

**KERALA MODEL OF DEVELOPMENT:  
An Analysis of the Sustainability of the  
Development Achievements of the State**

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**MASTER OF PHILOSOPHY**

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CERTIFICATE

I, Reshmy R. Nair, certify that the dissertation entitled “KERALA MODEL OF DEVELOPMENT: AN ANALYSIS OF THE SUSTAINABILITY OF THE DEVELOPMENT ACHIEVEMENTS OF THE STATE” for the degree of MASTER OF PHILOSOPHY is my bonafide work and may be placed before the examiners for evaluation.

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*Dedicated To*  
*My Parents & Brother*

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### **1.1 STATEMENT OF THE PROBLEM**

Kerala has in the past attracted the attention of several scholars both within the country and abroad for its unique development experience. For those observing the state, the important feature has been its impressive achievements in contributing to the quality of life of its people. These are the high level of literacy (which is now almost universal with very low differential as between the rural and urban areas and most importantly, between men and women), the high life expectancy, the extremely low infant mortality rate, a favorable sex ratio, high trend in the other health indicators and very high achievements on the demographic front. Education, health and demographic indicators are but a few examples of the nature of social development in Kerala. Equally impressive are those, which are less amenable for quantitative expression such as the vibrancy in political participation, social movements, and the enormous expansion in the circulation of the printed materials (newspapers, magazines, books etc). A number of studies carried out initially, focused on solving the riddle of a state, which was able to achieve high levels of social development despite low economic development. The significant role played by the state governments since independence have been emphasized by most of these studies. However the weak economic base on which the foundation of the state stood raised questions regarding the sustainability of the achievements of the state in the social sphere. Several academicians and scholars including those who were once the ardent admirers of the model have raised questions regarding the sustainability of the model.

Considering the important role played by the state behind its achievements, the deepening financial crisis faced by the state towards the latter half of the nineties certainly cannot be ignored. There is clearly

a dearth of studies that analyze both the worsening condition of the state finances in Kerala along with the direct repercussions of this on the social sector.

The future of the social sector of the state hence has to be viewed in a holistic manner. This study is therefore an attempt to analyze the weaknesses of the model in general besides seeing the adverse implications of the financial crisis of the state on the social sector.

## **1.2 OBJECTIVES OF THE STUDY**

*The major objectives of this study are the following: -*

1. To analyze in detail the factors that has made Kerala a model state in social development.
2. To make a comparative analysis of the state with other states of India in terms of both the development achievements (output indicators reflecting the high social achievements of the state) and the factors that have made it possible. (Input indicators)
3. To analyze the weaknesses of the model in terms of the threats posed to the sustainability with regard to education, health and social security
4. To probe into the financial crisis that has gripped the state and to give a deep insight into the nature of state finances in the last two decades i.e. 1981-82 to 2000-01
5. To analyze the adverse repercussions on the social sector resulting from the deteriorating condition of the state finances

## **1.3 DATABASE:**

1. Economic Review, State Planning Commission, Kerala
2. Budget Papers, Kerala 1981-82 to 2000-01
3. NSSO 42<sup>nd</sup> Round (1986-87) and 52<sup>nd</sup> Round (1995-96) Utilization of medical services

4. RBI Bulletins on State Finances
5. DHS; Kerala (Health statistics)
6. Health Information of India, CBHI, MoHRD
7. Selected Educational Statistics, 2000-01
8. Census of India
9. NIEPA (Physical Infrastructure in Schools)
10. Sample Registration System, 1997
11. National Human Development Report, 2001
12. National Family Health Survey, 1992-93 and 1998-99

#### **1.4 METHODOLOGY:**

1. The actual expenditures of the Government on various sectors and on different schemes are deflated to remove the effect of the value additions due to inflation. The deflator used is the GDP deflator, which is arrived in the following way.

$$\text{GDP Deflator} = \frac{\text{NSDP at current price}}{\text{NSDP at Constant price}}$$

With the base year shifting from 1980-81 to 1993-94, the continuous set of NSDP figures has been arrived at by splicing the old series to the new series.

2. Per capita Real expenditures are arrived at by dividing the total real expenditure by the population of the state.
3. The nineties having witnessed a major decline in the funds earmarked for the social sector, compound annual growth rates of per capita real expenditures on the social sector have been found out for two-time periods viz. 1990-91 to 1995-96 and 1995-96 to 1999-2000. The compound annual growth rate is calculated using the following formula

$$P_n = P_o (1 + r)^n$$

Where  $P_n$  = Expenditure incurred on the social sector in the terminal year considered

$P_o$  = Expenditure incurred on the social sector in the first year considered

$r$  = Annual rate of growth of expenditure

$n$  = Time period considered for the study

4. To analyze the revenue mobilization by the government, the income elasticity of the important revenue heads (Sales tax, Excise tax and stamps & registration fees) is found out for the two time periods considered in the study i.e. 1980-81 to 1990-91 and 1990-91 to 2000-01

Income elasticity of revenue heads =

$$\frac{\text{Change in revenue receipts}}{\text{Revenue receipts in the initial year}} \times \frac{\text{NSDP in the initial year}}{\text{Change in NSDP}}$$

5. Expenditure incurred by the government on various heads are expressed as percentages of NSDP, total expenditure and total revenue

### 1.5 RESEARCH QUESTIONS

The objectives having been specified above, the following research questions are central to the study.

- Q1. What is the Kerala model?
- Q2. What does the sustainability of the model refer to?
- Q3. What are the strengths of the model?

- Q4. What are the factors that have changed over the years, and what weaknesses does the model exhibit?
- Q5. What is the situation of the state finances and how will the model get affected by its deteriorating condition?

In this chapter and the subsequent chapters these questions will be answered keeping a firm focus on the central objective of the study.

## **1.6 AREA OF THE STUDY**

The study mainly covers the state of Kerala in the two decades starting from the eighties. However to gauge the strength and the weaknesses of the Kerala model, the state is compared with the fifteen major states of the country. Only the fifteen major states are included in the study because the minor states have low population base. Hence, this results in the distortion of the results by deflating the national averages in some cases or inflating them in others. Even the comparison of expenditure will give confusing results because of the same reason. Another problem with the minor states is that of data availability, since for certain variables the data was not available for many of them.

The comparison of Kerala with the other states to evaluate the strengths and the weaknesses of the model has been for the most part carried out in a temporal scale to see the changes that have occurred overtime

## **1.7 DESIGN OF THE STUDY**

As stated earlier, the focus of the study is on the analysis of the sustainability of the achievements of Kerala in the light of the financial difficulties faced by the state

*The following is the scheme of chapters followed in this study:*

Chapter II is a comprehensive survey of the literature regarding the research carried out on the Kerala studies. The study analyses the

factors that have gone into making of the Kerala Model besides a survey of the important works questioning the sustainability of the high social development in the state.

Chapter III analyses the strengths and the weaknesses of the model. The chapter is divided into two parts. In the first part, the strengths and the weakness of the model are assessed with the help of the important output indicators. To see the factors that have gone into the making of the model, a comparison of the states is also made in terms of input indicators relating to the education and the health sectors. In the second part of the chapter, the weaknesses of the Model in terms of education, health and social security is studied. The objective behind analyzing the weaknesses of the important social sectors is to show the threat to the sustainability of Kerala's development achievements since the financial difficulties of the government are going to further exacerbate them.

Chapter IV is an enquiry into the nature of the state finances in the past two decades. Considering the important role played by the state governments in the emergence of Kerala as a model state, the study considers it pertinent to have a deep understanding of both the financial difficulties of the state and the adverse repercussions of these on the social sector. The third chapter hence deals with all these aspects particularly emphasizing the problem of the sustainability of Kerala's development achievements.

Chapter V contains the conclusions of the analyses carried out by the study.

### **1.8 LIMITATION OF THE STUDY**

The study judges the sustainability of the Kerala model in light of the deteriorating condition of state finances and the inability of the government to maintain its high social spending. While the study adequately shows the important role that the successive state

governments have played over the years in the emergence of Kerala as a model state(in terms of important input indicators), the same cannot be said about the exact implication of the financial difficulties faced by the state on the social indicators at a predictable future. This is because the consequences of the fiscal crisis may take years altogether to get reflected in terms of these social indicators. Also the predictions can only hold if the current situation with regard to the financial condition does not improve to a significant degree and the social sector remains neglected as it is now.

**KERALA MODEL OF DEVELOPMENT: A SURVEY OF LITERATURE**

**2.1 INTRODUCTION**

Kerala is located in the Southwest of the Indian subcontinent, on a narrow strip of land between the Arabian Sea and the Western Ghats. The State covers an area of approximately 39000 square Km. According to the 2001 Census of India; Kerala has about 32 million inhabitants and the population density is among the highest in the world.

**2.2 KERALA MODEL OF DEVELOPMENT**

Development economists worldwide have referred to the development experience of Kerala, which has resulted in extraordinary achievements in terms of social indicators despite a low economic development, as the Kerala model. It however becomes important to elaborate on the definition of the Kerala model to identify those elements that are most critical to the question of sustainability. An elaborate definition of the same has been given by RICHARD W. FRANKE & BARBARA H CHASIN<sup>1</sup> who defined Kerala model as,

- A set of high material quality of life indicators coinciding with low per capita incomes, both distributed across nearly the entire population of Kerala.
- A set of wealth and resource distribution programs that have largely brought about the high material quality of life indicators.
- High level of political participation and activism among ordinary people along with substantial number of dedicated leaders at all levels. Kerala's mass activism and committed cadre were able to function within a largely democratic structure, which the activism has served to reinforce.

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<sup>1</sup> Paper presented at the International Conference on Kerala's development experience: National and Global Dimensions. Organized by ISS, New Delhi- Dec 96

Thus in broad terms, Kerala model refers to the high achievements of Kerala on the statistical indicators of development, particularly with regard to educational and health sectors. These indicators have been achieved despite low incomes.

### **2.3 HOW KERALA BECAME A MODEL STATE?**

Kerala has become well known for its unique development pattern. Despite its poverty in terms of economic indicators, the state displays a set of very high social indicators, that are not only outstanding in comparison with the rest of India but are also comparable even with the developed countries of the world<sup>2</sup> Yet the significance of Kerala's experience is often underestimated in international discussions. This is mainly because Kerala not being an independent country is often missed in policy analysis based on international comparisons. The fact however remains that Kerala with its 32 million people has a larger population than most of the countries of the world, including many from which comparative lessons are often drawn for India like Sri Lanka (19 million), Malaysia and Singapore (less than 4 million). Even South Korea, which received a great deal of attention in the development literature, had about the same population in the early 60s as Kerala has today. Hence to achieve as much as Kerala has done for a population of its size is no mean record in world history. Kerala's unique development pattern and its outstanding accomplishments achieved through public action have become known as the Kerala model of development.

Scholarly interest in Kerala as a model appears to have been triggered by the publication of a pioneering study on Kerala's path to development conducted by the Center for Development Studies (CDS) in Thiruvananthapuram in the year 1975. Challenging the dismal picture of poverty in Kerala painted by Dandekar and Rath in their report of Poverty in India, the CDS study pointed out that people of Kerala had achieved a relatively high degree of human development and quality of

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<sup>2</sup> State, India: Radical reform as development- FRANKE, RICHARD W & CHASIN, BARBARA H -Human Development Report

life despite low per capita income and consumption expenditures. Admirers of the model have even recommended it as a sustainable and eco friendly model for the whole world in the 21<sup>st</sup> century.

Over the years, however considerable number of studies<sup>3</sup> and discussions have been devoted to the failures experienced by the state in its path of development. Economists like Amartya Sen have even called it misleading to view Kerala as a model<sup>4</sup> This study does not focus on this controversy, rather it attempts to analyze in detail the factors, both historical and others that have helped it achieve remarkable development in its social indicators. The objective of the study is to analyze the sustainability of the Kerala model of development. Hence it becomes necessary to look into each of the so-called state specific factors, with particular emphasis on public action and the undeniable role of the government in the states success.

### **2.3.1 Initial Phase: Role Of The Princely States**

The Malayalam speaking nation of Kerala became a state in 1956 when Indian states were reorganized on the basis of language. The two princely states of Travancore and Cochin and the Malabar district of Madras Presidency of British India were combined to form Kerala. Some of the essential elements in the Kerala model have a history that predates the creation of the state of Kerala. Travancore was regarded as a model native state as early as 1867, when a British Secretary of State for India proclaimed it as such, in the British House of Commons. Cochin followed close behind with respect to the attributes that made Travancore a model state.

The establishment of the kingdom of Travancore in the 18<sup>th</sup> century was accompanied by a strengthening of the centralized power of the state. An important feature of the consolidation of state power was

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<sup>3</sup> K K GEORGE-Limits to Kerala model of development, CDS, 1993, Monograph series  
Also see Tharamangalam, Joseph- Perils of social development without economic growth, The development debacle of Kerala, January –March 1998. Bulletin of Concerned Asian Scholars

<sup>4</sup> Amartya Sen –Economic Development and Social Opportunity

the destruction by Martanda Varma and his successors of small feudatories and of independent centers of feudal power. Land was brought under state control. From the beginning of the 19<sup>th</sup> century, British suzerainty was well established and the state in Travancore and Cochin functioned within the bounds set by the British power, and by its immediate representative, the British Resident in Thiruvananthapuram.

The administrative history of 19<sup>th</sup> century Travancore was marked by an extraordinary series of state sponsored reforms.<sup>5</sup> Free and universal education was declared to be an objective of public policy. Schools were opened and instruction was introduced in Malayalam. The first public library in India was established in Thiruvananthapuram. A system of public health was introduced and hospitals were built. Way back in 1865, the Maharaja had stated, "One of the main objects of my government is to see that good medical aid is placed within the reach of all classes of my subjects. It is a blessing, which is not at present in the power of individuals generally to secure how much ever they may deserve it<sup>6</sup> It is hence the obvious duty of the state to render its assistance in this direction." The Western System of medical care (earlier Ayurvedic System existed) was introduced into Malabar by the British and then in Travancore and Cochin by the Maharajas. The Maharaja of Travancore, himself a convert to the allopathic system of medicine, influenced his subjects by setting an example himself and by persuading the upper classes to follow suit.<sup>7</sup>

The state rulers of Travancore hence considered the provision of health care services and the promotion of its utilization a duty of the state. The adequate provision of the health services gave the people of Travancore an opportunity to become familiar with the benefits of such

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<sup>5</sup> On the changes brought about by the Travancore administration in the second half of the nineteenth century, see Jeffrey(1976) esp. Ch.3.

<sup>6</sup> Sadanandan Rajeev-Government health services in Kerala, Who benefits-August 11, 2001

<sup>7</sup> -In 1868, Lord Salisbury, the Secretary of State for India said that "if all native states were governed as were Travancore by Madhava Rau and Cochin by Sankunni Menon, the British Government would have to look for their laurels"(cited in Achyuta Menon 1922,p.9)

measures as inoculation and vaccination. On the other hand, the colonial government of Malabar set up institutions only to cater to the British and their employees.

Land tenure legislation brought Travancore closer to a system of Ryotwari, investing proprietary rights in new sections of persons who were actually responsible for farming the soil. Public works became an important sphere of state activity. The Travancore rulers launched economic enterprises (plantation agriculture and agri based industries). The state also pioneered progressive social policies. The most famous early proclamation was in 1827, when the princess of Travancore called for state support for education so that "there should be no backwardness in the spread of enlightenment in Travancore". It was envisioned that by diffusion of education the people would become better subjects and public servants and that the reputation of the state might be advanced thereby.

The monarchy and the upper class elite however remained an autocratic and undemocratic ruling stratum. They practiced untouchability and were hostile to the demands of the outcaste and oppressed. Yet the increase in education and social consciousness among the previously disadvantaged made them challenge the old order. Also the new resources that were made available by the growing commercial – capitalist economy opened up new possibilities for social mobility outside the framework of the caste based ascribed status system.

While Kerala's achievements today cannot be attributed to the policies of the royal administrations of the princely states, what cannot be denied is that it did create an environment of official support for social services. This environment was given a further uplift by the missionary activities<sup>8</sup> The protestant missionaries<sup>9</sup> in Travancore in the late 18<sup>th</sup> and the first half of the 19<sup>th</sup> century constituted the first

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<sup>8</sup> See Ramachandran V.K-Kerala's Development Achievements: A Review (1995)

<sup>9</sup> "The social legislation against untouchability, the temple entry act, and the tenancy acts were the culmination of a long process which started with the beginnings of westernization of India and the impact of Protestant Christianity"(Aiyappan 1965, pp.8-9)

modern organized group opposed to untouchability and caste discrimination. They put their social outlook in many ways – they opened the first modern schools in the state and opened them for the children of the outcastes, boys and girls. They opened rural hospitals and dispensaries apart from playing a major role in medical education in South India and in propagating principles of hygiene and public health. They encouraged the breaking of caste taboos and were the main support of the people who fought for women of oppressed castes. They began literacy and anti slavery campaigns among the Shanar people of South Travancore and among Puliya people and pressed for legislation against slavery and against forms of torture.

Sir James Munro, the Resident from 1810 to 1819 in the princely state of Travancore was influenced by the activity of London Missionary Society and its work in the spheres of education and health, for the elimination of slavery and against other forms of Oppression of the lower castes. Although they practiced untouchability themselves, the rulers of Travancore accommodated the activity of the London Missionary Society and absorbed important features of missionary activity into the state policy. The missionary activity and influence helped prepare the ground for the social movements of the second half of 19<sup>th</sup> century and in the 20<sup>th</sup> century.

