemployment problem in the state. It has also made significant impact on social mobility. However, these remittances are not unmixed blessings. As will be argued later, the rising wage rates and land prices resulting from this massive inflow of funds has led to many distortions in Kerala economy. It has also generated a variety of social problems, the impact of which is yet to be assessed

fully. Level and Pattern of Economic Development

Economic growth had been the Achilles heel of the state. Though Kerala has made remarkable achievements in social development, its performance on the economic front had been rather poor. In 1994-95, the state's per capita income was only 83.1 per cent of the national average. It was only less than half that of Punjab.

As in the case of other states, Kerala economy had been undergoing major structural changes during the plan period. The importance of primary sector in the state domestic product has been coming down steeply. From 56 per cent in 1960-61, it has come down to 34 per cent in 1994-95. The major shift away from the primary sector took place during the seventies when the share of this sector came down to 39 per cent. The eighties saw only marginal decline. The share of primary sector in Kerala's sdp is marginally higher than its share in the country's Net national product.

The shift away from primary sector has been more or less equally towards the secondary and tertiary sector. The secondary sector improved its share from 15.2 per cent in 1960-61 to 26.1 per cent in 1994-95. Much of the gain of this sector took place during the seventies. The tertiary sector improved its share from 28.9 per cent in 1960-61 to 40 per cent in 1994-95. The shift towards this sector took place in all the decades more or less continuously.

	1960-61		1970-71		1980-81		1994-95 *	
Industry of Origin	Amount	% to	Amount	% to	Amount	% to	Amount	% to
		sdp		sdp		sdp		sdp
Primary	24196	55.98	62030	51.77	149970	39.23	747155	33.92
Secondary	6585	15.24	20481	17.09	93157	24.37	574032	26.06
Tertiary	12441	28.78	37311	31.14	139146	36.40	881246	40.01
Net State Domestic Product	43222		119822		382273		2202433	

Table 2: Net State Domestic Product of Kerala at Factor Cost by Industry of Origin (At Current Prices)

Source: Economic Review, Government of Kerala, Various Issues.

Employment and Unemployment

The structural transformation in the economy noticed earlier is broadly reflected in the changing composition of employment among different sectors. The sectoral distribution of the workforce shows many differences between Kerala and the country. The primary sector accounted for only 48 per cent of the main workers in Kerala as against 66.7 per cent in the country. The share of secondary sector was higher in Kerala (18.2 % and 12.2%). The major difference between Kerala and the national economy lies in the predominance of the tertiary sector in employment. The share of this sector was 33.8 per cent for Kerala as against just 21.1 per cent for the country.

Between 1961 and 1991 the primary sector's share in employment came down by 9.5 per cent. Most of the decline was in the eighties. During the 30 year period, secondary sector's share in employment too came down. This is in contrast with the rise in share of this sector in Kerala's sdp. The decrease was more steep in the case of household industry. There was marginal decline in the share of non-household industry during the eighties. Construction sector consistently improved its share throughout this period. In fact, the share of this sector in employment now is more than that of the household industry. The tertiary sector's share in employment was going up during all the decades. But steep increase in its share took place during the eighties (26.0% in 1981 and 33.8% in 1991). It appears that the workers displaced from the primary sector are getting absorbed not in the manufacturing sector but in the tertiary sector and the construction sector.

 Table 3: Distribution of the Workforce in Kerala (percentage distribution)

	1961				1981		1991		
	Male	Fe-	Total	Male	Fe-	Total	Male	Fe-	Total
		male			male			male	
Cultivators	22.9	16.3	20.9	16.8	7.6	13.7	14.2	5.2	12.2
Agricultural Labourers	23.7	37.1	27.9	25.7	44.1	30.8	22.4	36.1	25.6
Livestock, Forestry, Fishing & mining	10.1	5.3	8.7	11.5	6.9	10.0	11.2	6.9	10.2
Total- Primary	56.7	58.7	57.5	54.0	58.6	62.5	47.8	48.2	48.0
Household Industry	4.8	17.8	8.7	2.4	8.3	4.8	1.6	5.9	2.6
Non-household Industry	10.0	8.1	9.4	11.8	14.3	12.5	10.7	14.8	11.6
Sub-Total	14.8	25.9	18.1	14.2	22.6	17.3	12.3	20.7	14.2
Construction	2.8	0.2	2.0	3.9	0.8	3.0	4.9	0.9	4.0
Total- Secondary	17.6	26.1	20.1	18.1	23.4	20.3	17.2	21.6	18.2
Trade & Commerce	7.6	1.4	5.7	7.5	2.1	6.0	15.0	4.6	12.6
Transport & Communications	3.7	0.5	2.7	6.1	1.5	4.9	7.3	1.5	6.0
Other Services	14.3	13.4	14.0	15.0	15.4	15.1	12.7	23.7	15.2
Total - Tertiary	25.6	15.3	22.4	28.6	19.0	26.0	35.0	29.8	33.8

Note : Data for 1961 and 1981 made comparable by Mridul Eapen, See "The Changing structure of the Workforce in Kerala", in B.A.Prakash (ed.), Kerala's Economy: Performance, Problems and Prospects,Sage Publications, New Delhi,1994 Source: Census of India, 1991.