### **2.3.2 The Social Reform Movements**

The process of commercialization and modernization gave rise to a new middle stratum of commercial farmers, traders, petty industrialists etc. The economic advances that the low castes like Ezhavas made did not however coincide with their social status. This was the context of the emergence of socio-religious movements to reform the various castes and community customs and rituals and in the case of the Avarna castes and communities to fight against upper caste domination. Ironically it was the upper caste Nairs who set the ball rolling in 1891, protesting against the dominance of Tamil Brahmins in government service in Kerala. This was followed by one of the most significant social

protest and reform movements in Kerala led by Sri Narayana Guru of the Ezhavas, the largest caste overall and the most important of the lower castes.

In the caste hierarchy of Kerala, the Ezhava caste was the upper tier of the two levels of untouchability<sup>10</sup>. The last decade of the 19<sup>th</sup> century and the early part of the 20<sup>th</sup> century were a period of commercialization and capitalist development of agriculture of which the Ezhavas (whose traditional occupation was agricultural labor and peasant cultivation) benefited a great deal. A discrepancy therefore arose between their ritual status and economic status. The SNDP Yogam was established in 1903. The main demands of the Ezhava social reform movement were against untouchability and against upper caste - Hindu prohibitions on access by members of the backward caste to roads, bathing places, water sources and other public places for free entry into Hindu temples, for literacy and education for employment in government jobs and for greater representation in the restricted franchise legislature of the Travancore state. The most striking feature of the early history of the Ezhava social reform movement is the movement to gain access to primary education. An outstanding feature of the Malayalam renaissance of the 19<sup>th</sup> and early 20<sup>th</sup> centuries was that people from Ezhava caste, a caste whose members were considered untouchable by upper caste Hindus, played a distinguished part in it. Kumaran Asan, the secretary of the SNDP Yogam was the first lyrical poet in Modern Malayalam.

Among the other reform movements, the prominent one is that of the Pulayans .<sup>11</sup> Under Ayyankali of Travancore, the great leader of the Pulaya masses, the Pulayas put forward the demands for education and raised their voice against caste discrimination.

In the 19<sup>th</sup> and early 20<sup>th</sup> centuries, reform movements among the Nairs rose. These movements aimed at increasing access of the Nair

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<sup>10</sup> see Ramachandran, *opp. cit*

<sup>11</sup> On the social reform movement among the Pulaya people, see Tharakan (1991)

Community to higher education and at their entry into the professions and the bureaucracy on a large scale. Among Namboodiris there were reform movements against reactionary marriage practices within the caste and for the right to modern education.

### **2.3.3 Role Of The Left Governments<sup>12</sup>**

In the 1930s Malayalees began to organize new kinds of social movements – nationalist movements for responsible government and socialist and communist movements that spread rapidly. The Communist Party and the organizations of workers, peasants, agricultural laborers, students, teachers, youth and women under its leadership have been the major organizers and leaders of mass political movements in Kerala since the end of the 1930s and have been the major agents of politicization of the mass of Kerala's people. The Communist Party in Kerala assimilated the most progressive features of diverse local socio political movements and gave them a new philosophical and political direction.

The different movements in Kerala that shaped the post independent government's policies included the freedom movement, the radical and anti caste sections of the social reform movement, the movement against autocracy and monarchy and the modern movement of workers, peasants and radical intellectuals. The Communist Party entered electoral politics in the post independence period with a strong base in working class and mass organizations. When elections were held in Kerala in 1957, the newly established state achieved international acclaim for being the first state to democratically elect the Communist Party to Power. The major agenda of this Government of later Communist ministries in the state were land reform, health, education and strengthening the system of public distribution of food and other essential commodities. Thus it was this Left Government that launched some of Kerala's most radical and comprehensive reforms and social welfare measures including the Land Reforms.

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<sup>12</sup> For assessing kerala's development that highlights the role of left & of public policy see FRANKE & CHASIN) Kerala: Development through Radical Reform (1994)

The Communist Movement had its roots in Malabar. In this sense, Malabar made a distinct and crucial contribution to Kerala's development. It was the people of Malabar who faced the most archaic and reactionary system of agrarian relations. Hence an anti-imperialist, anti-feudal political movement based on mass organisations of workers, peasants, agricultural workers, teachers and youth and lead by Left Wing Contingent of the freedom movement was Malabar's specific contribution to Kerala's development. In the words of E.M.S. Namboodiripad the first CM of Kerala, "The anti imperialist freedom movement lead by the Left in that movement came from Malabar to the other part of the states, while educational and socio cultural, developments went from the other regions of the state to Malabar".

Despite political forces in Kerala being fragmented in the post 1959 period, most of the parties are broadly divided into two alliances led by the CPM and the Congress Party. Although the logic of coalition politics leads to alternating shifts in the electoral fortunes of the two fronts, the communist parties have continued to play a prominent role in public action in Kerala and have remained strong even in the global post communist era. Thus Kerala's state sponsored welfare measures have roots especially in the influence of Socialist and Communist ideologies that regarded state intervention as ideal and desirable.<sup>13</sup>

#### **2.3.4 Land Reform**

The Land Reform Programme of Kerala launched in 1969 is one of the most thorough and successful programme of the same kind in the third world. One and a half million tenants received either the fields they worked, house compound land or both. Just before the 1969 act, 8% of landowning households controlled 44% of all rented land and 62% of irrigated rental lands. Landholding inequality among farming households was the third worst among India's states. One regional study in the 1940s found that cultivators households paid half and

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<sup>13</sup> See Franke R. W & Chasin B.H-Power to the Malayalee People. Economic & Political Weekly 32(48), 1997

sometimes more than 3/4<sup>th</sup> of their gross returns to the classes above them<sup>14</sup> When the new state of Kerala elected a communist majority to the state legislature, the government included cabinet members who were themselves seasoned militants of peasants and worker movements. Their electoral promise included radical land reform and they acted to meet this goal. Although Kerala's communists pressed ahead with their land reform programme, the Kerala State Supreme Court struck it down and the State Government was dismissed in 1959.

In the late 1960s, tenants took matters into their own hands, planting red flags on their tenancies and claiming the right to farm the land without paying rent. Popular pressure became so great that most politicians including the ruling Congress Party of India, supported the programme and a comprehensive programme although a weaker than that of 1959 became law in 1969. The abolition of both household and field tenancy transformed landlords – mostly high caste Brahmin priests – into teachers, government administrators and medium sized farmers. The reform did compensate the landlords. For rice fields, they received 16 times one year's fair rent as determined by a government committee. The compensation for house compound land was 25% of the market value, with half paid from a government land purchase trust and half by the former tenant. Land reforms improved the vast majority of lives in the countryside of Kerala

Thus an important structural reform that generated demands for social services has been the implementation of the land reforms. While it did have many limitations, the most important being the failure to implement the land ceiling clause and the exemption that was given to plantations, it brought about a fundamental change in the rural society, particularly in northern Kerala. The tenants acquired proprietary rights and the agricultural laborers received ownership and security of residence in the hutment land.

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<sup>14</sup> See Ramachandran v. k-On Kerala's Development Achievements (1997). Also see Dreze, Jean & Sen, Amartya-Indian Development : Selected Regional Perspectives

It is significant that the gap between northern and southern Kerala in terms of social sector development began to narrow during the post independence period. The catching process of the north has been remarkably rapid since the implementation of land reforms. Kerala's land reform may have also improved the condition of lives of the high caste women in Kerala who traditionally led secluded lives suppressing the household servants. In strictly traditional families only the eldest son could marry, a practice, which protected the land from partition. But this also meant that many high caste women never left their families homes to start their own families. With the loss of land, high caste families invested in education for both sons and daughters.

### **2.3.5 Role Of Women**

The role of women in Kerala's development achievements is worth emphasizing. Women in Kerala have been , historically important participants in the trade union movement nad other socio-economic movements<sup>15</sup> . It should be noted that Kerala's women have made outstanding gains in the field of education and health and are more equal participants with men in education and health achievements than in any other part of India. Kerala is the only state where mass literacy has been achieved among women as well as among men. Literacy among adolescent girls was almost universal in 1986-87. Women's literacy is supported by the society and the state and there has never been any organized opposition to female literacy and as a result of progressive social attitudes in Kerala towards their survival in general, Kerala remains an exception in India in terms of favorable sex ratio. Kerala's experience is a dramatic example of the role of women's agency in advancing the social and economic development of a society. Female literacy and education are crucial determinants of child survival, general health and hygiene. These in turn determine progress in other demographic and health indicators, like the expectancy of life at birth, the birth and death rates, infant mortality rates etc. Kerala has also

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<sup>15</sup> Left women's movement in Kerala has been covered in AIDWA(994), pp44-86

benefited from the matrilineal tradition of property inheritance for an important part of the community (the Nairs), which has enhanced the social status of Nair women even in the past. While the Nairs constitute about 20 percentage of the total population and the practice has changed a good deal in recent years, nevertheless the social and political influence of a long tradition of this kind, which goes against conventional Indian norms, can certainly not be ignored.

Kerala's achievements in the sphere of health would have been impossible without female literacy and without an enlightened social attitude towards the survival of girl children and women<sup>16</sup>. Female literacy ensures next generation literacy. Women in Kerala have been active participants in the various social and political movements. In short, the contribution of women towards the development achievements of Kerala is certainly significant. Yet the socio political and economic advance among women today has not been commensurate with the historic achievements of women in the spheres of education and health. Work participation rates among women are low, rates of unemployment are high and gender differentials in the labor market persist across caste income and education categories. Educational advancement among women has not put an end to dowry related deaths, sexual harassment cases and other crimes against women.

### **2.3.6 State Governments:**

While various scholars have hailed Kerala's achievements in the sphere of human development, many of them have refused to accept it as a model of development citing its achievements as that which cannot be easily emulated because of the belief that Kerala specific conditions have been responsible to a great extent for its success. Having good luck in ones history is not however a policy parameter that one can

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<sup>16</sup> Jeffrey,R(1976), Governments and Culture: How Women Made Kerala Literate in Pacific Affairs, 60(3); 447-479

Also see Nair,P R G(1974),Decline in Birth Rate in Kerala:A Hypothesis About the Interrelationship Between Demographic Variables, Health Services and Education in Economic and political weekly, 9:323-336

command. Those who see a unique and unrepeatable pattern in Kerala's remarkable record of social progress can point to the very special nature of its past and suggest that other states can learn little from it. This is however far from the truth.

When the state of Kerala was created in independent India, it included not only the erstwhile native states of Travancore and Cochin but also on linguistic grounds the region of Malabar<sup>17</sup> from the old province of Madras in British India (later Tamil Nadu). The Malabar region transferred from the Raj was at that time very much behind Travancore and Cochin in terms of literacy, life expectancy and other social indicators. A highlight of Kerala's development experience is that public action after 1957-helped close the gap in important respects between Malabar and the Southern districts of Kerala. KABIR & KRISHNAN (1991) have discussed in detail the disparities in health and education facilities between these regions. By the eighties however Malabar had caught up with the rest of Kerala to such an extent that it could no longer be seen in divergent terms. The initiative that the State Governments took in reducing the differences between north and the South in respect of literacy, medical facilities, infant mortality, immunization and fertility and death rates and in infrastructure and general cultural development is a lesson that is not imprisoned in the of history of Kerala . Other parts of India can indeed learn a lot from Kerala's experience on what can be done here and now by determined public action.

The areas of State Government intervention in Kerala that have been most significant for the people have been land reform, health and education and the Public Distribution System apart from the series of social security measures provided to persons outside the organized sector who are usually not covered by such schemes. <sup>18</sup>Government

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<sup>17</sup> On the relative backwardness of Malabar in respect of medical facilities see Kabir & Krishnan (1991) and Jeffry (1992)

<sup>18</sup> Thomas Isaac TM and Michael Tharakan P K-Kerala: Towards a New Agenda EPW Nos August 5-12, 1995, 31 and 32

action on land reform began a few days after the first elected Government of Kerala took office.

Government policy after the formation of Kerala has played a key role in raising the health standards and in demographic change. The table given below shows the availability of health infrastructure in British India and Travancore.

**Table 2.1**

**Availability Of Health Infrastructure In British India And Travancore**

Year	Institutions per 1000 sqm		Beds per 100000 population	
	British India	Travancore	British India	Travancore
1925	3.02	10.23	18.55	37.93
1935	5.51	13.51	21.01	39.25
1940	5.78	15.74	19.24	41.37
1945	6.80	22.56	21.27	46.81

**Source:** *Sadanandan Rajeev, Government Health Services in Kerala, who benefits, August 11, 2001*

Thus the table clearly shows that Travancore had a better availability of hospitals and beds than British India. On the eve of the formation of Kerala, Travancore and Cochin had 76 beds per 1 lakh population while Malabar had 34<sup>19</sup> However, the gap overtime was filled by the elected governments of Kerala who tried to expand the reach of the health system and to bring the health facilities of the erstwhile Malabar to the level available in Travancore-Cochin.

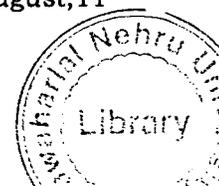
The table given below shows a comparison of the Health Per Capita Expenditure incurred by the state and the average incurred by India as a whole.

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<sup>19</sup> Sadanandan Rajeev, Government Health Services in Kerala, who benefits, August, 11 2001

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Health here includes allocation for different systems of medicine, medical education, Employees State Insurance and Public Health services including water and sanitation.

**Table: -2.2**

**Health Per Capita Expenditure: Average Of All Indian States  
And Kerala**

<i>Year</i>	<i>All states</i>	<i>Kerala</i>
1960-65	2.61	3.46
1965-70	4.56	6.05
1970-75	7.33	8.67
1975-79	19.06	15.43
1980-85	26.04	31.35
1985-90	47.88	48.98
1991-95	95.47	113.18

**Source** Same as above

The table depicts that the government has been spending more than the all India average in the crucial Health sector. Hence to attribute most of the credit to its historical past and to her geographic setting as a reason for its enviable achievements in the social sector would certainly be a one sided view. It can be said that to a considerable extent the large expenditures incurred by the successive state governments in Kerala has been responsible for the making of the Kerala model.

Zachariah (1994) writes that much of Kerala's success in moderating fertility and mortality in such a short span was due to its policies, which successive governments followed in Kerala since independence. Throughout the post independence period, health expenditure has been higher in Kerala than in any other state. Data also indicate the high levels of expenditure in the princely states of Travancore and Cochin on health and education from the 1920s.

Preventive immunization and vaccination are Kerala's most impressive public health projects. Small pox vaccination dates back to 1879 in Travancore. In 1970 Kerala became the first state in India to entirely eradicate small pox. Medical services are available throughout Kerala and rural hospital beds are much closer to patients than in the rest of India. The states provision of basic health care and its redistribution of wealth are the main explanations for a dramatic decline in birth rate. In terms of hospitals and dispensaries, the health infrastructure in Kerala is far better developed than India as a whole (explained in the next chapter). Although the basic structure of public health facilities is quite similar in Kerala and other states, an important difference is that health programmes in Kerala have been far better implemented largely due to the vigilance of an educated and health conscious public.

In terms of expenditure on education too, the successive governments in Kerala had been spending higher (as a proportion of total government expenditure and as a proportion of the NSDP) than the corresponding proportion spent by all the other states. Infact in the 80's Kerala had been the only state to fulfill the Kothari Commission recommendation of earmarking six percent of NSDP to education<sup>20</sup>

The two-tier public distribution system was established and strengthened in the 1970s and the 1980s; early attempts to establish an extensive public food distribution system of a permanent nature in the state began with the 1957 ministry. The State Governments of Kerala established ration shops and other state run stores to sell food and some basic articles of consumption to the people. The working of the public distribution system has been most efficient in Kerala. The contribution of the state governments in making food available at affordable rates has certainly contributed in Kerala's development achievements.

Another area where the state governments role cannot be missed out is its contribution towards social security measures that cover most

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<sup>20</sup> The Kothari Commission was entrusted with examining and making recommendations to improve education and Educational policies in India

sections of the rural workers. There are also pension schemes for the old age destitutes and for the physically handicapped persons besides providing assistance to the unemployed.

Kerala has extraordinary natural resources, human resources in the form of educated, skilled and politically conscious workforce and unique achievements in the spheres of health and education. It has a strong Left political movement that is sensitive to issues of development and growth that has set itself the task of building social alliances for economic development and socio-political change. Kerala's achievements were possible because of mass literacy and because traditional patterns of gender, caste and class dominance were transformed radically. It should be noted that while Kerala was already quite advanced compared with British India at the time of independence, much of the great achievements of Kerala that are so admired now are the results of post independence public policies. In fact in the 50s Kerala's adult literacy rate was around 50% compared with the above 90% now, its life expectancy at birth was 44 years vis-a-vis 74 now and its birth rate was 32 as opposed to 18 at present now. Kerala did have a good start, but the policies that have made its achievements so extraordinary today are to a great extent the products of post independence political decisions and public action.

#### **2.4 QUESTIONS ON SUSTAINABILITY OF THE MODEL**

Prominent experts and admiring researchers from both within the country and outside have studied Kerala. In development scholar Alexander's words, "extra ordinary efficiencies in the use of the Earth's resources characterize the lifestyles of the 29 million citizens of Kerala"<sup>21</sup> He even recommended Kerala as a sustainable and eco- friendly model for the whole world in the 21<sup>st</sup> century.

However while initially most of the writings on the Kerala model appeared as eulogies characterized by an excessive adoration of Kerala's

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<sup>21</sup> William M Alexander-Exceptional Kerala: Efficient use of resources and Life Quality in a Non Affluent Society- (Ecological perspectives in Science, Humanities and Economics), 1994

successful development experience in the social sector, several Development economists soon began questioning the very sustainability of the model. Infact the major themes of the two International Conferences <sup>22</sup>on Kerala studies was the crisis in Kerala's development. The words of EMS Namboothirippad , the most illustrious leader of a party that has a greater claim to be a patron of the Kerala model than any other single organization, past or present clearly reflected this changed perception. In his words <sup>23</sup> "Let not the praise that scholars shower on Kerala for its achievements divert our attention from the intense economic crisis that the state faces. We are behind the other states in respect of economic growth and a solution to this crisis brooks no delay. We can ignore our backwardness in respect of employment and production at our own peril".

After the initial euphoria over the achievements of Kerala, several authors have questioned the sustainability of the Kerala model

#### **2.4.1 Meaning Of Sustainability**

The dictionary meaning of the term is 'to maintain' or 'keep up'. A development model is sustainable<sup>24</sup> to the extent that it,

- Improves or at least maintains access to any entitlements necessary for economic security and personal dignity particularly of the vulnerable groups.
- Expands or at least maintains the number of people obtaining access to production resources adequate for a decent standard of living or employment at reasonable ways.

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<sup>22</sup> The main theme of 1. two editions of EPW, September 1990 "Kerala economy at the cross roads" 2. First international congress on Kerala studies held at Thiruvananthapuram-International Conference on Kerala Studies held at Thiruvananthapuram in 1994 and in New Delhi in 1996. See 17-International Conference on Kerala Studies held at Thiruvananthapuram in 1994 and in New Delhi in 1996. See International Congress on Kerala Studies-Abstracts, Vol 1 (Thiruvananthapuram A K G Center for Research and Studies. Also see International Conference on Kerala's development experience; National and International Dimensions-New Delhi; Institute of Social Sciences.

<sup>23</sup> -Presidential Address at the International Conference on Kerala Studies at Thiruvananthapuram in 1994

<sup>24</sup> Paper presented at the International Conference on Kerala's development experience: National and Global Dimensions. Organised by ISS, New Delhi- Dec 96

- Reduce the level of social and economic inequalities or at least does not exacerbate them.
- Expands or at least maintains basic political and individual rights.

The question regarding the sustainability of the Kerala model has not been a one posed in the recent times but many scholars over the years have been raising an alarm over the state of affairs in Kerala, which could pose a threat to the development achievements of the state.

The factors have been identified as, One, the slower growth of the SDP of Kerala since the late 1970s in comparison to national average.(however the very emergence of Kerala being amide is on account of its high social development in spite of low economic development. Also the state improved in this respect in the nineties). Second the sluggish industrial growth since mid 1970' (Isaac & Tharakan,1995)Third, unemployment which has been high enough to be the major blight on the Kerala model (Mohan,1994) Fourth, the approximately 15% of Kerala's people who have been left out of the model – fishing people, female stone cutters, female domestic servants, some tribals etc.(Ukkuru,1994)

K. K. George in his study<sup>25</sup> of the fiscal problems of the state during sixteen years from 1974–1990 pointed out that Kerala's problem lies in the fact that it is unable to generate enough revenue to finance and maintain its social development. Second the revenue expenditures are liable to increase over the years because of second-generation requirements of social development. According to him, Kerala has been suffering also on account of its inability to obtain its fair share of the national government transfers. For e.g. Kerala does not receive its share for social development since it is seen as having reached the national

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<sup>25</sup> According to K K george in 1986-87,1987-88 and in 1989-90 the revenue receipts absorbed more than a quarter of Kerala's total capital receipts. For further details see George –Limits to Kerala model of Development; An analysis of fiscal crisis and its implications,(1993)

targets despite the fact that the state is unable to make the recurring expenditures needed to sustain these achievements.

Joseph Tharamangalam<sup>26</sup>, in his study of the crisis faced by the model, argued that the crisis faced by the state has itself been a result of the success of the so-called Kerala Model. In his words, “ the patterns of social, political and cultural development that have produced the quality of life in Kerala have been the ones that have been responsible for its failures. Tharamangalam specially cites the financial crisis, the acute unemployment among the educated youths and the poor quality of higher education in Kerala. He, however, went to the extremes of linking the Kerala crisis to a critique of traditional Marxist faith in a state run economy, to which many scholars have cast their doubts.

In the recent past, observers from outside too have started having doubts on whether Kerala will be able to maintain the tempo of progress due to the growing financial problems of the state. In the words of the development expert, Joseph Collins, Kerala is a blotted welfare state without the economy to support it. He pointed out that all political parties are busy promising more goodies, which means more deficits and the mentality that things do not have to be funded, is strong in Kerala<sup>27</sup>

Richard Franke and Barbara Chasin, the one time ardent admirers of the mode, have also acknowledged that Kerala model faces a crisis<sup>28</sup>. In their view the crisis of the Kerala model has eight components. First, the slow growth of the state domestic product in relation to the Indian national average since the late seventies. Secondly the stagnation in the agricultural production until the late 1980's coincided with a decline in the area planted in rice . Kerala, which was thus substantially dependent on outside markets, has been made

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<sup>26</sup> Tharamangalam, Joseph- Perils of social development without economic growth, The development debacle of Kerala, January –March 1998. Bulletin of Concerned Asian Scholars

<sup>27</sup> Joseph K P (1999)-Poor Management of State finances in Kerala-In B.A.Prakash(Ed)-Kerala Economy: Performance, Problems and Prospects

<sup>28</sup> 21-Franke, R.W & Chasin ,B.H-(2000) Is the Kerala model sustainable? Lessons from the Past, Prospects for the Future. In G. Parayil (Ed), Kerala: The Development Experience: Reflections on Sustainability and Replicability

further vulnerable to outside forces for this major food crop. Third, the escalation of prices for raw materials and competition from cheaper labour sources in other areas has adversely affected the traditional industries such as coir, cashew and handloom (Isaac and Tharakan,1995). Fourth, the sluggish and even negative industrial growth in some years (Mohan1994; Subramanian 1994;Isaac and Tharakan, 1995). Fifth the high levels of unemployment which is almost three times the all Indian average (Prakash 1994, Isaac and Tharakan 1995, 1996) have been sighted as one of the major shortcomings of the educational policies undertaken by the successive state governments. This is claimed as major dent on Kerala being a model state.

Sixth, the conscious policies of the successive governments are a major factor behind the success of the state in social development. The high social spending, the elaborate social security measures including the different pension schemes operated by the state governments, have contributed immensely in providing the people of Kerala a better standard of living. The state had also created an elaborate network of fair price shops and the Public Distribution System in the state has always worked better compared to other states. However the series of fiscal crisis experienced by the state in the recent years have threatened to undermine many of the redistribution programmes(George 1993) like agricultural labor pensions, old age pensions and other social security schemes, educational and health spending and the public distribution system for food.

Seventh, Franke and Chasin refers to the people who have been left out of the success achieved by the state in the social sphere. These include fishing people (Karuna et al 1994), female stone cutters (Ukkuru et al 1994), female domestic servants (Subramony 1994), some female agricultural laborers (Mencher1994), some tribal people (Dev 1994;Corrie 1994), migrant workers from Tamil Nadu, and many head load and other casual laborers(Pillai 1992;1996). They further feel that extending the model to these groups would become increasingly difficult keeping in view the above given difficulties.

Finally Franke & Chasin feel that the state is facing a serious environmental crisis, which threatens the quality of life and both directly

and indirectly reduces the economic potential that must be tapped to sustain the main elements of the model. Loss of forest cover has resulted in substantial soil erosion and additional problems include various kinds of pollution. In a stagnant economy with little surplus to invest in renewal, repairing environmental damage becomes quite costly. The states high population density and its intense landuse exacerbate the ecological problems. Further poverty in Kerala have driven settlers into hillsides too steep for cultivation, further leading to depletion of forests to the firewood needs of these problems.

Franke and Chasin have also thrown some light on the perils to the sustainability of the model caused by the structural adjustment, privatization, downsizing, and associated policies which could effectively reduce the role of the government. A market takeover of health, education and social welfare could price the poor out of the process. M A Oommen(1994) has characterized these trends as euthanasia for the Kerala model.

The study however focuses on the problem of sustainability posed by the reducing role of the state in the social sector. The study proposes to give a deep insight to the financial crisis faced by the state and its adverse repercussions on the social sector Chapter one has analyzed in detail the contribution of the state Government in the evolution of Kerala as a Model state. The state govt. has experienced a series of fiscal crisis, which has aggravated in the 90s and this has threatened to undermine the state initiatives with regard to educational and health spending. Thus, sustainability of Kerala model here refers to the ability of the state to maintain its lead in terms of the statistical quality of life indicators (which had put Kerala closer to the high income developed countries), on account of the adverse effects of the financial crisis of the government

The following chapters analyze the strengths of the development experience of Kerala, the weaknesses the model has come to exhibit in the recent years, a realistic evaluation of the financial problems of the state in the recent times and finally whether the achievements of the state would be sustainable in the years to come.

## **STRENGTHS AND WEAKNESSES OF THE MODEL**

A comparison of Kerala with other states is of utmost importance to gauge both the strengths of the model and its weaknesses, which this study highlights upon.

### **3.1 STRENGTHS OF THE MODEL**

#### **3.1.1. In Terms Of Output Indicators**

The strength of the model obviously lies in the set of statistical quality of life indicators, which remains high even now putting Kerala at the top in India and comparable to that of the developed countries. In a comparative perspective, the female literacy rates in Kerala are higher than those in every province in China<sup>1</sup> That fertility rates in Kerala achieved without compulsion are now lower than those in China and countries in the upper middle income bracket is a tremendous achievement.<sup>2</sup> Kerala also surpassed the expectations of the demographers by reaching the third stage of the demographic transition within two decades.<sup>3</sup>are other indicators of the high quality of life in Kerala, some of which can be measured and others more intangible like the high levels of social mobilization and democratic participation in the state, an exceptionally high readership of newspapers and magazines and a writers cooperative that may be the worlds first and the most successful intangible indicator however is the new sense of dignity and self worth that the formerly oppressed and humiliated sections of its population possesses <sup>4</sup>.It becomes important to highlight

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<sup>1</sup> Sen, Amartya, "D.T. Lakadawala Memorial Lecture"(New Delhi; Institute of Social Sciences), 1994

<sup>2</sup> Sen, Gita, "social Needs and Public Accountability: The case of Kerala" Development policy and Public Action (Oxford: Oxford University Press

<sup>3</sup> Zacharia K.C. et al, Demographic Transition in Kerala in the eighties

<sup>4</sup> Tharamangalam Joseph, Agrarian class conflict: The political mobilization of agricultural labor in Kutanad, South India. Vancour:UBC Press, 1981, pp 94-95

Kerala's continuing success in delivering a high material quality of life to its people because of the skepticism seen in different quarters over the significance of the Kerala model. Broadly Kerala's strengths can be divided into two parts – one highlighting the states success in the health sphere and secondly the educational attainments.

### **3.1.1.1 Important Social Indicators: A Comparative Perspective**

The following table shows the important social indicators of the 15 major states of India, clearly reflecting the states lead over the rest with respect to Literacy levels, the Infant Mortality Rate, the Sex ratio, the Life expectancy, Crude Birth rate (CBR), Crude Death Rate (CDR) etc.

**TABLE- 3.1**  
**Important Social Indicators**

<b>S No</b>	<b>States</b>	<b>Literacy Rate</b>	<b>Sex Ratio</b>	<b>CBR</b>	<b>CDR</b>	<b>TFR</b>
1	Andhra Pradesh	61.1	978	22.5	8.3	2.5
2	Assam	64.28	932	28.2	9.9	3.2
3	Bihar	47.53	921	31.7	10	4.4
4	Gujarat	66.43	921	25.6	7.6	3
5	Haryana	68.59	861	28.3	8	3.4
6	Karnataka	67.04	964	22.7	7.6	2.5
<b>7</b>	<b>Kerala</b>	<b>90.92</b>	<b>1058</b>	<b>17.9</b>	<b>6.2</b>	<b>1.8</b>
8	MP	64.08	920	31.9	11	4
9	Maharashtra	77.27	922	23.1	7.3	2.7
10	Orissa	63.61	972	26.5	10.9	3
11	Punjab	69.95	874	23.4	7.4	2.7
12	Rajasthan	61.03	922	32.1	8.9	4.2
13	Tamil Nadu	73.47	986	19	8	2
14	Uttar Pradesh	57.36	898	33.5	10.3	4.8
15	West Bengal	69.22	934	22.4	7.7	2.6
	INDIA	65.20	939		8.9	3.3

**Source** *Census of India, 2001-Literacy rates and Sex ratio*  
*Others-SRS, 1997*

Table 3.1 shows the important social indicators like Literacy rates, Sex ratio, and the Crude birth and death rates. The table clearly reflects the lead the state enjoys in terms of all these indicators pertaining to education and health. While the literacy rates of India stood at 65.2% according to the 2001 census that of Kerala stood at 90.92%. Similarly among the 15 major states Kerala remains the only state with a favorable sex ratio. The Crude Birth Rates and Crude Death Rates of Kerala at 17.2 and 6.2 are also much higher than the other states.

Another crucial indicator given in the table above is the Total Fertility Rate, which indicates the average number of children per couple in the fertility age group. When a society reaches and maintains a level of two, it will reach the replacement level. The BIMARU states still have TFR above 4, while in Kerala it has gone down below the replacement levels. This is a remarkable achievement and several studies point out to the crucial role of education (Nair 1981, Krishnan 1976). Improved access to health care facilities, especially for pregnant mothers have subsequently played a crucial role in ensuring the survival of new born children indicated by the percentage of births attended by trained health personnel (shown in the later part of the chapter). This has been a major factor behind the success of the state in reducing the fertility rates.

Table 3.2 shows some other important indicators relating to health. An important measure to understand the mortality transition in a region is considered to be the levels of infant mortality. All the more IMR is recognized as a sensitive measure to understand the health status of the population. IMR is also often used to assess the overall socio economic development of a particular socio economic region. The reduction in IMR has been one of the priority health goals of both national and state governments in India. While the all India Infant Mortality Rate was 72 per thousand, the same in Kerala was as low as 12 per thousand.

**Table 3.2**  
**Other Health Indicators**

<b>S No</b>	<b>STATES</b>	<b>IMR.</b>	<b>Neo natal mortality rate</b>	<b>Expectati on of life at age 1</b>	<b>Persons not expected to survive beyond age 40</b>
1	Andhra Pradesh	63	46	65.2	14.9
2	Assam	76	48	60.6	21.8
3	Bihar	71	50	63.2	19.5
4	Gujarat	62	44	65.1	16.7
5	Haryana	68	43	67.6	15.4
6	Karnataka	53	38	66.6	15.7
<b>7</b>	<b>Kerala</b>	<b>12</b>	<b>8</b>	<b>73.2</b>	<b>5.1</b>
8	MP	94	64	61.2	25.3
9	Maharashtra	47	37	68.1	12.3
10	Orissa	96	63	62.6	22.3
11	Punjab	51	29	70.5	13.8
12	Rajasthan	85	55	64.6	19.9
13	Tamil Nadu	53	38	66.1	13.4
14	Uttar Pradesh	85	51	62.2	22.2
15	West Bengal	55	37	65.8	14.8
	INDIA	71		64.9	18.0

**Source-** Same As Above

NHDR 2001(For Indicator 4)

IMR is further divided into neo natal and post neo natal mortality rates. The infant deaths in the neo natal period (first 28 days) result from endogenous factors related to mother. The post neo natal mortality (29 days to one year) occurs due to exogenous components viz the larger environment. High levels of neonatal mortality reflect on the poor socio economic status of the mother. Another reason could be under nutrition among women. In comparison to other states and India as a whole, the level of neo natal mortality rates are very low, therefore reflecting the better

socio economic and health status of mothers in Kerala. In addition with 8 out of 12 infant deaths being neo natal deaths (or the very low post neo natal deaths) point out to the better health facilities or the better health environment in the state.

In using life expectancy at age 1, the influence of infant mortality rates and their trends, which may often be at variance with the trends in adult mortality rates, is being separated. Thus by using life expectancy at age 1 (which is more sensitive to adult mortality rates and reflects cumulated attainments of the population) in conjunction with infant mortality rates, different aspects of health attainments are reflected in a more clear fashion. The table shows that life expectancy at age 1 in Kerala stood at 73.2 years while for India it was just 64.9 years.

Persons not expected to survive beyond 40 years reflect the deprivational aspects of longevity in population as it presents the proportion of population that is not likely to live even to an age just above half the expected life span of people the developed world. While in Kerala this proportion was just over 6%, for the country as a whole 18% of the population are not expected to survive beyond 40 years.

### **3.1.2. In Terms Of Input Indicators**

#### **3.1.2.1 Health**

In spite of the economic backwardness, Kerala has made remarkable achievements in health almost comparable with that of even developed countries. Health is a multi-dimensional and multi-causal variable. It is defined as a "state of complete physical, mental, and social well being" (World Health Organization). Kerala also has been passing through an advanced phase of health transition despite remaining economically backward. Health transition is a complex process comprising demographic (mortality), epidemiological, and health care transitions<sup>5</sup>. It is manifested in

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<sup>5</sup> P G K Panikkar, Health Transition in Kerala

the rising life expectancy at birth due to changes in the fertility, mortality, and morbidity profile of a population.

Demographic (mortality) transition brings down birth and death rates and changes the age structure;

Three fundamental changes in the configuration of a population's health profile take place during epidemiological transition: (i) mortality decline due to

Infectious diseases, injuries, and mental illness; (ii) shift of the burden of death and diseases from the younger to the older groups; and (iii) change in health profile from one dominated by death to one dominated by morbidity. Epidemiological transition implies change in the morbidity profile from acute, infectious, and parasitic diseases (e.g. plague, smallpox, and cholera) to non-communicable, degenerative, and chronic diseases. A third component of health transition is health care transition brought about through changes in the patterns of the organized social response to health condition.

Kerala has apparently entered the third or final phase of the demographic transition, characterized by low death rate and declining birth rate leading to a slow down in the growth rate of population. Kerala's demographic experience has attracted wide research attention (eg (i) Zachariah, 1983; (ii) Zachariah & Irudaya Rajan, 1994; (iii) Bhat and Irudaya Rajan, 1990; (iv) Ratcliffe, 1984; (v) Zachariah & Irudaya Rajan, 1997).