The organised sector establishments covered under the EMI scheme employed only 1.18 million persons in 1992. Of this, 55 per cent was employed in the public sector. The growth rates in public sector employment was 30.4 per cent between 1981 and 1992

whereas it was just 2 per cent in the private sector. The share of women in organised sector employment was only 36.1 per cent. It was higher in the private sector (42.7%) than in the public sector (30.8%).

One of the major failures of the Kerala economy which eclipses all its achievements is its inability to provide employment. The work participation rate in Kerala in 1991 (31.4%) was much lower than that of the country (37.5%). The rates were lower both for males and females. As may be seen from Table 4, the unemployment rate in Kerala by all accounts is considerably more than in the country. The problem is likely to get aggravated as the demographic transition in Kerala is pushing up the share of the population in the working age group. It is estimated that the percentage of population in the working age group which rose from 51.5 in 1961 to 62.6 in 1991 is expected to reach 66 by 2016 (Sarma, 1994). However, the current rate of economic growth is insufficient to absorb the increasing number of employment seekers.

	Kerala		All -	All - India		
	Male	Female	Male	Female		
Usual Principal Status						
Rural	125	250	28	35		
Urban	141	388	61	85		
Current Weekly Status						
Rural	144	234	42	44		
Urban	145	330	66	92		
Current Daily Status						
Rural	167	275	46	67		
Urban	224	403	88	120		

Table 4: Unemployment Rates in Kerala and India: 1987-88

Note: Rate of Unemployment as Percentage of Labour Force. Source: National sample Survey, 43rd Round.

As at the end of 1995, there were 33.5 lakh job seekers registered with the employment exchanges in the state. Though there is the possibility of a large number of people employed in the unorganised sector registering with the employment exchanges, these statistics may still give some indication of the magnitude of the unemployment problem in the state. One of the peculiarities of Kerala's unemployment is the predominance of educated unemployed. Those who have passed matriculation and above constitute 72 per cent of the job seekers in 1995. The percentage of graduates and post-graduates was 5.6 per cent. The share of professional and technically qualified personnel was also quite high (3.6%).

Level of Consumption

One of the paradoxes observed in Kerala is the co-existence of low per capita sdp with high per capita consumption. From the eighties onwards, per capita consumption expenditure in Kerala started exceeding per capita sdp. The monthly per capita consumption expenditure in Kerala's rural areas was Rs.218 in 1988-89 which was the third highest among the states. The per capita expenditure in the urban areas at Rs.280 was the second highest. The excess of consumption expenditure over sdp can be explained only by the inflow of remittances from the large migrant population.

Infrastructure Development

The low rate of economic growth despite the high level of infrastructure development is yet another development paradox of Kerala. On the face it, Kerala ranks very high in infrastructure development. The index of socio-economic infrastructure constructed by Anant, Krishna and Uma Roy for the Tenth Finance Commission places Kerala on the top among the Indian states (Anant, Krishna and Uma Roy, 1995). According to the index of relative infrastructure constructed by Centre for Monitoring Indian Economy, Kerala's position is second (CMIE, 1997). To some extent,

this high position of Kerala is due to the inclusion of a large number of variables relating to social service infrastructure as also financial infrastructure and their high weightage. In infrastructure sectors crucial to economic development like power, railways and national highways, the state is lagging behind.

Power and Energy

Though Kerala was surplus in power during the fifth and sixth five year plans, it has since emerged as a power deficit state. This is despite the low power consumption in the state. The per capita power consumption in Kerala in 1994 was only 207 kwh. This formed only 76.7 per cent of the all-India average and 30 per cent that of Punjab. The percapita consumption of petroleum products (72.6 Kg) although higher than in the country as a whole (68 Kg) was only 47.7 per cent that of Punjab. Due to its distance from the major coal fields, the consumption of coal per capita was just 10 Kg against the all-India average of 261 Kg.

The power production in Kerala in 1995-96 was only 6662 million kwh. The installed capacity was 1506 mw. In power production and installed capacity, Kerala's share was less than 2 per cent while its share in sales was 2.6 per cent. The shortfall was met

by imports. If all the power projects in different stages of construction are completed, Kerala will again become a power surplus state by 2000 AD.

One of the peculiarities of the Kerala's power scene is the exclusive reliance on hydro-electric projects. Barring a 20 mw diesel based power plant near Cochin and 2 mw demonstration wind energy projects, the entire installed capacity is in the hydel sector putting the state's power generation totally at the mercy of the monsoons.

One of the biggest attractions of the state despite the present power shortage is the low power tariff rates. Due to its exclusive reliance on hydel sources, the tariff rates in Kerala are one of the lowest in India. It was just Rs. 0.93 per unit against Rs. 1.43 in Karnataka, Rs. 1.46 in Tamil Nadu and Rs. 1.72 in Maharashtra.