That Kerala achieved the health status as par with that of USA spending roughly \$ 10 per capita per year while US spends about \$ 3500 per capita<sup>6</sup> annually made scholars worldwide look at Kerala as something of an enigma. (Spending on health however has been higher when compared to other states of India)

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<sup>6</sup> EKBAL B Peoples campaign for decentralized planning and the health sector in kerala

Undoubtedly, there are certain factors, which have made the state successful in this sphere. Kerala's high literate population especially the high female literacy in relation to other states has significantly contributed to this. World over

Indicators like IMR and female literacy have shown an inverse relationship.

The long period of struggle for social reforms emphasizing dignity of the people who were considered socially inferior later found expression in secular democratic movements and as a result of these there is a remarkable reduction in the rate of exploitation of underprivileged in Kerala compared to other states.

The Agrarian Reforms ended the feudal relationship in agriculture and giving land to tiller improved the social living conditions of the landless poor. This contributed to alleviation of poverty and improvement of their health status.<sup>7</sup>

The Public Distribution of food through fair price shops assured minimum food materials at relatively cheap cost to the people, warding the people from poverty, related diseases.<sup>8</sup>

Most importantly Kerala's achievements have been a result of the higher commitment of the government reflected in terms of its high spending on health and the huge infrastructure that it has built over the years. The state has had a long tradition of efficient medical and health services. Kerala has a three-tier system of health care – the Primary Health Centres and the Community Health Centres, Taluk and

District Hospitals and the medical colleges. Apart from modern medicine, Ayurveda, Homeopathy and other alternative systems are also

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<sup>7</sup> -Kannan K P- Declining incidence of Rural Poverty In Kerala,EPW,14-21, October, 1995.

<sup>8</sup> The first comprehensive study highlighting the importance of public policy in advancing social development and establishing food security in Kerala was by CDS in 1975.

popular in the state. The given table shows the number of hospitals and beds per lakh population in the 15 major states of India.

**Table 3. 3**

**Number Of Hospitals Per Lakh Population**

	<b>STATES</b>	<b>1971</b>	<b>1976</b>	<b>1981</b>	<b>1986</b>	<b>1988</b>	<b>1991</b>	<b>1996</b>
1	Andhra	0.99	0.88	1.14	1.03	0.98	1.75	4.2
2	Assam	0.55	0.32	0.54	0.60	0.94	1.20	1.20
3	Bihar	0.13	0.34	0.32	0.38	0.37	0.35	0.4
4	Gujarat	0.51	0.56	2.43	3.78	4.0	4.34	5.6
5	Haryana	0.73	0.69	0.66	0.52	0.5	0.48	0.4
6	Karnataka	0.65	0.64	0.63	0.61	0.67	0.64	0.6
7	Kerala	0.55	2.52	2.98	3.2	7.35	7.05	6.7
8	M.P.	0.40	0.43	0.53	0.51	0.58	0.61	0.5
9	Maharashtra	0.78	0.53	1.60	2.18	2.54	2.67	3.8
10	Orissa	0.98	0.99	1.15	1.07	0.99	0.91	1.2
11	Punjab	0.90	0.92	1.51	1.44	1.38	1.14	1.0
12	Rajasthan	0.71	0.69	0.67	0.62	0.60	0.49	0.4
13	Tamil Nadu	0.79	0.83	0.78	0.76	0.73	0.70	0.7
14	UttarPradesh	0.66	1.04	0.92	0.68	0.66	0.59	0.6
15	West Bengal	0.60	0.61	0.75	0.67	0.64	0.61	0.5
	INDIA	0.70	0.72	0.99	1.02	1.27	1.32	1.60

**Source:** Health Information Of india – Cbhi, Mohrdstatistical Abstracts

Here we see that Governments of Kerala has created a much better physical infrastructure for its population in absolute numbers, it is way above the rest and much above the All India average. The figures become much more astounding when we see the total number of beds per lakh population. Demand for such social services as health and education has always been high in Kerala. However, what has brought about the high achievement levels (the reasons of which have been explained in detail) has been the fact that the government has been equally supportive of and has supplied its people with a much better infrastructure than elsewhere in the country.

The availability of beds is one of the most reliable indicators of resource deployment. The table 3.4 gives the total number of beds per lakh population from the 1970s to 1990s. In 1971 while the All India average was 63.6, Kerala had 101.98 beds per lakh population. In 1998, the figures for Kerala and India stood at 309.36 and 71.5 respectively.

Thus we see that medical facilities in the state increased at a much higher rate than the increase in population over the years. Majority of the states have actually seen the ratio declining in the subsequent time period as shown in the table.

**TABLE-3.4**  
**BEDS PER LAKH POPULATION**

	<b>STATES</b>	<b>1971</b>	<b>1976</b>	<b>1981</b>	<b>1986</b>	<b>1988</b>	<b>1991</b>	<b>1996</b>	<b>1998</b>
1	Andhra	71.82	67.04	63.68	61.2	59.25	64.55	65.27	94.59
2	Assam	52.92	36.42	50.19	50.87	66.3	56.98	56.12	56.31
3	Bihar	26.33	37.7	39.33	46.16	34.68	32.7	33.01	33.12
4	Gujarat	59.93	64.62	97.71	111	130.67	145.76	141.06	155.12
5	Haryana	61.28	69.91	62.27	51.33	51.22	45.38	38.45	38.23
6	Karnataka	84.61	92.41	96.25	96.58	82.42	78.26	77.55	78.10
<b>7</b>	<b>Kerala</b>	<b>101.98</b>	<b>225.4</b>	<b>175.92</b>	<b>220.12</b>	<b>266.56</b>	<b>263.2</b>	<b>254.5</b>	<b>309.36</b>
8	M.P.	36.7	39.64	32.24	34.59	36.03	38.27	26.58	26.59
9	Maharashtra	74.24	77.43	116.22	132.78	128.94	144.64	95.75	97.72
10	Orissa	49.51	48.36	43.59	42.83	43.17	44.64	43.06	34.85
11	Punjab	72.87	83.14	118.95	119.63	116.44	101.77	81.94	88.96
12	Rajasthan	67.38	64.23	52.16	54.73	53.15	44.11	42.33	41.63
13	Tamil Nadu	67.07	92.87	95.23	86.44	88.41	88.17	81.76	82.22
14	UttarPradesh	43.87	47.29	45.74	42.47	40.65	38.2	37.83	42.41
15	West Bengal'	91.28	91.65	88.89	87.15	84.26	80.14	73.65	69.88
16	INDIA	63.6	72.7	75.64	77.79	78.19	78.87	66.4	71.5

*Source: Health Information Of India – Cbhi, Mohrd*

*Statistical Abstracts*

The Physical infrastructure apart, the distribution of medical personnel is also the highest in the state (as given in the table).

**Table: 3.5**

**Number Of Medical Personnel Per Lakh Population 1987**

	<i>Doctor</i>	<i>Nurses</i>	<i>Total</i>
1. ANDHRA	49.9	25.5	75.4
2. ASSAM	14.6	11.3	25.9
3. BIHAR	21.1	11.4	32.5
4. GUJARAT	12.4	17.9	30.3
5. HARYANA	17.6	19.2	36.8
6. KARNATAKA	62.4	21.9	84.3
<b>7. KERALA</b>	<b>54.3</b>	<b>141.3</b>	<b>195.8</b>
8. MP	14.1	18.6	32.7
9. MAHARASHTRA	58.2	50.9	109.1
10. ORISSA	14.9	14.3	29.2
11. PUNJAB	19.5	111.8	131.4
12. RAJASTHAN	28.1	19.2	47.3
13. TAMIL NADU	14.4	50.9	71.3
14. UTTAR PRADESH	6.0	8.1	14.1
15. WEST BENGAL	47.5	20.5	68.0

**Source:** *South India HDR 2000.*

The table shows that the state has the highest medical personnel per lakh population. While Kerala was third with respect to the number of doctors per lakh population, there was no state close by with regard to the number of nurses. The pathetic state of affairs in the highly populated states of Bihar, M.P., Orissa and U.P., and the comparatively richer state of Gujarat is also reflected in the table. U.P. had the lowest ratio at 14.1 medical personnel per lakh population. In Punjab too, the number of doctors does not show a very healthy trend.

As explained before Kerala's development has been on account of both the ability of the Government to supply better services to the people and the people actually utilizing these facilities to the fullest extent. Thus Kerala not only has the highest number of hospitals, beds and medical personnel per lakh population but also better utilization of institutional facilities as indicated by the percentage of births attended by medical professionals than most of the Indian states. Kerala has achieved a landmark in achieving near universalisation in institutional deliveries in Kerala. The following table shows the percentage of births delivered in medical institutions. The data have been compiled for two years 1992-93 and 1998-99 from the National Family Health survey (for 15 major states).

**Table 3.6**

**Births Delivered In Medical Institutions**

	1992 - 93			1998 - 99		
	RURAL	URBAN	TOTAL	RURAL	URBAN	TOTAL
1. Andhra	20.7	69.6	32.9	40.4	78.6	50
2. Assam	7.4	50.1	11.1	15	59.9	17.6
3. Bihar	7.7	41.4	12.1	12.4	39.9	14.7
4. Gujarat	23.7	62.1	35.6	33.2	69.4	46.4
5 Hayana	11	36.8	16.7	14.9	47.1	22.3
6. Karnataka	25.8	66.6	37.5	38.7	78.8	51.1
<b>7. KERALA</b>	<b>85.4</b>	<b>94.7</b>	<b>87.8</b>	<b>91.5</b>	<b>99.4</b>	<b>93.0</b>
8 MP	7.4	49.7	15.9	12.3	49.8	20.4
9Maharashtra	25.3	73.3	43.9	34.6	80.9	52.5
0 Orrisa	9.7	39.8	14.1	19.3	54.7	22.9
1 Punjab	21.3	36.2	24.8	32.0	56	37.5
2 Rajasthan	7.2	35	11.6	15	47.9	21.7
3 TN	48.7	89.8	63.5	73.11	92.6	79.8
4 UP	6.5	34.1	11.2	11.7	37.3	15.7
5 W. Bengal	21.4	66	31.5	31.5	80.1	40.4
ALL INDIA	16	57.6	25.5	24.6	65.1	33.6

**Source : NFHS 1992-93 and 1998-99**

The All India average in 1998-99 showed only 1/3<sup>rd</sup> of deliveries being institutional deliveries. In Kerala especially in the urban areas the figures show near universalisation in institutional deliveries. This unique situation has largely contributed to the reduction in the IMR and MMR. Further this has helped or facilitated the attainment of immunization goals and better health for women and children. Kerala has attained universalization whereas other states are way down between 60 and 80%.

Another notable development in the health front is the reduction/eradication of major public diseases. The state has succeeded in reducing the prevalence rate for leprosy, enteric fever, viral hepatitis, measles etc. below one per 1000 population.

**Table - 3.7**

**Prevalance Rate Of Public Health Diseases In Kerala, 2001**

<b>S. NO.</b>	<b>DISEASES</b>	<b>PREVALENCE PER POPULATION</b>	<b>RATE 1000</b>
1.	LEPROSY	0.84	
2.	TUBERCULOSIS	1.12	
3.	FILARIA	--	
4.	ACUTE DIARRHOEAL DISEASES	19.27	
5.	ENTERIC FEVER	0.29	
6.	VIRAL HEPATITIS	0.17	
7.	MEASLES	0.15	
8.	ACUTE RESPIRATION INFECTION	212.37	
9.	PNEUMONIA	0.76	
10.	MALARIA	0.09	

**Source** *Economic Review, State Planning Commission*

**3.1.2.2 Education**

Kerala stands foremost among the states of India with respect to its literacy levels. As against the All India average of 65.3 percent the Literacy rates in Kerala was 90.92 percent according to the 2001 census. Kerala's female literacy of rate at 87.86% and male literacy rate at 94.20% in 2001 are well above the All India position. The literacy rates for all India and

Kerala at the beginning of the 20<sup>th</sup> century and its growth in subsequent decades is given below: -

**Table-3.8**  
**Literacy Levels All India And Kerala 1901-2001**

<i>Year</i>	<i>All India</i>	<i>Kerala</i>
1901	5.35	11.14
1911	5.92	13.31
1921	7.16	19.02
1931	9.50	21.34
1941	16.10	-
1951	16.67	40.47
1961	24.02	56.87
1971	29.95	60.42
1981	36.03	70.42
1991	52.21	89.81
2001	65.38	90.92

*Source- Census Of India*

**Table- 3.9**  
**Literacy Gap**

1.	ANDHRA	19.68
2.	ASSAM	15.9
3.	BIHAR	26.75
4.	GUJARAT	21.9
5.	HARYANA	22.94
6.	KARNATAKA	18.84
<b>7.</b>	<b>KERALA</b>	<b>6.34</b>
8.	MADHYA PRADESH	26.52
9.	MAHARASHTRA	18.76
10.	ORISSA	24.98
11.	PUNJAB	12.08
12.	RAJASTHAN	32.12
13.	TAMIL NADU	17.78
14.	UTTAR PRADESH	27.25
15.	WEST BENGAL	17.36

*Source- Selected Educated Statistics, 20002001*  
MOHRD, Government of India

More importantly the literacy gap of the state is as low as 6.34% which shows that female literacy levels are not way behind the male literacy levels as seen in other states. Lack of gender gap in literacy rates makes Kerala's achievements even more commendable. As documented in the case study of Kerala by V.K. Ramachandran (1996), Kerala's remarkable record in the field of literacy is the outcome of more than a hundred years of public action involving activities of the general public as well as of the state in the widespread provision of elementary education. Literacy levels have always been highlighted as Kerala's strength and hence this study does not prolong with the discussion on the comparison of literacy levels of Kerala with other regions. A more relevant comparison of actual achievement of the state would be by seeing the percentage distribution of the household population by the levels of education and median number of completed years of schooling according to sex and state.

It is to be noted that even 56 years after the country gained independence, Kerala remains the only state to have obtained the constitutionally set target of 8 years of median number of years of schooling. The All India average of median number of years of schooling is still 5.5 years for males and a pathetic 1.8 years for the female population (NFHS 1998-99). In Bihar this is as low as 8.6 years for males.

**TABLE 3.10**  
**LEVELS OF EDUCATIONAL ATTAINMENTS AMONG THE STATES OF INDIA**

	State	illiterate		Literate <Primary		Primary Complete		Middle Complete		High school complete		Higher Secondary complete		Median Number of years of schooling	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
1.	ANDHRA	33.1	54.9	18.1	15.2	19.8	16.3	8.9	5.4	10.5	5.5	9.6	3.6	3.6	0
2	ASSAM	25.4	40.9	27.2	24	15.7	12.5	15.8	13.7	6.9	4.9	8.9	3.8	4.7	2.5
3	BIHAR	36.8	65.2	19.7	14.5	14.2	9.3	9.7	4.8	10.4	4.1	9.2	2	3.6	0
4.	GUJARAT	23.3	46.4	18.3	13.7	20.3	16.5	13.4	8.4	12.2	7	12.4	8.1	6.3	3.2
5.	HARYANA	21.2	42.7	19.6	17.4	17.8	16.5	13.1	8.4	16	7	12.3	8.1	6.2	3
6.	KARNATAKA	25.7	44.5	17.6	15.1	19.6	16.6	10.9	7.9	12.8	8.9	13.4	7	6	3.2
7.	<b>KERALA</b>	<b>7.2</b>	<b>14.9</b>	<b>18.4</b>	<b>16.9</b>	<b>23.4</b>	<b>21.4</b>	<b>17.4</b>	<b>16</b>	<b>21.2</b>	<b>18.5</b>	<b>12.4</b>	<b>12.3</b>	<b>8.1</b>	<b>7.6</b>
8.	MADHYA PRADESH	27.9	55.5	24	18.7	20.4	12.7	11.4	5.6	5.6	2.7	10.7	4.8	4.8	0
9.	MAHARASHTRA	17.3	38.6	21.6	18.1	19	17.8	16	10.8	12.8	7.9	13.3	6.9	7.1	4.1
10.	ORISSA	24	48.7	24.8	20.4	20.8	15.8	13.2	7.8	8.5	4.1	8.6	3.2	5.1	1.2
11.	PUNJAB	22.1	35.1	18	14.7	17.3	17.3	12.9	9.5	17.4	13.3	12.3	10.1	6.4	5
12.	RAJASTHAN	28.2	62.9	22	15.7	18.4	9.9	13.2	5.3	9.3	3.2	8.9	2.9	5	0
13.	TAMIL NADU	20.13	41.7	15.2	12.6	24.2	19.4	16.4	12.5	12.8	7.2	11	6.5	6.4	4.5
14.	UTTAR PRADESH	28.2	57.3	22	16.2	15.9	11.4	13.8	6.3	8.9	3.6	11.2	5.1	5	0
15.	WEST BENGAL	24	42.6	29	26.4	16.7	13.9	12.5	8.4	7.6	4.1	10.2	4.6	4.7	2.1

Table 3.10 highlights certain important facets of the educational attainment of the population of Kerala gender wise. The table shows the percentage distribution of the household population by the levels of education and median number of completed years of schooling according to sex and state.

The table highlights the big gap between Kerala and other states. The state's female population that has completed is primary school education is 21.2% as against the All India average of 13.9%. There are considerable disparities among the states in this regard but states like Bihar and Rajasthan show very poor attainment levels. Another point worth noting is that the gender gap in educational attainment at different levels especially the higher levels is not much in Kerala. This is reflected in both the cases of male and female percentage population who have completed high schools and higher secondary school education. The proportion of male and female population being high school complete is 21.2% and 18.5% respectively in Kerala whereas for the country as a whole it is 7.6% for males and 4.1 for females. There is hardly any gender gap in case of higher secondary complete population. 12.4% of the female population and 12.3% of the male population of the state are higher secondary complete. The same average for All India stands at 10.2% for male and a low 4.2% for the female population.

The educational attainment of Kerala also cannot be attributed to historical factors only. Although government efforts in the past were supplemented by private efforts (that began with the establishment of Church Managed Schools and Colleges) the educational policies followed by successive democratic governments place a high financial burden on the government. Educations being made free to all till the pre-degree level in the past, the policies and programmes of the state have increased the school enrolment and literacy rates in the state. In Kerala from 1957 onwards-major expenditures like maintenance grant and teachers salary of all private schools except the unaided schools are borne by the government. Running such schools involve considerable financial responsibility of the

government since the financial returns in terms of fees from these schools as well as from the government schools are very low.

Educational infrastructure has been emphasized by various studies as the prime factor behind the educational achievement of the population. The most important failure in India according to Jean Dreze is the lack of access to educational infrastructure and the abysmal quality of Indian schools.<sup>9</sup> The PROBE study<sup>10</sup> also observed that children enjoy going to school and learn with enthusiasm if the school environment is supportive. One important reason behind the problem of retention, the study noted is on account of the poor infrastructure in the schools. Demand for educational facilities has always been high in Kerala. On the supply front, the State does have its share of schools without basic equipment like blackboards and furniture's and ancillary facilities like drinking water, latrine, free medical check up, vaccination etc. However, this share has been much less than for All India.

**Table -3.11**  
**Availability Of Black Boards & Furniture In Kerala & India**

Facilities	Kerala		India	
	NO.	%	NO.	%
1. Number of Schools	6096	--	528730	--
2. Number of Sections	51199	100	2658220	100
3. Number of Sections having				
i) Usable blackboard	46987	91.8	472823	17.8
ii) Unusable	2447	4.8	1162050	43.7
iii) No blackboard	1762	3.4	102334	38.5
4. Number of Sections with				
i) Furniture/ Chair and Table	40740	79.6	1053202	39.6
ii) Chair only	3885	7.6	461154	17.3
iii) Table only	4033	7.9	129150	4.9
iv) Neither	2541	3	1014714	38.2

**Source:** NIEPA 1992

<sup>9</sup> A. Sen & Jean Dreze- India Development and Participation

<sup>10</sup> Public Report On Basic Education in India, Oxford University Press, New Delhi

**Table -3.12**

**Availability Of Ancillary Facilities In School**

<b>Facilities</b>	<b>Kerala</b>		<b>India</b>	
	<b>No.</b>	<b>%</b>	<b>NO.</b>	<b>%</b>
Drinking Water	4858	76.4	250369	47.4
Urinal	3962	65	81929	15.5
Separate Urinal for girls	1750	28.7	27232	5.2
Laboratory	1517	24.9	33197	6.3
Separate Laboratory for girls	438	7.2	14584	2.8
Medical check-up	2950	48.4	139449	26.4

**SOURCE-** Same as above

Table 3.11 and 3.12 shows the physical availability of basic infrastructure in Kerala and India as a whole. In India the classes having usable blackboard which is the barest minimum necessity required is merely 17% while kerala had more than 90 percent having the same. The same holds true in case of furniture. Similarly each of the ancillary facilities given in table 3.5 plays an important role in not discouraging students to drop out on trivial reasons. As mentioned earlier while Kerala has its gaps in terms of infrastructural facilities available the school environment in Kerala shows a much better promise than elsewhere in the country with greater access to ancillary facilities in schools. Another important input indicator is the number of students per teacher or the teacher-pupil ratio. Table 3.6 given below shows that in even in terms of the most important learning infrastructure i.e. the teacher, the state is better placed in relation to others.

**Table 3.13**

**Teacher-Pupil Ratio And Number Of Female Teachers Per  
100 Male Teachers**

<i>Sl no</i>	<i>States</i>	<i>Teacher- Pupil Ratio</i>		<i>No. Of female teachers per 100 100 male teachers</i>	
		<i>Primary Schools</i>	<i>Higher Secondary Schools</i>	<i>Primary</i>	<i>Higher Secondary Schools</i>
1	Andhra	45	29	55	38
2	Assam	39	32	41	40
3	Bihar	67	42	24	43
4	Gujarat	60	38	101	36
5	Haryana	42	26	101	90
6	Karnataka	32	44	66	26
<b>7</b>	<b>Kerala</b>	<b>29</b>	<b>24</b>	<b>250</b>	<b>187</b>
8	MP	43	29	40	49
9	Maharashtra	35	39	106	39
10	Orissa	38	52	99	31
11	Punjab	42	30	96	129
12	Rajasthan	51	29	86	42
13	Tamil Nadu	33	34	100	25
14	UP	42	41	98	24
15	West Bengal	55	40	67	35

**Source-** Selected Educational Statistics, 2000-2001

The table shows that in the formative years when the individual attention of the teacher is most required i.e. at the primary levels the teacher-pupil ratio is the most favorable in Kerala. Further the ratio has become only more favorable in the recent years although the improvements

have been subtle. On the other hand in most other states at the primary level the ratio has only tended to become more unfavorable over time<sup>1</sup>

The ratio of female teachers over every hundred male teachers also reflects two facts .One, that the state does not only have a high female literacy but also its women population are actively involved in the work force. Secondly, studies in the remote areas to see educational attainment in the country have revealed that parents in rural areas hesitate to send their girl children to school in the absence of female teachers. Hence presence of female teachers acts as an additional incentive for parents to send children to school.

### **3.2 WEAKNESSES OF THE MODEL**

The objective of the study is to analyze the weaknesses that have crept into the system over time and to see whether the achievements in the sphere of health and education can be sustained over time. The financial difficulties faced by the government, which aggravated in the 90's has forced it to reduce its high social spending which had been the trademark of Kerala's development experience. The government had built up in the past a massive social infrastructure (explained in the strength's of the model) and for the very maintenance of it the government requires to spend considerable amount of its total expenditure. To some extent aggravating financial difficulties are not a new thing for most of the states in the current decade.

#### **3.2.1 Comparison Of The Social Sector Expenditure Incurred By The Different States**

Deepening fiscal crisis with no signs of improvement has been the most consistent economic problem facing the country and the states. The following table gives the financial implications resulting from the crisis on

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11 NFHS- 1992-93&1998-99

the social sector of various states and a comparison of Kerala with other states and the country as a whole. is attempted

**Table-3.14**

**Expenditure On Social Services(As % Of Total Expenditure)**

<b>S No</b>	<b>States</b>	<b>1981-82</b>	<b>1991-92</b>	<b>1998-99</b>
1	Andhra Pradesh	33.45	31.66	32.14
2	Assam	26.78	32.56	37.16
3	Bihar	29.87	31.87	35.06
4	Gujarat	29.19	28.63	31.05
5	Haryana	24.04	28.24	24.07
6	Karnataka	26.19	30.65	33.22
<b>7</b>	<b>Kerala</b>	<b>41.78</b>	<b>35.79</b>	<b>34.18</b>
8	Madhya Pradesh	26.07	32.77	30.96
9	Maharashtra	26.25	29.91	29.91
10	Orissa	33.12	30.22	31.61
11	Punjab	26.83	24.67	22.81
12	Rajasthan	30.69	32.78	35.81
13	Tamil Nadu	39.03	34.17	34.27
14	Uttar Pradesh	27.30	27.4	28.61
15	West Bengal	36.39	37.09	32.99
	INDIA	29.47	31.66	31.40

**SOURCE-** RBI BULLETINS

The table shows that in spite of the financial difficulties majority of states have actually increased the expenditure on social services as percentage of their total expenditure. On the other hand Kerala has actually seen this proportion declining. India as a whole increased the share of social sector expenditure from 29 percent to 31 percent. The break up of the total expenditure into revenue and capital is given in the table,

**Table 3.15**

**Revenue And Capital Expenditure (As % Of Total Expenditure)**

S No	States	Revenue Expenditure			Capital Expenditure		
		1981-82	1991-92	1997-98	1981-82	1991-92	1997-98
1	Andhra Pradesh	43.46	37.63	37.03	2.92	4.05	3.68
2	Assam	41.87	41.73	43.25	4.18	3.78	5.45
3	Bihar	45.29	37.02	39.21	5.21	7.85	8.31
4	Gujarat	41.47	35.95	35.81	6.39	5.46	11.19
5	Haryana	33.26	32.95	25.76	6.26	7.5	16.35
6	Karnataka	36.53	38.07	37.75	1.63	2.27	8.74
<b>7</b>	<b>Kerala</b>	<b>51.41</b>	<b>42.21</b>	<b>34.25</b>	<b>12.51</b>	<b>5.35</b>	<b>5.80</b>
8	Madhya Pradesh	37.8	38.58	34.83	2.97	8.24	11.82
9	Maharashtra	34.85	35.63	37.84	2.92	3.25	4.08
10	Orissa	47.58	39.04	25.88	3.46	5.05	6.01
11	Punjab	39.75	29.41	41.71	4.31	7.88	6.25
12	Rajasthan	41.78	39.7	38.14	11.92	13.05	17.58
13	Tamil Nadu	40.58	38.12	38.14	4.11	6.97	6.979. 14
14	Uttar Pradesh	39.86	33.52	32.83	3.4	5.24	7.435. 27
15	West Bengal	48.62	42.33	39.92	2.74	6.37	3.89
	INDIA	40.85	36.99	35.9	5.43	7.09	9.53

**Source- Same As Above**

The table shows that Kerala has not only seen sharp decline in the proportion of revenue expenditure devoted to the social sector, but the capital expenditure too fell considerably. Conversely all the states saw an increase in the capital expenditure for social services as a percentage of the total expenditure. While owing to the larger social infrastructure the state needs to spend more, the financial mess it is in (explained in detail in the next chapter) is making it impossible for the state to do so.

### 3.2.2 Health

The widely acclaimed Kerala model of health has been encountering severe threats owing to loosening grip of the state government or in other words owing to the falling expenditure incurred by the government on the social sector. The fall in the spending of the state governments can be seen from the following table in a comparative perspective.

**TABLE-3.16**

**Expenditure On Medical & Public Health Services (As Percentage Of Total Expenditure ) Of The States**

S NO	STATES	1981-82	1991-92	1997-98
1	Andhra Pradesh	7.77	6.49	6.29
2	Assam	6.78	8.37	6.98
3	Bihar	6.02	7.25	6.76
4	Gujarat	6.51	5.83	7.34
5	Haryana	6.80	6.23	7.22
6	Karnataka	6.07	6.29	7.42
<b>7</b>	<b>Kerala</b>	<b>9.62</b>	<b>7.72</b>	<b>6.98</b>
8	Madhya Pradesh	7.99	7.44	7.05
9	Maharashtra	7.29	6.4	6.01
10	Orissa	7.43	6.85	6.81
11	Punjab	6.10	7.2	5.98
12	Rajasthan	11.28	11.02	12.47
13	Tamil Nadu	7.65	7.37	6.89
14	Uttar Pradesh	6.45	13.91	6.62
15	West Bengal	8.96	7.95	7.33
	INDIA	7.65	7.25	7.32

**Source-** Same As Above

The table shows that in Kerala the decline in the expenditure on medical and public health has been greater in proportion (in comparison to the other states). The tables given below show the break up of the total expenditure into revenue and capital expenditure made on the social sector.

**Table-3.17**

**Revenue Expenditure On Medical And Public Health (As Percentage Of Total Revenue Expenditure) Of The States**

S NO	STATES	1981-82	1991-92	1997-98
1	Andhra Pradesh	9.64	7.84	7.37
2	Assam	10.03	10.4	8.22
3	Bihar	7.07	7.72	7.03
4	Gujarat	8.6	6.88	7.11
5	Haryana	9.52	6.91	6.1
6	Karnataka	8.46	7.8	8.32
<b>7</b>	<b>Kerala</b>	<b>9.74</b>	<b>9.06</b>	<b>7.82</b>
8	Madhya Pradesh	11.78	9.15	6.68
9	Maharashtra	9.55	7.49	7.03
10	Orissa	10.48	8.29	7.57
11	Punjab	8.88	7.15	6.96
12	Rajasthan	11.52	11.08	11.51
13	Tamil Nadu	10.52	8.03	7.58
14	Uttar Pradesh	9.06	7.82	7.68
15	West Bengal	11.56	9.7	8.78
	INDIA	9.73	8.25	7.85

**Source:- Same As Above**

**Table-3.18****Capital Expenditure On Medical And Public Health((As % Of Total Capital Expenditure)**

S NC	STATES	1981-82	1991-92	1998-99
1	Andhra Pradesh	2.01	0.32	0.06
2	Assam	1.93	2.18	0.36
3	Bihar	4.54	5.28	4.80
4	Gujarat	2.41	0.12	0.57
5	Haryana	1.57	1.82	0.77
6	Karnataka	.89	0.51	1.68
<b>7</b>	<b>Kerala</b>	<b>9.61</b>	<b>1.37</b>	<b>1.57</b>
8	Madhya Pradesh	0.52	0.65	2.27
9	Maharashtra	1.16	0.91	0.51
10	Orissa	1.20	2.37	4.07
11	Punjab	1.28	1.55	0.78
12	Rajasthan	10.92	11.05	16
13	Tamil Nadu	1.46	3.01	2.51
14	Uttar Pradesh	1.50	1.94	1.64
15	West Bengal	1.7	2.45	1.19
	INDIA	3.26	3.37	4.68

**Source-** Same As Above

In the table given above while there has been a reduction in terms of both revenue and capital expenditure in Kerala ,the fall has been more drastic in case of capital expenditure. Infact the sharpest decline in the share of capital expenditure on medical and public health (as a percentage of the total capital expenditure)The sharpest decline in the shre of capital expenditure on medical and public health as a percentage of total capital expenditure has been in Kerala. The earlier table has already showed the declining share of capital expenditure. In a situation of declining capital expenditure, the declining share of medical and public health implies that

less and less resources are being deployed for building up the health care infrastructure in the public sector. This obviously does not augur well for the health environment in a state which had been successful in the past in providing its people with medical facilities which were both affordable and accessible.

There is now significant evidence from the transitional economies<sup>12</sup> and from where health systems have undergone considerable change to show that a well functioning and wide-ranging system of public health services is the best guarantee of equitable and affordable services for the poor

Conversely poorly regulated privatization may have a negative impact on accessibility and affordability for the poor and the other groups, which are socially disadvantaged and discriminated against. They may lead to a kind of forced substitution by reducing the consumption of other goods and services, which could also be important from the health point of view in order to accommodate the increases in health care costs. They could also increase the untreated morbidity. The public health system in Kerala has been getting alienated from the people. More importantly, the private sector has far outpaced the government facilities in the provision of sophisticated modalities of diagnosis and therapy such as CT scans, MRIs, endoscopy etc. On the other hand public sector itself is being subjected to internal privatization<sup>13</sup>. Because of the irregular supply of medicines and other materials, patients seeking medical care from the government hospitals are forced to buy them from outside. Also the laboratory facilities are inadequate in government hospitals and patients have to depend upon private labs to get it done on time. The decay of the public health system, the marginalisation of the poor, the escalation of health cost and the expansion of the private sector have seriously affected the affordability of the medical services. In addition the greatly admired

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<sup>12</sup> Bloom G 1997- Primary Health Care meets the market: Lessons from China & Vietnam, IDS working paper 53.

<sup>13</sup> EKBAL B- Peoples campaign for Decentralized Planning And the Health sector in Kerala

public distribution system of the state too seems to be in shambles. The key dimensions of health services that determine the extent of equity are access, cost and the range of quality of services made available to the people. The reasons mentioned hence are causing a heavy blow to the prosperity of the health environment, which had been carefully nurtured over the years.

Kerala had proved empirically that high life expectancy, low infant mortality and high trends in the other health indicators<sup>14</sup> can be achieved even before industrial levels of income are attained and that some aspects of development do not have wait for economic growth. However the present health scenario in Kerala have provoked certain analysts to comment that the kerala model of health care,(the hall marks of which were the low cost of health care and its universal accessibility and availability) have been changing to the American model<sup>15</sup> where in spite of the technological supremacy 40 million\* people are denied health care because of privatization and the escalation of cost. The fact of the matter is that the sustainability of the Kerala's achievements is at stake. The consequence of the fiscal crises experienced by the state and the declining social spending of the government on the output indicators may not be easy to capture empirically at this point of time. But in the times to come, the adverse effect on the high social indicators of Kerala (as a result of the withdrawal of the government from critical areas) would certainly become unignorable.

The present study draws upon the data from the two surveys of health care utilization undertaken by the National Sample Survey Organization in the mid 80's and the mid 90's and the NCAER Survey on the similar subject during 1993 besides data by CEHAT and the Directorate of Health Services.

The distribution of public medical institutions across the state affects the accessibility particularly for the poor and marginalized sections of the population, considering the fact that that these people are the ones who

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<sup>14</sup> Pannikar,P.G.K and Soman C.R.(1984): Health status of Kerala, Centre of Development studies

<sup>15</sup> *ibid*

utilize the government services the most. The following table shows the growth of shows the growth of the medical institutions in the state district wise in the 90's.

**Table 3.19**  
**Growth Of Medical Institutions In Kerala (Allopathic)**

S No	DISTRICTS	1991-92	1999-00
1	<i>Thiruvananthapuram</i>	111	115
2	Kollam	82	88
3	Pathanamthitta	60	64
4	Alappuzha	86	90
5	Kottayam	76	85
6	Idukki	64	63
7	Ernakulam	113	117
8	Thrissur	110	122
9	Palakkad	104	112
10	Malappuram	111	123
11	Kozhikode	91	96
12	Waynad	45	40
13	Kannur	99	106
14	Kasaragod	61	60
	KERALA	1249	1317

**Source--DHS, Kerala**

Here Medical institutions includes Government hospitals primary health centers community health centers and subsidiary health centers. The table shows that there has been very little growth in the medical infrastructure as seen in the number of medical institutions in the last decade. What is notable is that the comparatively underdeveloped districts of Kasargode , waynad and Idukki have seen a fall in the number of medical institutions

A clearer picture would emerge if we see the bed population ratio in each district over time.