Transport

For a state located at the tip of the country the importance of railways can not be under estimated. This is all the more so due to the diaspora of the malayalees and the export-import oriented nature of the economy. The route length of railways per thousand square kilometre was 27.1 against the all-India average of 19. But in terms of 25

railway line per lakh population, the state's position is only 56 per cent of the country's average. Between 1975 and 1994-95, there was only an increase of 282 km of railway lines. Most of the railway lines were laid from north to south during the British period. That pattern still continues. There has not been much progress even in the doubling of tracks. The Konkan railways are likely to reduce the distance, time and cost from Kerala to some of the major industrial centres. But even to take advantage of this potential, the state has to wait for the doubling of the tracks from Mangalore to Shornur. Today, the bottlenecks in railways act as a major constraint on the state's development. The frequent hikes in fares and freights add to the costs and prices in Kerala more due to the import intensity of the state's economy. The increasing diversion of traffic to roads due to the poor development of railway lines to the state has also contributed to price increases in the state.

One of the indicators which has boosted Kerala's position in any index of infrastructure is the state's wide road network. Road length per thousand square kilometres in Kerala is 3551 against the all-India average of 663. In this respect, Kerala's position is at the very top. Despite the wide road network, the vehicle density in the state is one of the highest among states- 22.8 per square kilometre against the national average of 8.3. Qualitative improvements, however, have not taken place commensurate with the quantitative expansion.

All roads do not have the same economic significance. National highways which should play a major role in the state's economy due to its export-import orientation accounted for just 0.7 per cent of the total road length in the state. The process of converting the existing national highways for four lane traffic has only just commenced. State highways account for another 1.6 per cent. Panchayath and municipal roads constitute four fifth of the roads in the state.

Communications

Infrastructure for communications is well developed in the state. There is a post office for every 7.73 square kilometres in Kerala (the all-India figure is 21.49). Similarly, there is 1.44 telephone connections per 100 persons in Kerala against the country's average of 0.9. In this respect, Kerala ranks fourth among the states. Telecommunication facilities are available even in rural areas. Even STD and ISD facilities are available in all villages of Kerala. This is understandable in view of the large scale outmigration from the state.

Financial Infrastructure

The historic trade links with other countries and the early commercialisation of agriculture had led to the monetisation of Kerala economy resulting in the growth of financial intermediaries. There were indigenous financial institutions like the 'Kuries' or 'Chits' even before the advent of commercial banks. In 1946, there was a commercial bank office for every 16,000 population in the erstwhile Travancore-Cochin state as against 65,000 for the country. In 1953, Trichur, a district headquarters town, had the second highest number of registered offices of commercial banks in India, second only to

Calcutta. The banking system which developed in Kerala was mainly the unit banking system. Even after mergers and consolidation, seven banks have their registered offices in the state. The lead of the state in banking infrastructure continues till date. At the end of March 1996, the population coverage per office of the commercial banks is still lower (10,000) than for the country (15,000). In addition to the 3009 offices of commercial banks, there are two regional rural banks with 269 offices and 1710 co-operative banks and societies functioning in the state.

The role of commercial banks in the state's economic development is a widely debated topic at present. The increasing financial intermediation in the state is now leading to capital drain from the state. The credit-deposit ratio of the banks has come down from 65.8 per cent in 1969 to 43.7 per cent in 1996. The decline has been particularly steep in the nineties. The rapidly growing Cochin Stock Exchange has also been facilitating the capital drain. The performance of the all-India financial institutions in the state is also a matter of debate as the share of the state in their cumulative disbursements upto march 1995 was only 1.67 per cent.

Sectoral Development-Agriculture

The importance of agriculture in the state's economy has been coming down steadily both in terms of its contribution to sdp and employment. From 48.6 per cent in 1970-71, the share of agriculture in sdp came down steeply to 33.9 per cent in 1980-81 and further to 28.9 per cent in 1990-91. The share of this sector stood at 29.4 per cent in 1994-95 as against 30.7 for the country.

One of the characteristics of Kerala's agricultural sector is its commercialisation. The state depends on cash crops to larger extent than other states. These crops depend on external markets both within the country and outside. This makes it vulnerable to the economic changes which are taking place in the rest of the country as also outside. The state is heavily dependent on imports for meeting its food requirements. Another characteristic of Kerala's agricultural sector is the very small size of the holdings.

Despite the presence of large forest cover in the state, net sown area forms 57.6 per cent of the reporting area as against 46.6 per cent in the country. The proportion of gross cropped area also is higher (78.3 % and 61.1 %). Net irrigated area forms only 17.3 per cent of the net sown area (35.1% for the country), thanks to the abundant rainfall during the two monsoon periods. Rabi season contributes marginally more to both area and output than the kharif season.