**Table-3.20****Total Number Of Beds And Bed-Population Ratio**

Sno	DISTRICTS	BEDS 1991	Bed pop ratio	BEDS 2000	Bed pop ratio
1	<i>Thiruvananthapuram</i>	6446	457	7187	441
2	Kollam	2053	1172	2078	1226
3	Pathanamthitta	947	1254	1062	1151.41
4	Alappuzha	3980	502	4016	518
5	Kottayam	3058	597	3378	570
6	Idukki	931	1157	840	1331
7	Ernakulam	3681	765	4137	734
8	Thrissur	4061	674	4119	710
9	Palakkad	2128	1119	2208	1163
10	Malappuram	2149	1440	2183	1610
11	Kozhikode	4308	608	4745	595
12	Waynad	777	865	811	939
13	Kannur	2335	964	2175	1093
14	Kasaragod	651	1630	739	1590
	KERALA	37511	775	39678	788

**Source-** *DHS Kerala*

Population figures calculated from Census 1991

The table shows that whatever little growth in the number of medical institutions has taken place, it has been more in the better-developed regions while under developed regions like Kasargode and Waynad have been left in the lurch. Also in majority of districts the bed population ratio has worsened except the developed regions like Thiruvananthapuram, Ernakulam, Kottayam, and Pathanamthitta.

The growth of the public and private institutions in the health sector in Kerala is given below. The data on private health institutions are available from the surveys conducted in 1978, 1986 and 1995.

**Table-3.21**  
**Growth Of Public And Private Medical Institutions In Kerala**

<b>Year</b>	<b>Government</b>		<b>Private</b>	
	<i>Institution</i>	<i>Beds</i>	<i>Institutions</i>	<i>Beds</i>
<b>1976</b>	53.32	58.82	46.88	41.18
<b>1986</b>	23.23	40.50	76.77	59.50
<b>1995</b>	22.70	36.22	77.30	63.68

**Source-** *Sadanandan Rajeev, Epw, Aug 11,2001*

Thus we see that while the government owned more than 50% of the medical institutions in the mid seventies this ratio fell drastically to 22% in 1995. Similarly the percentage of beds owned by the government has reduced over time at a fast rate. A better picture emerges when we see the distribution of the population receiving hospitalized treatment from the public provider

**Table: 3.22**  
**Number (Per Thousand) Of Hospitalised Treatments Received From The Public Provider**

<b>S NO</b>	<b>STATES</b>	<b>RURAL</b>	<b>URBAN</b>
1	Andhra Pradesh	225	362
2	Assam	738	652
3	Bihar	247	346
4	Gujarat	321	368
5	Haryana	305	373
6	Karnataka	458	298
<b>7</b>	<b>Kerala</b>	<b>401</b>	<b>384</b>
8	Madhya Pradesh	533	560
9	Maharashtra	312	318
10	Orissa	906	810
11	Punjab	394	276
12	Rajasthan	649	731
13	Tamil Nadu	411	357
14	Uttar Pradesh	471	398
15	West Bengal	820	721
	INDIA	453	431

**Source-** *NSSO 52<sup>nd</sup> Round, 1995-96*

We can see from the table that overtime people utilizing public providers in Kerala has become less than the all India average. Yet rural people continue to use the public institutions more than the urban population. Therefore the government actions or further withdrawals from the health sector are going to affect the rural population more.

Analyses of the NSS Rounds of 1986-87 and 1995-96 brings about a comparative picture of the share of public providers in treated illness in both in patient and out patient care in Kerala.

**Table-3.23**

**Share Of Public Providers In Treated Illness**

<b>RURAL AREAS</b>		
<b>YEAR</b>	<b>INPATIENT CARE</b>	<b>OUTPATIENT CARE</b>
1986-87	43.6	34
1995-96	39.5	28
<b>URBAN AREAS</b>		
1986-87	56.3	34.8
1995-96	37.3	28

**Source-** Nsso-42<sup>nd</sup> And 52<sup>nd</sup> Rounds

In out patient care, the fall in the share of public providers has been more or less the same in the urban and the rural areas. But the fall has been more rapid in case of inpatient care in the urban areas. The reason could be the greater quality consciousness of the urban population and the better quality health services, which they can avail from the private provider. The decline in the availability of government medical services has affected the people in different ways. The percentage of people receiving free hospital beds (in-patient care) and free medicines (outpatient care) have also significantly reduced in between the two time periods as given in the following table. Some others have been affected by the lack of accessibility of public medical institutions.

**Table-3.24**  
**Percentage Of Free Inpatient And Outpatient Care**

<b>FREE HOSPITAL BED</b>		
<b>YEAR</b>	<b>RURAL</b>	<b>URBAN</b>
1986-87	45.1	45
1995-96	37.5	31
<b>FREE MEDICINE</b>		
1986-87	29	25
1995-96	9	8

*Source- Same As Above*

The percentage of people getting free medicines has particularly shown a drastic fall in both the rural and the urban areas. Thus the proportion of people getting free medical treatment especially outpatient care being minimal, it has certainly affected the affordability of health services to the poor in Kerala.

The tables' 3.22,3.23 and3.24 while showing the declining role of the government however do not point out the reason. The reasons could be different. It can directly be related to the declining accessibility to public health infrastructure. On the other hand the demand for services from the private health sector can be highly inelastic in the absence of a functioning public health system. Unless people have an alternative, they may be compelled to pay high prices or be forced to opt out of health services altogether. The consequences of opting out are increased burdens of untreated morbidity and often hidden costs of women's time. Debilitated public health institutions may not only have a negative impact on the utilization by the poor but may also severely impact women's access to and utilization of health care. National and state level studies indicate that inequalities within households mediate the distribution of benefits to certain groups. Significantly lower sums of money are spent on the

treatment of women and girl children in the household for both inpatient and outpatient care<sup>16</sup>

The NSSO Surveys 42<sup>nd</sup> and 52<sup>nd</sup> rounds also provide statistical evidences of the health care becoming increasingly difficult for the poor people to access. This is reflected from the reasons given by the people for not availing treatment and a comparative analysis of the two time periods shows the consequences of the weakening public health system in the state.

**Table 3.25**  
**Percentage Distribution Of Untreated Ailments By Reason For Non Treatment**

<b>Year</b>	<b>No nearby Facility</b>	<b>Lack Of Faith</b>	<b>Financial Reasons</b>	<b>Ailment Not Considered Serious</b>	<b>Other Reasons</b>
<b>RURAL AREAS</b>					
86-87	0	1.7	14.7	81	2.6
95-96	5.7	1.2	12.9	69.8	9.1
<b>URBAN AREAS</b>					
86-87	0	0.2	4.5	88.9	6.4
95-96	1.1	1.3	12.5	68.6	14.4

**Source-** Same As Above

As given in the table the proportion of those people who were unable to access health care because of financial reasons went up significantly in the urban areas. Also the proportion that said that there was no medical

16 - Sundar, 1995- Household Survey of Health Care Utilization and Expenditure .  
NCAER, Working paper no 53  
NSSO, 1998 52<sup>nd</sup> round, July 1995-96. Morbidity & Treatment of Ailments, Dept of Stats,  
Government of India

facility available increased, the increase being more in the rural areas. This also points out a significant fact that the cut in government spending has affected the rural population more. While in 1985-86 no respondent gave lack of medical institution nearby, as a reason for not taking treatment, by 1995-96 this reason was responsible for 5.7% of ailments remaining untreated. Correspondingly the proportion of those who did not consider their health problems to be not serious enough went down sharply in both rural and urban areas, pointing out that not availing treatment has become less of a voluntary decision in the latter period.

Apart from these factors affecting the health sector in the state, the increase in life expectancy and the proportion of the aged population will also have significant implications on the health sector and health costs. This is because the aged are more prone to illness, more importantly chronic illness. Both the incidence and prevalence rates of chronic diseases among the aged are apt to be higher among the aged population

Table 3.26 shows the higher prevalence of chronic diseases among the aged (60 plus) population. This will have important consequences for the health sector. This is because the chronic diseases involve higher cost of treatment, partly because they call for hospitalization of varying length and also since these diseases require the services of the specialists. Further the medicines required for these are also more expensive. The new developments in medical technology such as chemotherapy and organ transplantation require expensive equipment and skilled personnel. By prolonging life instead of curing illness such technology can be radically cost increasing. A number of studies have focused on the high cost of dying. These studies have revealed that the elderly are found to use relatively more health care technology and thus they contribute more to the medical care costs.

**Table-3.26**

**Prevalence Of Chronic (Long Duration) Ailments Per Lakh Persons By  
Age**

<b>S</b>	<b>Ailment</b>	<b>0-14</b>	<b>15-39</b>	<b>40-59</b>	<b>60 plus</b>
1	Chronic Amoebiasis	14	11	16	71
2	Pulmonary TB	11	102	155	226
3	Leprosy	6	5	20	61
4	Filaria	2	9	17	38
5	Cancer	1	7	50	76
6	Diabetes	-	5	74	577
7	Mental & Behavioral Disorders	6	33	48	81
8	Diseases of Nerves	2	15	45	228
9	Visual Disability	3	5	24	291
10	Hearing Disability	3	3	10	355
11	Disease of Heart	9	53	119	274
12	Piles	0	6	27	98
13	Ulcer	8	106	220	308
14	Diseases of Kidney	10	37	71	210
15	Locomotors Disability	23	30	33	372
16	Other Diagnosed Disease >30 days	78	177	499	1462
17	Any long duration ailment	311	860	2425	7978

**Source-** NSS Survey, 52<sup>nd</sup> Round, 1995-96

The Kerala health miracle being built on the solid foundations of active public support in the health and education sectors is in crisis today owing to the withdrawal of government (or reduced social spending) and the increasing health care costs which would most affect Kerala's vulnerable sections of the population. Serious attention by the government towards the imminent crisis is necessary if the Kerala experience is not to become a failed miracle.

### **3.2.3 Social Security**

The declaration of the Rights of men serving as the preamble to the French Constitution of 1793 proclaimed: Public assistance is a sacred duty. Society owes subsistence to unfortunate citizens either by providing them work or by ensuring the means of existence to those who are unable to work. In 1948, the UN General Assembly adopted the Universal Declaration of Human Rights where social rights include the right to social security.

ILO defines social security as the protection which society provides for its members through a series of public measures against economic and social distress that otherwise would be caused by the stoppage or substantial reduction of earnings resulting from sickness, maternity, employment injury, unemployment, invalidity, old age and death e.t.<sup>17</sup>.

The term social security is used in a broader sense in the developing countries than in the developed countries. In the widest sense it is a system that improves both entitlements and capabilities (Sen 1981). Guhan (1992) argues that social security measures should in fact be used as an integral part of the direct attack on poverty and as complementary to the promotional and targeted anti-poverty programmes. India has followed a dualistic pattern of social security system. Protective social security measures such as medical care, sickness benefit, old age benefit, maternity

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<sup>17</sup> Social Security Initiatives In Kerala, CDS, 1996

benefit etc. has been extended to the organized sector. India has relied mostly on promotional measures such as self-employment, wage employment, public distribution system etc. to the unorganized sector. Kerala is one state (besides Tamil Nadu), which has been relatively successful in both promotional and protective social security measures in the unorganized sector. In Kerala protective measures have succeeded in reaching a sizeable proportion of the unorganized sector.<sup>18</sup>

The final stage of demographic transition,<sup>19</sup> which Kerala is in now is characterized by fewer births and deaths. This has resulted in the ageing of the population (ageing is defined as the proportion of population above 60 years of age). This would mean more commitments in areas like pension for retired government employees, old age security to the poorer segments of the population, medical care and other facilities etc.

There are more than 35<sup>20</sup> social security and assistance schemes implemented in Kerala. Of the 35 major schemes under implementation 16 are entirely financed by the state exchequer. The schemes fully financed by the state includes the following:-

1. Kerala Destitute and Widow Pension Scheme.
2. Kerala Agricultural Workers Pension Scheme.
3. Special Pension Scheme for the Physically Handicapped and the Mentally Retarded.
4. Old age Pension to Craftsmen.
5. Pension to Sportsmen in indigent circumstances.
6. Pension to Journalists in indigent circumstances.

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<sup>18</sup> Social Security in the unorganized sector: Lessons from the experiences of Kerala and Tamil Nadu states

<sup>19</sup> Zachariah, K.C. et al (1997) Kerala's Demographic transition: Determinants and consequences

<sup>20</sup> See Rajan, S. Irudaya-Ageing in Kerala in Prakash, B.A. (1999).-Kerala Economy :Performance, Problems and Prospects

7. Pension to the Cine artists in indigent circumstances.
8. Assistance to TB/leprosy and cancer patients in indigent circumstances.
9. Financial assistance to widows towards the marriage expenses of their daughters.
10. Group Personal Accident Scheme for school children.
11. Unemployment Assistance.
12. Self-Employment Assistance Scheme.
13. Special employment Programme for one lakh youth in Agriculture.
14. Group Insurance Schemes of LIC.
15. Financial; assistance to men of art and letters.
16. Kerala Tree Climbers Welfare Scheme.

Apart from the above there are other seven major schemes, which are financed partly with the state support. These include Kerala Cashew Workers Relief and Welfare Fund, Kerala Handloom Workers Welfare Fund, Kerala Coir Workers Welfare Fund, Kerala Khadi Workers Welfare Fund, Kerala Construction Workers Welfare Fund, Kerala Advocate Clerks Welfare Fund and Kerala Fishermen Welfare Fund Scheme. The rest of the schemes are financed outside the budget and are operated by the respective boards.

Among the state financed schemes two major initiatives in social security in Kerala that have considerable impact in terms of budgetary commitment and physical coverage are the Agricultural workers pension scheme and the Old age destitute and widows pension schemes.

Before we go on to trace the effects of demographic transition on the state and the financial implications on the Kerala model, a brief review of

the states initiatives with regard to the above two important programmes and the Unemployment assistance scheme is made below.

#### **KERALA DESTITUTE AND WIDOW PENSION SCHEME**

The old age pension scheme was first initiated on 1<sup>st</sup> November 1960 and the widowed /destitute were added on 1<sup>st</sup> January 1964. This is the first social assistance scheme announced in Kerala after its formation on 1<sup>st</sup> November 1956. The scheme is intended to provide financial assistance to old age destitutes and the widowed destitute subject to the fulfillment of the prescribed eligibility conditions. Old age destitute means a person above 65 years of age without any source of income or having only a nominal income below Rs 100 per month. Also the widowed divorcee with an income below Rs. 100 per month is eligible for pension.

#### **AGRICULTURAL WORKERS PENSION SCHEME**

The second major social assistance scheme initiated in Kerala is the Kerala Agricultural Workers Pension scheme, which came into existence on 1<sup>st</sup> April 1980. To be a beneficiary under this scheme, the person should be an agricultural worker above the age of 60 whose annual income is below Rs 1500. Agricultural worker is defined as workers other than those covered by the Plantation Labor Act depending principally upon wages for livelihood and residing within the state for a continuous period of at least 10 years immediately preceding the date of application. Agricultural workers with physical infirmity are also eligible for pension

In expenditure terms the third biggest scheme is the Kerala Special Scheme for the physically handicapped and the mentally retarded.

#### **UNEMPLOYMENT ASSISTANCE SCHEME**

The Kerala Unemployment Assistance Scheme and Self Employment Scheme has been framed and implemented under government orders and was enforced with effect from 1<sup>st</sup> November 1982. To be a beneficiary under this scheme the eligibility conditions are that the applicant should have passed the matriculation examination, his family income should not be exceeding Rs. 4000 per annum and he should have been unemployed and

validly registered in an employment exchange in the state for the preceding three years and in case of a physically handicapped person, for the preceding two years.

This study proposes to bring forward two aspects of the problem that has manifested today in the social security system in the state that could apart from accelerating the financial difficulties of the state would also put a question mark on the states ability to provide social security or assistance to its increasing proportion of the aged population.

The following figures give the total population covered under the 2 major schemes and the unemployment assistance scheme in the state along with the expenditure incurred by the government both in nominal and real terms.

**Table-3.27**

**Agricultural Workers Pension Scheme: Expenditure & Beneficiaries**

<b>Year</b>	<b>Total beneficiaries</b>	<b>Total expenditure</b>	<b>Real exp</b>
1980-81	293778	1092	1092
1981-82	172376	356	288.14
1982-83	139817	446	366.20
1983-84	217659	1188	798.33
1984-85	250116	1098	753.56
1985-86	277821	1132	711.27
1986-87	261584	1641	890.97
1987-88	286733	1582	798.06
1988-89	299758	2144	1070.44
1989-90	308346	2144	983.36
1990-91	316509	2914	1259.67
1991-92	344301	1897	673.88
1992-93	349503	1451	485.9
1993-94	344946	2000	644.72
1997-98	300784	4301	846.63

**Source-** *Various Issues Of Economic Review, State Planning Commission*

**Table 3.28****Kerala Destitute/Widow/Old Age Pension Scheme:- Expenditure & Beneficiaries**

<b>Year</b>	<b>Total beneficiaries</b>	<b>Total expenditure</b>	<b>Real exp</b>
1980-81	165000	810.10	810
1981-82	169590	905	843.58
1982-83	199015	1108	909.76
1983-84	156774	1018	684
1984-85	194565	970	622.5
1985-86	153901	1077	676.72
1986-87	156826	1071	581.49
1987-88	161665	1319	665.38
1988-89	170110	1183	590.64
1989-90	177565	1178	540.24
1990-91	185914	1277	552.02
1991-92	181091	1401	497.69
1992-93	181297	1593	533.72
1993-94	182075	1630	525.45
1994-95	189263		
1997-98	145226	2072	407.86

**Source : Same As Above**

**Table-3.29****Unemployment Assistance Scheme: Expenditure And Beneficiaries**

<i>Year</i>	<i>Total beneficiaries</i>	<i>Total expenditure</i>	<i>Real exp</i>
1982-83	44011	80.22	65.86
1983-84	98261	649.79	436.65
1984-85	136471	768.79	493.41
1985-86	20083	1012.08	635.92
1986-87	255683	835	453.36
1987-88	20556	1095.65	552.71
1988-89	215456	2353	1174.19
1989-90	246040	1996.37	915.55
1990-91	264314	1934.88	836.41
1991-92	253798	1619.64	575.13
1993-94	16748	2137	688.88
1997-98	263715	3594	707.46

**Source:** Same As Above

Keralas social security system has been much publicized and written about. Dreze(1990) says that the pension scheme for the old and the widows in Kerala have been working much better than the other states. The figures given above show the actual situation in Kerala over the years in terms of both the expenditure incurred and the beneficiaries covered under the schemes. Table 5. 1 shows that in terms of total expenditure incurred, the increase has been almost four times in the period 198081 to 97-98 for the agricultural workers pension scheme. But if you see the real expenditure incurred by the government it has decreased by several folds.

From 1092.21 lakhs in 1980-81 it decreased to as low as 485.90 lakhs in 1992-93 after which it improved to 846.13 lakhs in 1997-98. In real terms hence the state has been incurring less expenditure over the time.

Similarly when we see the expenditure incurred for the old age/destitute scheme over the same period we see that while the absolute expenditure increased from 810.10 lakhs to 207.2 lakhs the real expenditures actually declined to almost half at the end of the above said period ie 810 lakhs to 407 lakhs. Even in case of Unemployment assistance scheme we see the real expenditures rising at a slow rate

Thus in all these assistance programmes the real expenditures have not increased much (unemployment assistance scheme) or have decreased by several folds in others. While Kerala was a pioneer in initiating social development measures and social security initiatives, the question definitely arises whether the beneficiaries of the scheme gain much from it today considering the meager amount that they receive in real terms.

The below mentioned table gives both the absolute and the real amount disbursed by the government through the three schemes viz old age/destitute pension scheme, Agricultural workers pension scheme and Unemployment Assistance Scheme

**Table-3.30**

**Real Amounts Received Under Various Schemes**

	<b>1</b>	<b>Real Amount</b>	<b>2</b>	<b>Real Amount</b>	<b>3</b>	<b>Real Amount</b>
1980-81	45	45	55	55		
1986-87	60	32.57	55	29.86	60	32.57
1990-91	70	30.25	60	25.93	60	25.93
1994-95	100	31.23	100	28.40	70	19.88

**1.** Agricultural workers pension ; **2.** Old age pension  
**3.** Unemployment assistance

**Source-** *Economic Reviews, State Planning Commission*  
*Real figures found at 1980-81 prices*

The table shows the declining amount in real terms that the beneficiaries have been receiving through these schemes. Ironically these schemes are known to work better in Kerala among all the other states in the country. If at all these schemes are to actually help the needy, the amount disbursed would have to be increased and this does not seem plausible in the current scenario of fiscal crisis experienced by the state. The growing revenue deficit (details given in the next chapter) makes efficient implementation of the various schemes near impossible. Thus the social assistance schemes and the financial assistance that they provide to the needy today has become more of a tokenism, with absolute decreases in the real amount received due to the erosion in their value by inflation.

The second aspect of the problem that the study intends to point out is the rise in expenditures that would be required given the demographic transition even if the present level of coverage of beneficiaries are to be maintained. Several studies in the past have pointed out this impending crisis the state is heading to. The bellow given table gives the demographic profile of the aged in Kerala.

**Table- 3.31**

**Proportion Of Aged Population To Total Population**

<b>YEAR</b>	<b>Number of Aged</b>		
	60+	70+	80+
1961	986	363	85
1971	1328	496	125
1981	1910	712	186
1991	2574	1001	290
2001	3487	1572	449
2011	4884	2260	708
2021	7205	3223	1039
2031	10001	4906	1538
2041	11584	6758	2401
2051	11861	7439	3256

**Source** Rajan, Irudaya (1999)

**Table-3.32****Proportion Of Aged Population To Total Population**

<b>Year</b>	<b>Proportion To Total Population</b>		
	<b>60+</b>	<b>70+</b>	<b>80+</b>
1961	5.01	1.89	0.44
1971	6.18	2.31	0.58
1981	7.45	2.78	0.73
1991	8.85	3.44	1.00
2001	10.98	4.95	1.41
2011	14.37	6.65	2.08
2021	20.44	9.14	2.95
2031	28.24	13.85	4.34
2041	33.59	19.59	6.96
2051	36.61	22.96	10.05

**Source:-** Same As Above

The agricultural workers pension covers almost 13% of the population above sixty years at present. Even without extending the coverage by 2051, considerable amount of expenditure would have to be incurred by the government. This is because while the 60 Plus population barely constituted 8.85% of the total population of Kerala in 1991, the projected 60 plus population in the year 2051 would be 36.61% of the total population of the state. The same holds true for the old age/destitute pension scheme, which at present covers about 7% of the 60 plus population.

The number of beneficiaries for agricultural labor pension will be 11241146 in 2051 given the present coverage. Similarly the increase in

the number of beneficiaries in the old age pension scheme will be by 685044 persons. This will result in manifold increase in government expenditure devoted to social security. What further complicates the situation is the fact that the growth rate of 80 plus population is the highest. This proportion, which accounted for just one percent in 1991, is expected to increase to 3% in 2021 and further to 10 percent in 2051. This also has important repercussions for the government expenditure. Due to the increase in the survival rate of the 80 plus population pension has to be given for comparatively longer period of time.

The scenario hence will not be sustainable in the long run and the highly celebrated social security schemes of Kerala will remain a thing of the past if the current state of the finances in the state do not improve and the productivity in different sectors does not rise.

#### **3.2.4 Education**

Often the progress of Kerala in the field of education is hailed as phenomenal and exemplary. The distinctive educational achievements of the state have substantially contributed to the much-extolled Kerala model of development. The earlier section in the chapter has shown that Kerala has not only surged ahead of the other regions in terms of the literacy levels but even in the other indicators of educational attainments, the state has done exceptionally well.

What however needs to be noted is that Kerala has more or less followed the same kind of policies and have more or less remained contented with the kind of achievements already made. None can dispute the changes that and would be taking place in the Kerala,s society owing to the demographic transition. Reflecting the fall in the fertility and mortality rates, the age composition of the population in Kerala has been changing. While the older age group proportion is increasing, the proportion of the population belonging to the younger age group is declining at the same time. So far the planners and the policy makers in the state do not seem

to have taken advantage of the situation resulting from the demographic transition.

Much has been written about the low quality of education in the state. Mass education has been one of the greatest success stories of Kerala and at the foundation of its major achievements. But post secondary education in Kerala leaves much to be desired and remains an unsustainable burden, one that cannot meet the economic and the social needs of the society. Undoubtedly education at the primary and the secondary school levels has been a success story in terms of promoting general literacy and quality of life and in providing Malayalees with a definite comparative advantage in obtaining employment abroad. However higher education in the state continue to cater the requirements of a bygone era and the type of education imparted today is mostly unrelated to the requirements of the economy or of the development needs of state. In the words of Joseph Tharamangalam, the quality of higher education in the state has deteriorated to the point where it can only be characterized as dismal. Kerala's students are ill equipped to compete in national competitive and entrance examinations.

The Expenditure Reforms Commission's fifth report states that, "Higher education and technical education are important because educated and skilled manpower becomes available only from the products of higher and technical education. Therefore, for improving efficiency and productivity, the higher and technical education sectors will also need to be continuously expanded. According to the reports of the Task Force on Higher Education and Society (2000) which was convened by the World Bank and UNESCO, higher education simultaneously improves individual lives and enriches wider society, raises wages and productivity making both individuals and countries richer, encourages independence and initiatives, both valuable commodities in the knowledge society, creates educated people and environment in which economic development is possible, embodies norms of social interaction such as open debate and argumentative sessions, promotes rejection of discrimination based on

gender, ethnicity, religious belief or social class. A society that wishes to build or maintain a pluralistic accountable democracy will benefit from a strong higher education sector. The report further states that the quality of knowledge generated within higher education institutions and its accessibility to the wider economy and is becoming increasingly critical to national competitiveness and urgent action is needed to expand the quantity and improve the quality of higher education. This should be a top development priority. The report also points out that today higher education is not a luxury but that which is essential to future social and economic development of the nation.

In an environment where education depends more narrowly focused on providing a skilled labor pool for the immediate needs of the economy, market forces predominate and the public benefits of and responsibilities for higher education recede from the view. However the private sector (or the profit sector) has problems establishing quality programmes that address anything other than short-term market driven needs.

The decline in enrolments in the schools of Kerala in the 90's owing to the falling growth rate of population is shown in the table below.

**Table3.33**

**School Enrolment In Kerala**

YEARS	LP	UP	HIGH SCHOOL	TOTAL
1991	24.21	19.33	15.53	59.07
1993	23.72	19.08	15.89	58.69
1994	23.25	18.67	16.16	58.08
1995	22.52	18.39	16.26	57.17
1996	21.98	18.33	16.17	56.28
1997	21.41	17.90	16.04	55.35
1998	20.78	17.61	16.98	54.36
1999	20.10	17.26	16	53.36
2000	19.32	17.05	16.12	52.49

**Source:** Budget Papers Kerala, 200102

The table shows a fall in the total enrolment of students to school to the tune of 6.58 lakhs during the whole period, 1991-2000. This is a decline of 11.4%. The fall has been more pronounced at the earlier stages that is at the lower primary stage where it declined from 24.21 lakhs in 1991 to 19.32 lakhs in 2000 i.e. a fall by 4.89 lakhs. At the high school level there has been a slight increase in the enrolment rates.

Kerala being a state with perceptible deceleration in the population growth and having already achieved high literacy rates, there are strong arguments for reducing the government expenditure on elementary education. However the facts are that policies in the state have hardly made a shift in spite of the increasing need felt for the same. The emphasis on primary and secondary education continues with scant regard for university and higher education and more importantly the technical education. In the early 1970s, about 80 percent of the total expenditure was spent on primary and secondary education. The table given below shows the level of expenditures made by the successive governments in the previous two decades under different heads.

**Table 3.34**

**Percentage Of Expenditure Under Different Heads**

Year	Primary & secondary	University & HE	Technical
1981-82	83	11.4	4.05
1985-86	81	13	4.86
1990-91	82	12.32	4.12
1995-96	80	14.9	4.25
2000-01	81	14	4.32

**Source-**Computed From The Budget Papers Of Kerala

Thus, we see that no major change has taken place in the expenditure pattern of the government in the past two decades despite a perceptible fall in the rates of school enrolment. The government continues to spend around 80 percent of its total expenditure on primary and secondary education. The case is the same with Technical education with only an average of four percent of its expenditure being allocated to it. There have been arguments from several quarters over the need to devise steps to reduce the problem of educated unemployment, which is at present highest in the country. It is regrettable that the share demarcated for technical education has hardly seen any improvement in the past two decades. The continuing emphasis on the primary and secondary education does not provide much justification particularly keeping in view the above given arguments.

The educational policies and the expenditure pattern have significant consequences on the society as a whole. Much has been written about Kerala's emphasis on Universal Primary Education and the low rates of drop-outs owing to which a significant proportion of the educated work-seekers come from the lower strata of the society. But while the scope of vertical mobility, implied in the high rates of participation of the lower strata of the society in the market for the educated, is a factor that promotes equality, there are others that have worked in the opposite direction. The faulty educational planning with its over-emphasis on promoting elementary education and the insufficient attention given to job oriented education at the higher level have created a reservoir of educated unemployed. The inadequacy of opportunities for employment prevents in two ways any significant gains achieved by the lower strata in the labor market<sup>21</sup>

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<sup>21</sup> United Nations(1975), Poverty, Unemployment and Development Policy: A case study of selected Issues with special reference to Kerala(by Centre for Development Studies, Thiruvananthapuram) pp121-133

- i) While the average waiting period for the salaried jobs is very long as a consequence of the growing number of the unemployed it is longer still for those whose levels of education are relatively low (e.g. Matriculation) compared to those who are able to maintain higher levels (e.g. Post graduate education). The ability to secure higher levels of education is determined by the levels of income since a higher family income gives greater scope for higher education, which is not free unlike school education and offers a limited no. of scholarships for the talented and the poor. Consequently, the average waiting period tends to be longer for the poorer sections of the society even in the absence of direct discrimination in the labor market.
- ii) The income secured on placement by the educated after long periods of waiting are generally not much higher than those of unskilled workers except those who are able to specialize in high - income fields implying thereby that the education system in the state does not contribute significantly to the reduction of income - inequalities.

Thus in these circumstances with inadequate growth of employment opportunities, educational system in the state have a limited role in promoting social and economic equality. What the system has succeeded over the years is to enable the poor to acquire levels of education up to matriculation. To go beyond this, a radical change in the present scenario is a must. In Kerala, the educational system needs radical reform and a marked shift from emphasis on primary and secondary education to job oriented and better quality higher education. In the present scenario a reduction in the expenditure at lower levels of education and increase in the same for higher education is all the more warranted because of the

decline in the population of younger age group owing to the demographic transition.

The following table shows the population projection of the school – going population:

**Table-3.35**

**Population Projection Of School Going Population**

<b>Year</b>	<b>Children Under 15(Lakhs)</b>	<b>Proportion To Total Pop</b>
1961	7205	42.62
1971	8595	40.26
1981	8901	34.97
1991	8617	29.35
2001	7429	23.40
2011	7230	21.10
2021	6624	18.60
2031	5785	16.10
2041	5419	15.30
2051	4921	14.70

**Source**-Tharakan Michael P.K and Navneetham K (1999),CDS Working paper No 296

Given these trends in the school – going population, the case for enhancing expenditures to improve the quality of higher education receives a higher boost.

**COMPOSITION OF EDUCATIONAL EXPENDITURE**

Kerala spends considerably more on social services than most other states is reasonably well known. The quality of services provided

however is always affected by the composition of the expenditure made on education sector.

As will be explained in the chapter on government finances, because of the higher priority to social and community services in the earlier plans of the state, past expenditures on the plans get accumulated in the non-plan account. The larger share of revenue component in total expenditure normally leads to higher shares of compensation of employees in the government consumption expenditure. The composition of expenditure in the education sector is tilted heavily towards compensation of employees. The teachers in the educational system form the biggest single group in the government employment. It is to be noted that in Kerala since 1957, major expenditure like maintenance grant and teachers salary of all private schools except private schools are borne by the government. The table given below shows the percentage of expenditure on compensation of employees to total expenditure under different heads of educational expenditure.

**Table 3.36**

**Percentage Of Compensation Of Employees In Total Expenditure**

<b>S No</b>	<b>Heads</b>	<b>Percent Of Compensation Of Employees</b>
1	Elementary education	99.93
2	Secondary Education	96.41
3	University & HE	91.56
4	Technical education	74.55
	Total	92.44

**Source:** *Calculated from the State Budget Papers.*

While on the on the hand, Kerala has been reducing its share of expenditure on social development (e.g. Education and health) because of

the fiscal crisis and the inability to sustain the high social spending on the other hand as seen from the above table whatever is left is spent on the salaries (very little is left for current expenses or modernizing facilities. As we have seen in the beginning of the chapter, the ancillary facilities in the schools in Kerala are comparatively better than the All - India averages. Such a large amount of social expenditure requires that adequate funds be devoted for its maintenance. But as seen from the table, hardly any funds are left after paying wages and salaries to the employees of the education sector. This would seriously affect the quality of education in Kerala, be it elementary, secondary, university and higher education or technical education.

**NATURE OF STATE FINANCES AND IMPLICATIONS ON  
THE SOCIAL SECTOR**

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**4.1 INTRODUCTION**

The achievements of the people of Kerala are the result of major social, economic and political transformations. As explained in detail in the first chapter, these changes have roots in Kerala's history but they are also in an important sense, achievements of public action is the post - 1957 Kerala. Undoubtedly, government policy after the formation of Kerala, has played a key role in raising health standards, improving literacy rates and bringing about demographic change.

High levels of social development require an interaction of the demand for and the supply of social services (education and health). The governments in Kerala have played an important role in raising demand and in ensuring adequate supply of social services at affordable rates. Through the promotion of literacy and creation of awareness, through the upliftment of the socially disadvantaged sections, through the betterment of the mass of underprivileged by successfully implementing the land reforms programme, through the people centric policies especially relating to the social sector initiated first by the Left Governments, the people in the state over the years have come to consider these services as essential services and consequently the demand for these have gone up and there is better utilization of these services in Kerala than elsewhere. To meet this demand, the government also had to supply these services at affordable rates. Hence in Kerala

along with the high demand for these services the ability of the government to make these available, affordable and easily accessible for even the poor, goes a long way in explaining the success of the state in the social sphere.

A theoretical model<sup>1</sup> on human capital production can be as analyzed. Assuming that individuals are rational and utility maximizing agents, the demands function for social services can be expressed in the form given below.

### **DEMAND FUNCTION**

$$Q^d = f(r^e, p, w)$$

Where,

$Q^d$  = Vector of indicators for participation and usage by agents. e.g. school enrollment or attendance, occupancy rates of hospital beds etc.

$p$  = Vector of prices eg. tuition and user fees, price of health services etc.

$w$  = Household wealth

$r^e$  = Macro economic factors that enter into the demand function through their effects on the expected rate of return from investment in education and health. e.g. High rate of unemployment lowers the return from investment in education and health. Inflation creates uncertainty and reduces the real rates of return.