Of all the crops, coconut occupies the single largest area followed by paddy, rubber, pepper, tapioca and cashew. The state contributes only 0.6 per cent of the all India production of food grains. The index of area, production and productivity of major crops is given in

Table 5.Table 5: Index of Area, Production and Productivity of Crops in Kerala in 1995-96 (Base year average of triennium ending 1979-80)

	Area	Production	Productivity
1. Food Grains	58.38	74.25	126.83
a. Cereals	58.84	74.11	126.09
b. Pulses	47.93	83.47	174.27
2. Non-food Grains	128.77	163.47	120.37
a. Oil Seeds	144.48	189.88	129.18
b. Plantation Crops	180.38	261.91	152.69
c. Condiments & Spices	136.87	160.51	118.38
d. Drugs & Narcotics	32.18	28.89	96.61
e. Fruits & Vegetables	78.99	72.52	91.80
f. Miscellaneous Crops	150.65	116.51	67.39
All Crops	106.59	146.68	121.59

Source: Economic Review, Government of Kerala, 1996.

The table shows that the area under all has been showing only marginal increase. Production had been increasing at a larger pace due to increase in productivity. The decline area under food grains had been guite steep though the gains in productivity prevented the decline in output to corresponding extent. Coconut, the principal crop of Kerala, shows steady increase in area, production and productivity. The state accounts for 55 per cent of total area and 44 per cent of the production. For pepper, Kerala enjoys near monopoly. It accounts for 96 per cent of both the area and production in the country. In cardamom, another major spice, Kerala's share is 52 per cent of the area and 60 per cent of the output. Rubber is emerging as the major crop of the state showing steep increases in area, production and productivity. The state now accounts for 86 per cent of the area and 94 per cent of the production in the country. However, the steep decline in prices following liberalisation in import policy and reduction in tariffs have created uncertainties for all major commercial crops of Kerala.

The size of holdings in Kerala is very small and is declining steadily. Even plantation crops are grown in these small holdings. The average size of holdings has come down from 0.57 hectare in 1970-71 to 0.33 hectares in 1991. The size of the holdings is the lowest in India. Marginal holdings (less than one hectare) account for

93 per cent of the number of holdings and 49 per cent of the area. Large holdings (10 hectares and more) account for only 0.06 per cent of the number and 9.7 per cent of the area. If individual holdings alone are taken into account, the share of large holdings is only 0.04 per cent of the number and 3.0 per cent of the area. The most important reason for the decline in the size of the holdings is the increasing density of population. Land reforms have also contributed to this trend. Alienation of land by the medium and rich peasants is another reason.

Agricultural sector in the state by all accounts is facing a crisis. Reasons are many. As noted earlier, the liberalisation policies have been upsetting the commercial crop sector in recent years. The large inflow of remittances had been pushing up the money wages and land prices, disproportionate to productivity and profitability. Land is increasingly transformed from a productive asset to a speculative asset. Though land reforms have abolished absentee landlordism, the state has been witnessing the emergence of a new class of absentee farmers whose main occupation is not agriculture. All these have contributed to the current problems of the agricultural sector.

Development-Industry

Kerala today is one of the industrially backward states in the country. However, it was not always so. In 1950-51, the per capita income originating from industry was higher for Kerala than for the country as a whole. But progressively, Kerala's position has been coming down. Today, Kerala's per capita income originating from industry is 78.9 per cent that of the country. According to all indications, economic liberalisation in the country is bypassing the state.

The share of manufacturing in sdp has been increasing, but only marginally. It rose from 13.1 per cent in 1970-71 to 15.7 per cent in 1990-91. In the nineties, this share showed a decline. The share of manufacturing was only 14.6 per cent in 1994-95 as compared to 20.3 per cent for the country. The share of registered and unregistered manufacturing was more or less equal (7.6% for registered and 6.9% for unregistered).

At the end of 1995, there were only 15965 registered factories in the state of which 15466 were in the private sector. There were 1,43,123 small scale industrial units. Selected ratios relating to the industrial sector shows that Kerala's industries are characterised by low labour productivity, low capital intensity and low capital output ratios indicating the technological backwardness. The industrial structure is characterised by the low share of engineering industries. Industries like chemicals which dominate the organised industrial sector have very little forward and backward linkages in the state's economy. They were once attracted to the state due to the abundant availability of cheap hydel power and plentiful supply of water.

All indicators of industrial investment show that Kerala has not been able to share the flow of industrial investment in the post liberalisation period. Kerala's share in the foreign direct investment approved between 1991 and 1996 is just 0.6 per cent. In the investment proposed under industrial entrepreneur's memoranda, the state's share was only 0.99 per cent (George K.K., 1996)

The reasons for the industrial stagnation of the state are not fully studied. The oft-quoted reason is the higher wage rates and the poor industrial relations climate. While the wage rates in Kerala's agriculture and traditional industries and unorganised sectors may be higher than in the neighbouring states, the rates in relation to productivity in the modern registered factory sector are lower (Subramanian and Mohanan Pillai, 1986). Similarly, work stoppages, due to strikes though prevalent in the sixties and the seventies, have been decreasing from the eighties. Perhaps, the fears arising from the experience of the past may still be lingering. The shortage of power, the bottlenecks in its transport sector, particularly in national highway and railway network and the high cost and scarcity of land have now emerged as major constraints.

The state in the past had played a major promotional role in the industrial development of the state. The state's active role started much before independence. Almost all the major industrial units in the state were started during this period. In addition to its promotional role, the state played a direct entrepreneurial role. As a result, today there are44 state government owned industrial enterprises. But most of them have failed to modernise partly due to inadequate budget support and partly due to non-professional management. Most of them are running at a loss. But the government finds it difficult to deal with these perennially loss making units despite fiscal crunch.

The Central government's investments in this resource starved state has been grossly inadequate. There is no Central investment in power sector. Its investments in crucial infrastructure sectors like railways, national highways, ports and airports have been very small. Its industrial investments in the state too had been grossly inadequate. What is more, it has also been coming down. The share of the state in the fixed capital investment of central sector companies had come down form 3.1 per cent in 1970 to 1.3 per cent in 1994. The per capita investment of the central government in the post liberalisation period in Kerala is just Rs. 619 against the all India average of Rs. 1,117 (CMIE, 1993). Besides, the linkages of these Central undertakings in the state's economy are very weak.

Social Development

In terms of the physical quality of life index and the human development index, Kerala stands on the top among the states. As seen earlier, comparisons are made not with other Indian states, but with other countries like Sri Lanka, Costa rica, China and some of the middle income countries. We have seen some aspects of Kerala's social development earlier while discussing the demographic features of the state.

Literacy and Education

Kerala is the first state in India which has achieved universal literacy. The percentage of literates in Kerala is 89.8 per cent as against the all-India average of 52.2 per cent. In literacy, there is only marginal difference between rural and urban areas. The literacy rate of scheduled caste population (69.4%), though lower than the state average, is much higher than the national average. Only scheduled tribes with their literacy rate of 48.6 per cent lags behind.

There is only very small gender difference in literacy. The female literacy in Kerala at 86 per cent is far above the all-India rate of 39 per cent. Adult female literacy rate in Kerala is more than that of China. Rural female literacy rate in Kerala is higher than that of every individual province in China (Amartya Sen, 1994).

Kerala's achievements in education do not stop with attaining literacy. Primary school enrollment is almost total. As in the case of literacy, there is only marginal rural-urban and gender difference. In fact, the girls outnumber boys from the secondary school level onwards due to their lower drop out rates. The number of girls entering higher education except technical/professional education is much higher than that of the boys. One of the peculiarities of Kerala is the decline in the absolute number of enrollment. This decline which started first in the primary schools has now reached the upper primary schools. This is due to the decline in school age population, a consequence of the decline in the birth rate. It is estimated that the number of children in this age group will decline from 56.3 lakhs in 1996 to 52.9 lakhs by 2001AD. This phenomenon is rendering many schools uneconomical.

The state has an elaborate infrastructure for post-secondary education. It is estimated that more than 60 per cent of the matriculates proceed for post-secondary education. Nearly 1.28 lakhs students are attending degree courses. Eleven thousand students enroll for post-graduate courses.

Facilities for technical education is also substantial. Despite the large opportunities for higher education as also technical education within the state, there is still an unfulfilled demand for higher education which is met by institutions in other states run mostly on commercial basis. This high demand for education at all levels is to some extent a reflection of state's unemployment. Education serves to disguise unemployment especially when it is highly subsidised as in Kerala. One of the major problems in the educational sector has been the erosion of quality at every level. The qualitative decline in the public school system has led to the mushrooming of private unaided English medium schools. At the level of higher education and technical education also, there has been an erosion of quality. The state with its resource constraints finds it difficult to upgrade the standards of its education.

Health Status

Some of the achievements of Kerala on the health front had been noted earlier. The state has been able to reduce the infant mortality, child mortality, peri-natal and neonatal mortality and maternity mortality substantially. Part of the reason for Kerala's achievements is the elaborate network of health care institutions, both in the private and the public sector. This network encompasses all systems of medicine and extend to the rural areas. It is also due to the state's well developed public health system and immunisation campaigns. The rural and urban living conditions, sanitation, water supply and educational levels of the people particularly of women have also contributed to Kerala's success in bringing down mortality rates.

All is, however, not well with Kerala's health sector.

40

Though the state had been able to reduce its mortality rates, morbidity rates are one of the highest among the states (Kannan et al., 1991, Panikar P.G.K., 1992) The state today has both the diseases of poverty and the diseases of old age. The increasing life expectancy as in the case of advanced countries has resulted in diseases of the old age coming into prominence. But unlike in the developed countries, the state with its limited financial resources finds it difficult to tackle these health problems which calls for higher spending per patient for diagnosis as also management.

The financial crisis of the state has led to decline in quality of services rendered in the government institutions. This has resulted in the mushrooming of large number of private sector institutions run on commercial basis. Institutions in the private sector outnumber government institutions now. Unlike in the past, many of these institutions are now run on commercial basis, pushing up the health care costs.

Housing and Living Conditions

One of the reasons for the better health status of Kerala is its better living conditions. Kerala has been able to reduce its housing shortage from 1.56 lakh units in 1981 to 54,000 in 1991. Of the total

41

number of houses in the rural areas, 50.2 per cent are pucca houses. The corresponding percentage for urban areas is 68.7 per cent. Semi-pucca houses constitute another 23.1 per cent and 17.6 per cent respectively. In the matter of sanitation also, Kerala maintains higher standards. The percentage of houses without latrine in rural areas(51.5%), though still high is the lowest among states. In the urban areas, only 18.7 per cent of the houses lack latrines (K.R.Nayar, 1997).

In the matter of protected water supply also, Kerala's position is much better. Forty seven per cent of the rural population and 74 per cent of the urban population are covered by protected water supply. The dependence on surface water for drinking is less than one per cent in the state. More than four fifth of the people have access to water supply within their own premises. The share of people who have to travel for more than half a kilometre for drinking water is just 1.7 per cent in the rural areas and 0.4 per cent in the urban areas (K.R.Nayar, 1997).

Nutrition

One of the possible reasons for the higher morbidity rates in the state is the inadequate nutrition intake (Meera Chatterjee, 1996).

According to the National Nutrition Monitoring Bureau Survey (Government of Kerala, 1996) during the period 1988-90, the intake of cereals and millets in the state is below the recommended levels by about 20 per cent. The consumption of pulses and leafy vegetables falls short by 78 per cent.

The deficiency in the nutritional levels is paradoxical as the per capita expenditure on food in the state, as noted earlier, is one of the highest. The nutritional deficiency has arisen despite the existence of the elaborate public distribution system which is acclaimed as the best among the states. The reduction in subsidisation of the public distribution in recent years may undermine the food security system off this food deficit state. This may further reduce the nutritional intake with its implication for health.

Social Security

As in the case of food security, the state was a pioneer in social security. As early as 1960, Kerala introduced the Destitute Pension Scheme. In 1980, the state again pioneered the Agricultural Workers' Pension Scheme. In 1981, it introduced the Unemployment Relief Scheme. Pension Schemes for the disabled followed in 1982. Altogether there are 35 social security schemes now in existence

though the first four schemes still account for the major chunk of the budgetary outlay.

There are special reasons for the state's pioneering role in social security. Firstly, due to the improvement in life expectancy, the proportion of old aged people is rising. From 5.9 per cent in 1961, the percentage of people above the age of sixty has progressively reached 8.2 in 1991. It is expected to reach 8.9 per cent in 2001 AD and 11.7 per cent in 2011AD (State Planning Board, 1996). About 70 per cent of the people above 70 years are widows. The dependency ratio of households in the state has been rising due to the increasing presence of not only unemployed but also of the old aged people.

A review of the social security schemes in the state shows that though government expenditure in money terms has been increasing, the same in real terms has been decreasing. The rates of pension have not been raised taking into account the rates of inflation.

Poverty

The state has been successful to a great extent in tackling the problem of poverty. The poverty ratio for the state has been coming down according to all methods used for measuring poverty (Abhijit Sen, 1996, Suryanarayana, 1997). The ratio of poverty in the state which was once above the national average has now fallen below it. The provision for social consumption in the form of publicly funded education and health care facilities has also been helpful in mitigating the pangs of poverty. Though there is a general decline in poverty, there are still pockets of poverty in the coastal areas and the tribal regions.

Though there is no firm evidence, there are enough circumstantial evidences to suggest that the income and asset distribution in the state is relatively more even. The ownership pattern of operational holdings noted earlier suggests a much less skewed distribution of land. The income tax statistics show that 79 per cent of the returns accounting for 45 per cent of the Returned income was from assessees with income less than Rs.50,000. The number of assessees with income above Rs. 1 million was just 0.06 per cent. Their share in Returned income was only 1.4 per cent.

Role of the State

Historically, the state played a major role not only in social development but also in economic development. Even today, the state's role is quite high as may be seen from the public expenditure

ratios given in Table 6. The public expenditure ratio which had been always higher in the state has now reached 29.4 per cent of the sdp.

	1974-75		1980-81		1990-91	
	Kerala	All	Kerala	All	Kerala	All
		States		States		States
Public Expenditure Ratio (PER)	16.52	15.29	22.34	23.06	29.36	24.79
Social Allocation Ratio (SAR)	44.13	31.56	45.23	29.42	39.91	32.99
Social Priority Ratio (SPR)	47.33	36.83	38.83	35.35	38.50	38.39
Human Expenditure Ratio (HER)	3.45	1.79	3.92	2.39	4.51	3.21

Table 6: Expenditure Ratios of Kerala and All States

Note:

PER- The percentage of national income that goes into public expenditure.

SAR-The percentage of public expenditure earmarked for social services.

SPR-The percentage of social expenditures devoted to human priority concerns, taken to be elementary education, preventive health care, water supply and sanitation and nutrition.

PER- The percentage of national income devoted to human priority concerns.

HER can be expressed as the product of other three ratios.

Source: Seeta Prabhu and Somnath Chatterjee, 1993.

The state's achievements in the social sectors is not only due to its higher proportion of public spending but also due to the higher priorities given to social sectors. This is seen from the social allocation ratio, the social priority ratio and the human expenditure ratio. All these ratios are higher in the state though the gap is getting narrowed over time.

The state today faces acute fiscal crisis which has debilitated its capacity to intervene in the economy on the past scale (K.K.George, 1993). The ratio of fiscal deficit to sdp in Kerala during the nineties had been higher than that of all states average except in 1992-93. In 1994-95, the ratio stood at 5.2 per cent as against the all states average of 4.2 per cent.

The growth in real per capita total expenditure has been coming down in recent years (Seeta Prabhu and Somnath Chatterjee, 1993). This deceleration in growth is not due to poor resource efforts of the state. Resources raised by the state, especially tax revenue, in relation to sdp and in relation to state's total expenditure was quite high. Tax-sdp ratio in the state was 12.7 in 1994-5. The own resources financed 65.1 per cent of the total expenditure in 1995-96 as against 57.3 per cent for all states. The real reason for the state's slow growth in the public expenditure was the slow growth in the resource base as indicated by the growth of sdp. The inadequate flow of Central government funds too had contributed to the situation. Funds from the Centre as a percentage of state's expenditure was lower in the state from the mid seventies. In per capita terms also, the flow of central funds to the state was lower. The reasons for this smaller flow of Central government funds lie in the differences in the priorities of the Central and state governments. All Central funding agencies today give more emphasis to social backwardness while allocating funds to the state. Economic backwardness get only inadequate weightage. Beside, while these agencies are concerned with first generation social problems like illiteracy and infant mortality, Kerala is confronted with second generation problems like the problems of the old age and the problems of the educated unemployed.

A major share of state's expenditure in the past had gone for financing social services. The recurring character of these expenditure with its high salary component limits to a great extent the scope for containing state's non-plan expenditure. This erodes the 'balance on current account' component of state's resources for the Plans. This together with the slow growth of state's resource base reduces its plan resources. Given the inadequate weightage given to economic backwardness in the NDC formula for central plan transfers, the size of the state's plan outlay is bound to be small in relation to those of other states and in relation to the state's needs.

It is not as though that the state government has exhausted all avenues of resource mobilisation. Its failure to deal with the loss making government companies had been noted earlier. There has also been a failure to increase the non-tax revenues by increasing the cost recovery rates in its social and economic services. The government has also failed in bringing about economies in public expenditure.

Though there has been a failure in redefining the role of the state, there have been efforts to redesign administration giving more powers to the three tier popularly elected panchayath/ Nagarapalika institutions. Kerala is the one state where decentralisation of powers and responsibilities to local bodies in accordance with the 73rd and 74th amendments of the Constitution is being implemented vigorously. Popularly elected panchayaths and municipal bodies are already in saddle. There has been substantial empowerment of these bodies though the process is still not complete. More than thirty per cent of the ninth plan allocation in the state is earmarked for projects formulated by the local bodies. Unlike in the past, these bodies are enticed to step up their role in the productive sectors. It is envisaged that 40 to 50 per cent of the plan funds will be spent in these sectors. These bodies are given a major role in social service sectors also. It is expected that 30 to 40 per cent of the plan funds will be spent on social services. The emphasis on infrastructure is sought to be reduced as infrastructure at the local level is comparatively better developed in the state. The state hopes to augment the plan resources of these bodies by attracting voluntary labour and financial participation. It is expected that these additional resources will help to increase the state's ninth plan outlay substantially.

Kerala- Major Achievements and Failures

The picture of the Kerala society which emerges out of our discussion above is a relatively egalitarian society where skewness of income and assets is not extreme. Abject poverty and destitution are not very visible. Minimum social security, food security and access to social consumption is provided. The existence of subsidised education has provided a fair degree of social mobility though the widespread unemployment of educated youth tends to undermine it. The rural urban and gender differences are reduced to a minimum. On the economic front too, there has been great achievements in laying out transport, communication and

financial infrastructure.

The major failure of the state has been its failure to transform all these achievements into self sustaining economic growth. The slow growth in economy has already put a limit to the development in the social sectors. Cracks are already visible in the large edifice of social service infrastructure. As seen earlier, the state's achievements themselves are generating new sets of problems. Unlike in the past, solution to these success induced problems calls for larger investments. Like its successes which are comparable to those of advanced countries, its present problems are also comparable to those of advanced countries. But, unlike these countries, Kerala's economic and fiscal base is inadequate in tackling them. As in the advanced countries, the state's massive success in school education has generated huge demand for higher education and technical education. This calls for higher investments. Similarly, Kerala's success in prolonging life expectancy has generated a variety of health and social security problems as in advanced countries. Again, the state doesn't have the wherewithal to tackle them. The state's problems have been compounded by the failure of the Central government in appreciating the gravity of these state specific problems. No doubt, there has also been failure on the part of the state's policy makers in assessing the future implications of state's successes on the social front. As a result, there has been a de-facto withdrawal of the state from many areas not by design, but by default. This allows unplanned, unregulated and silent entry of commercial interests in sectors like education and health care. All these failures are a reflection of the state's larger failure in redefining its role and reorienting its strategy in the changed situation. Kerala at the Cross Roads

It appears that Kerala economy and society have reached the cross-road not knowing whether it can and should continue following its unique past track or to retrace the steps and follow the mainstream paths of development. Those who argue for a growth strategy on the traditional lines do not fully realise the constraints faced by the state in following such a path. One such constraint is the shortage of major raw materials and the distance from the input and output market. Secondly, due to the density of population, land has become an extremely scarce resource unlike in other states. Land prices are also high. Unless the state is prepared to inflict further damages to its environment, it is likely to face power shortage in future and therefore energy intensive development is not a desirable option.

It is not as though the state does not have any other option. It

51

is possible to draw up a growth strategy based on its human resources. This is one way in which Kerala's future plans for economic growth can be integrated with its past mode of development (George K.K., 1994). It is quite possible that social development did not trigger off economic growth in the state because the state by spreading its resources too thin did not attain the critical minimum threshold level of quality in its social services which is necessary to transform social development into economic growth. If this assumption is true, further investment for upgradation of quality of manpower becomes imperative. Recent advances in science and technology and the possibility of shift from material and fuel intensive activities to skill and knowledge intensive industries and services make it a feasible option.

References

- 1. George K.K., "Whither Kerala Model?", International Congress on Kerala Studies Organised by A.K.G Centre for Research and Studies, Trivandrum, August 1994.
- 2. Sen Amartya, "The Economics of Life and Death", Scientific American, May 1993.
- 3. Sen Amartya, "D.T.Lakadawala Memorial Lecture," Institute of Social Sciences, New Delhi, 1994.
- 4. Sen Gita, "Social Needs and Public Accountability: The Case of Kerala", in Development Policy and Public Action, Oxford University Press, Oxford, 1992.
- 5. Quoted in Government of Kerala, Report of the Survey on the Utilisation of Gulf Remittances in Kerala, Department of Economics and Statistics, Trivandrum, 1987.
- Gopinathan Nair, P.R., "Migration of Keralites to the Arab World", in Prakash. B.A. (ed.) Kerala's Economy: Performance, Problems and Prospects, Sage Publications, New Delhi, 1994.
- 7. Prakash B.A., "Migration and Economic Development: The Economic Impact of Gulf Migration in Kerala, International Conference on Kerala's Development Experience, Institute of Social Sciences, New Delhi, December 1996.
- 8. Gopinathan Nair, P.R., 1994. op.cit.

- 9. Reserve Bank of India, Composition and Ownership Pattern of Bank Deposits, RBI Bulletin, December 1996.
- 10. Sarma Sankara, "Changing Demographic Profile and Labour Supply", Presented at a Seminar at Centre for Development Studies, Jan.17, 1994.
- 11. Anant T.C.A, Krishna K.L. and Chaudhary Uma Roy, "Measuring Inter-state Differentials in Infrastructure: A Study Undertaken for the Tenth Finance Commission, 1995.
- 12. CMIE, Profile of States, March 1997.
- George K.K., "Economic Reforms: What they Foretell Different States?", National Seminar on Disparity and Equality organised by the Institute of Social Change and Development, Guwahati, Feb. 1996.
- 14. Subramanian, K.K. and Mohanan Pillai, P., "Kerala's Industrial Backwardness: Exploration of Alternative Hypotheses", Economic and Political Weekly, No.14, April 1986.
- 15. Sen Amartya, 1994, op.cit.
- Kannan K.P., et al , Health and Development in Rural Kerala, Kerala Sastra Sahitya Parishad, Trivandrum, 1991 and Panikar P.G.K., "High Cost of Medical care in Kerala", Economic and Political Weekly, June 6, 1992.
- 17. Nayar K.R, "Housing Amenities and Health Improvement: Some Findings", Economic and Political Weekly, May 31- June 6, 1997.

- 18. Nayar K.R., ibid.
- For details regarding the protein calorie adequacy of households in Kerala, see Meera Chatterjee, "Nutritional Challenges to Health and Development" in Monica Das et al (ed.), Health, Poverty and Development in India, Oxford University Press, New Delhi, 1996.
- 20. As quoted in Kerala Economic Review, 1996.
- 21. State Planning Board, Report of the Expert Committee on Social Security Initiatives in Kerala, Government of Kerala, 1996.
- 22. For details of poverty indices, see Sen Abhijit, "Economic Reforms, Employment" and Suryanarayana M.H., "Poverty Reduction in Kerala:Estimates and Assessment", Dr. T.N. Krishnan Memorial Seminar on Development Experience of South Indian States in a Comparative Setting, Trivandrum, September 7-9 1997.
- 23. For details see K.K.George, Limits to Kerala Model of Development, Centre for Development Studies, Trivandrum, 1993.
- 24. Seeta Prabhu K. and Somnath Chatterjee, Social Sector Expenditures and Human Development: A Study of Indian States, Study No.6, Department of Economic Analysis, Reserve Bank of India, 1993.
- 25. George K.K., 1994, op.cit.