### **SUPPLY FUNCTION**

Unlike the supply of pure private goods, the supply of social services depends not only on the prices of inputs and outputs, but also on the government's ability to finance and manage the education and

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<sup>1</sup> Macroeconomic policies & project performance in the social sectors: a model of Human capital production –Daniel Kaufman & Yan Wang-WDR, Vol23, 1995

health infrastructure. Private providers are profit maximisers whose behavior is described by a conventional supply function. While public providers are not for profit, both the quality and quantity of services provided are constrained by the government budget.

$$Q_s = f(C, P, G, M)$$

Where,

$Q_s$  = Vector of indicators for quantity and quality of education and health services. e.g. number of teachers, school expenditures, number of hospital beds etc.

$C$  = Vector of input costs.

$P$  = Vector of output price.

$G$  = Capacity of the Government to finance social projects.

$M$  = Managerial inputs for delivering the social services.

The availability of the government funding is affected by government deficit and expenditure policies. Also, government managerial ability and institutional arrangements are going to affect the planning of social projects, allocation of resources and the delivery of social services.

The big achievement in social indicators thus can be expressed as a function of both quantity and quality of services and the participation and usage by the people.

Numerous studies <sup>2</sup>in the past have cited the high public participation in Kerala, since pre-independence days (a prominent role was played in the same by the socio reform movements). The explanation given for the paradox of high morbidity rates in spite of high health indicators too was in terms of the high health consciousness of its population and the consequent demand for medical facilities. The high enrolment rates suggest that education is still a topmost priority of the people despite the existence of mass educated unemployment. Given these facts this study places less importance on the demand side determinants. Further the model also shows that both the demand and supply of social services are directly and indirectly affected by the

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<sup>2</sup> Given in the reference at the end

government ability to finance the projects and services to keep its costs affordable to the common people and its ability to manage the scheme of works undertaken in the social sector.

Thus given the unchallengeable role played by the state governments over the years in the evolution of Kerala as a model state, the objective of the study here is to probe into the financial crisis that has gripped the state. Considering the deteriorating condition in the state finances, the study proposes to give a deep insight into the nature of state finances over the years and its possible repercussions on the nature of development policies of the state.

The fiscal crisis in Kerala is not of recent origin.<sup>3</sup> Financial trouble has however aggravated since the early 90s. High level of social development coupled with a low level of economic growth imposes an extra burden on the government finances. Since most social services are provided at the expense of the public exchequer, the sustainability of high level of social development, would critically depend on the government revenues. Public investment in basic infrastructure is also critical for accelerating economic growth. Low level of per capita income and slow growth of the economy imposes severe limitations on the revenue raising capacities of the state government. In the recent past, several development economists in Kerala have started questioning the sustainability of the tempo of progress in the social sectors due to the growing financial problems of the government.

Development expert JOSEPH COLLINS calls kerala abloated welfare state without the economy to support it.<sup>4</sup> He thinks that all political parties are busy promising more goodies, which means more deficits and that the mentality that things do not have to be funded is strong in Kerala.

The analysis in the chapter is divided into two parts. First the magnitude of the fiscal crisis is shown with the help of important

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<sup>3</sup> K. K. George in his study *Limits to Kerala model of Development; An analysis of fiscal crisis and its implications*, (1993) analyzed the fiscal problems of the state during sixteen years from 1974 – 1990

<sup>4</sup> Joseph K P (1999)-*Poor Management of State finances in Kerala*-In B.A.Prakash(Ed)-*Kerala Economy: Performance, Problems and Prospects*

financial indicators. Second, how far and in what way are the social sector expenditures and related policies of the government affected by these.

The crisis in the state finances originates mainly from the burgeoning revenue deficit and the mounting debt liability of the state.

## **4.2 IMPORTANT FINANCIAL INDICATORS: AN ANALYSES**

### **4.2.1 Revenue Deficit**

The growing revenue deficit in the state is the most serious signal of the financial crisis of the state. Revenue expenditure has been growing at a much larger rate than revenue receipts. While the situation needs to be tackled by reducing revenue expenditure particularly the non-development expenditure under non-plan heads and increasing revenue receipts, the surge in the revenue expenditure has continued unabated. The dual effect of low realization of revenue potential and the growth of non-plan non-development expenditures has accelerated the financial crisis of the state.

The growth in revenue deficit (Table No. 4.1) has been alarming. This holds irrespective of the fact that the devolution to local self-governments has been classified as revenue grants and almost 50% of the expenditure could be capital expenditure. From 13.01 crores in 1970-71 the deficit reached 3624 crores in 1999 – 2000. After 1982-83, the state has been continuously running revenue deficits. While the state was able to reverse this trend in the early 1990s, it has been increasing at a fast rate since then. A digit decrease in the revenue deficit in 2000-01, the WHITE PAPER <sup>5</sup>reports, is a direct consequence of the lack of resources with the government to meet the revenue expenditure. The growth rates show alarming trends towards the end of the nineties. Faced with acute shortages of resources to finance budgeted expenditure, the state was unable to meet payment on cheques and bills.

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<sup>5</sup> White paper released by the kerala government in 2001 on the condition of state finances

**Table-4.1**  
**Revenue Deficit**

<b>Year</b>	<b>Revenue Deficit(Rs Cr)</b>	<b>Growth Rate(%)</b>	<b>As A % Of Nsdp</b>
1970-71	13.01		1.03
1980-81	27.23		0.71
1981-82	-95.98	-452.48	0.56
1982-83	26.81	-72.07	0.56
1983-84	58.18	117.01-317	1.05
1984-85	13.67	-76.5	0.22
1985-86	74.17	442.57	1.14
1986-87	152.24	105.26	2.07
1987-88	194.58	27.82	2.35
1988-89	163.94	-15.75	1.78
1989-90	250.45	52.77	2.34
1990-91	422.04	68.51	3.46
1991-92	364.34	-13.67	2.41
1992-93	337.41	-7.39	1.96
1993-94	371.31	10.12	1.88
1994-95	399.88	7.61	1.72
1995-96	402.81	.74	1.44
1996-97	643.03	59.63	1.98
1997-98	1122.90	74.63	2.94
1998-99	2029.96	80.78	4.5
1999-2000	3624.21	78.54	5.9
2000-2001	3147.06	75.23	5.1

**Source-** Kerala Budget Papers

#### **4.2.2 Gross Fiscal Deficit**

Gross fiscal deficit is a measure of the amount that the state government has to borrow each year to support its total expenditure. It

is the sum of the revenue deficit, capital expenditure and loan advances dispersed by it. The figures showing Gross Fiscal Deficit over the years, yield more comparable data over the years. This is because since the late 1990s, revenue deficit is overlaid with some of the capital expenditure incurred by local self-governments.

**TABLE-4.2**

**Gross Fiscal Deficit(Rs Cr)**

YEAR	GFD	YEAR	GFD
1970-71	47.41	1990-91	198.57
1980-81	178.99	1991-92	803.45
1981-82	61.70	1992-93	732.02
1982-83	122.88	1993-94	935.45
1983-84	299031	1994-95	1108.65
1984-85	232.26	1995-96	1302.66
1985-86		1996-97	1542.48
1986-87	322.31	1997-98	2413.85
1987-88	440.78	1998-99	3012.20
1988-89	412.13	1999-2000	4008.17
1989-90	604.53		

**Source-White Paper Released By Kerala Government, 2001**

The growth in Gross Fiscal Deficit was inordinately high towards the end of the 80s and the 90s. The fact that the borrowing has largely gone to finance revenue expenditure (because of the rise in the expenditure incurred on salaries, pensions and interest payments) is the most worrying aspect of this trend.

As for revenue deficit, the table shows that as a percentage of NSDP, the revenue deficit rose to 3.46% in 1990-91 from .71% in 1980-81. The trend was to some extent arrested in the later years. But towards the end of the decade, it rose alarmingly once again to reach 5.1

of NSDP in 2000-01. The precarious fiscal situation can be seen also in terms of total revenue expenditure as a percentage of total revenue receipts.

#### **4.2.3 Percentage Of Revenue Expenditure To The Total Revenue**

Sound fiscal management calls for higher level of resource mobilization particularly on the revenue account and allocation of resources to socially and economically desirable purposes. Resources are also mobilized by the states on its own account under revenue and capital heads. A state's own revenue comprises own tax revenue and receipts from own non-tax sources.

**Table-4.3**

#### **Percentage Of Revenue Expenditure To The Total Revenue**

<b>Year</b>	<b>% Of Rev Exp To Total Revenue</b>	<b>Year</b>	<b>% Of Rev Exp To Total Revenue</b>
1970-71	108.88	1990-91	117.23
1980-81	104.25	1991-92	112.77
1981-82	98.71	1992-93	110.17
1982-83	96.69	1993-94	110.17
1983-84	106.23	1994-95	109.48
1984-85	101.22	1995-96	108.57
1985-86	105.41	1996-97	110.46
1986-87	110.13	1997-98	107.43
1987-88	112.27	1998-99	128.20
1988-89	108.64	1999-00	145.63
1989-90	110.14	2000-01	136.05

**Source-Same As Above**

Thus the total revenue expenditure as a percentage of total revenue has risen to as high as 136.05% by 2000-01. This shows that the state is spending much beyond its means and the situation would become unsustainable in the long run.

#### **4.2.3 Proportion Of Different Revenue Heads To Total Revenue**

Any discussion on the tax revenue of Kerala has to commence with sales tax since it is the most important source of revenue for the state. Sales tax as a percentage of total revenue of the state increased from 32.54% in 1980-81 to almost 50% in 2000-01

**TABLE-4.4**

#### **Percentage Of Sales Tax To Total Revenue**

<b>YEAR</b>	<b>Percentage of TR</b>
1980-81	32.50
1985-86	33.43
1990-91	37.50
1995-96	42.15
2000-01	49.76

**Source:** *Finance Accounts, Kerala*

There is further potential for sales tax revenue to rise. This is because of high purchasing power of a large segment of the population with high incomes originating from inward remittances from abroad and growth of secondary and tertiary sectors with good revenue potential in the 1990s. Yet to get optimum advantage of these favorable factors and to ensure good tax compliance, suitable administrative reforms for effective enforcement of sales tax are also indispensable.

Another major trend is the declining trend in the collection of state excise duties.

**Table-4.5****Percentage Of Excise Tax To Total Revenue**

<b>Year</b>	<b>% TR</b>
1980-81	12.99
1985-86	13.44
1990-91	11.40
1995-96	11.60
2000-01	09.24

**Source-Same As Table 6.4**

The revenue from stamps and registration fees in the total revenue of the state has been almost stagnant in the previous decades, although it did see an increase in the mid 90s.

**Table-4.6****Percentage Of Stamps & Registration Fees To Total Revenue**

<b>Year</b>	<b>% Of Total Revenue</b>	<b>Year</b>	<b>% Of Total Revenue</b>
1981-82	3.90	1992-93	5.71
1982-83	4.03	1993-94	5.87
1983-84	4.07	1994-95	6.34
1984-85	3.82	1995-96	6.52
1985-86	3.38	1996-97	5.86
1986-87	3.63	1997-98	4.65
1987-88	4.20	1998-99	4.18
1988-89	5.52	1999-20	3.52
1990-91	5.08	2000-01	3.91
1991-92	5.92		

**Source-Same As Above**

This is surprising because of the considerable potential for revenue mobilization from stamps and registration fees in the state owing to the fact that the onward remittances to Kerala from gulf countries are mainly invested in real estate. The table below given shows the income elasticity of the major revenue heads of Kerala

**TABLE 4.7**  
**INCOME ELASTICITY OF REVENUE HEADS**

S No	Revenue	1981-82 To 1991-92	1991-92 To 2000-01
1	Sales Tax	1.75	1
2	Excise Tax	1.14	.51
3	Stamps & Registration Fees	1.96	-.04
	Total Revenue Receipts	1.68	.8

**Source:** Calculated From The Budget Papers Of Kerala

The table shows that while the income elasticity was high in the early nineties, this was not the case in the second half of the decade when it became inelastic in most cases. This points out the important fact that in spite of the better performance of the economy in the latter half of the nineties, the revenue mobilization has been poor.

#### **4.3 Non Tax Revenue**

Revenue from non-tax sources originates principally from three sources *viz* economic services, interest receipts and miscellaneous general services.

**TABLE-4.8****NON TAX REVENUES OF KERALA**

<b>Year</b>	<b>Total NTR (In Lakhs)</b>	<b>Real NTR</b>	<b>Per Capita NTR</b>	<b>% TR</b>
1982-83	11638.26	9556.01	36.69	14.37
1983-84	11826.01	7947.05	30.10	12.66
1984-85	13341.89	8562.92	32.01	11.86
1985-86	14173.03	8905.45	32.84	10.34
1986-87	16386.45	8896.98	32.38	10.90
1987-88	18853.80	9511.07	33.83	11.89
1988-89	18136.09	9054.92	31.88	9.56
1989-90	17444.03	8000.01	27.88	8.52
1990-91	20881.45	9026.69	31.19	8.69
1991-92	23471.54	8338.02	28.38	8.23
1992-93	27940.31	9375.94	31.49	8.92
1993-94	32292.92	10417.07	34.52	8.24
1994-95	39635.10.	11259.97	36.82	8.49
1995-96	53549.06	13092.68	42.24	8.87
1996-97	51380.15	11317.21	36.02	8.36
1997-98	55211.20	10868.35	34.14	7.76
1998-99	5765.91	12567.12	38.14	7.00
1999-2000	65908.69	13425.89	40.96	6.68
2000-2001	69340.67	14478.89	43.67	7.00

**Source- Same As Above**

For a more realistic comparison of the non tax revenue receipts, one needs to look at the deflated figures. While in absolute amounts, the revenue rises steeply, in the long period of two decades; it does not show any significant rise in real terms. The per capita figures also do not show any perceptible change. However, as a percentage of total revenue, it fell from 14.37 of the total revenue to 7% in the last period.

There has been a decline in the interest receipts in recent years largely due to the defaults by state public undertakings. In 2000-01 while interest receipts comprised 0.5% of the total revenue the interest payment and servicing of the debt comprised 25% of the total revenue. The state has also been offering considerable subsidy for social service. School education in Kerala up to the Xth standard is free for all classes of people. Tuition and other fees charged for higher education are also very low and in many cases free services are provided. All classes of people enjoy the benefits of free or low cost health services. The resources commission appointed by the Government of Kerala in the early 90s has suggested several measures for stepping up the tax and non-tax revenues of the state. There is a need to fully implement the recommendations of the report so as to step up the revenue receipts of the state to its full potential.

#### **4.4 Non Plan Non Development Expenditure**

The maintenance and sustainability of the existing large social sector infrastructure is a must if the state has to at least maintain the existing level of social sector development. Hence considerable development expenditure both plan and non-plan needs to be made. The reduction of non-plan revenue expenditure through economy measures is more feasible for items for non-development expenditure, since austerity measures on such items do not reduce the resources available for the maintenance of social sector assets nor does it lead to any deterioration in the social sector development. This includes expenditure on debt servicing, administrative services etc. All these have to be pruned up. Steps would also have to be taken to reduce the heavy expenditure incurred on salaries particularly the non plan non

development sectors including expenditure on pay revision, DA etc. Increase in the expenditure on such sectors is bound to aggravate the financial crisis of the government as well as divert resources that should be made available for development expenditure. At the same time plan expenditure has remained very low. In 1980-81, 18% of the total revenue expenditure was plan revenue expenditure, which declined to 13.8% in 1985-86. It declined to 12.7% further in 1991-92. It however did reach 25.3% in 1996-97. The pace of development in all sectors of the economy has to be accelerated and for this, it's necessary to step up the plan expenditure.

#### **4.5 Total Debt**

Rising total debt of the state coupled with an upward surge in the interest payment is another worrying aspect of Kerala's finances. While in the past a significant component of the debt burden went towards the financing of state plans, in recent times a substantial portion is directed for revenue expenditure. Debt of the state includes borrowing on account of internal debt, treasury saving and provident fund and loans from government from India. The Kerala government as been faced with a growing Gross fiscal deficit. The sustainability of the debt of a state or country is assessed in terms of its proportion to the state domestic product. According to the White Finances any figure above 30% is considered excessively high.

As shown in the table below, Kerala has thus crossed the prudential limits on all years since 1982-83.. The white paper on government finances states that the debt incurred by the state is far above what other states with similar or better economic growth rates are achieving. The growth rate of the total debt is seen to be the highest in the year 1999-2000 when the total debt increased by 28.5%. It is stated in the white paper that if Kerala government does not put a stop to the growth of the total debt, a stage will soon come when Kerala will be unable to fulfill its debt servicing obligations Hence unless the government arrests its excessive dependence on debt to finance its budgetary operations, the question mark over the sustainability of its high social expenditure remains.

**TABLE-4.9****Total Debt Of Kerala**

<b>Year</b>	<b>Debt (Rs Cr)</b>	<b>%NSDP</b>	<b>Growth Rate</b>
1970-71	217.34	-	-
1980-81	1041.60	27.24	-
1981-82	1133.20	27.98	8.79
1982-83	1505.18	31.39	32.83
1983-84	1740.94	31.50	15.66
1984-85	1929.90	31.40	10.85
1985-86	2319.48	35.66	20.19
1986-87	2596.65	35.30	11.95
1987-88	2984.40	35.89	14.16
1988-89	3359.08	36.50	13.31
1989-90	3941.87	36.95	17.35
1990-91	4716.79	38.70	19.66
1991-92	5466.56	36.19	15.9
1992-93	6297.13	36.00	15.19
1993-94	7198.67	36.56	14.32
1994-95	8820.87	38.06	22.53
1995-96	10113.54	36.20	14.65
1996-97	11420.91	35.00	12.93
1997-98	12868.14	33.70	12.67
1998-99	15700.28	35.00	22.01
1999-2000	20176.00	37.80	28.57

**Source-Same As Above**

#### 4.6 INTEREST PAYMENTS

The upward surge in the burden of interest payments is the cause of concern for state finances.

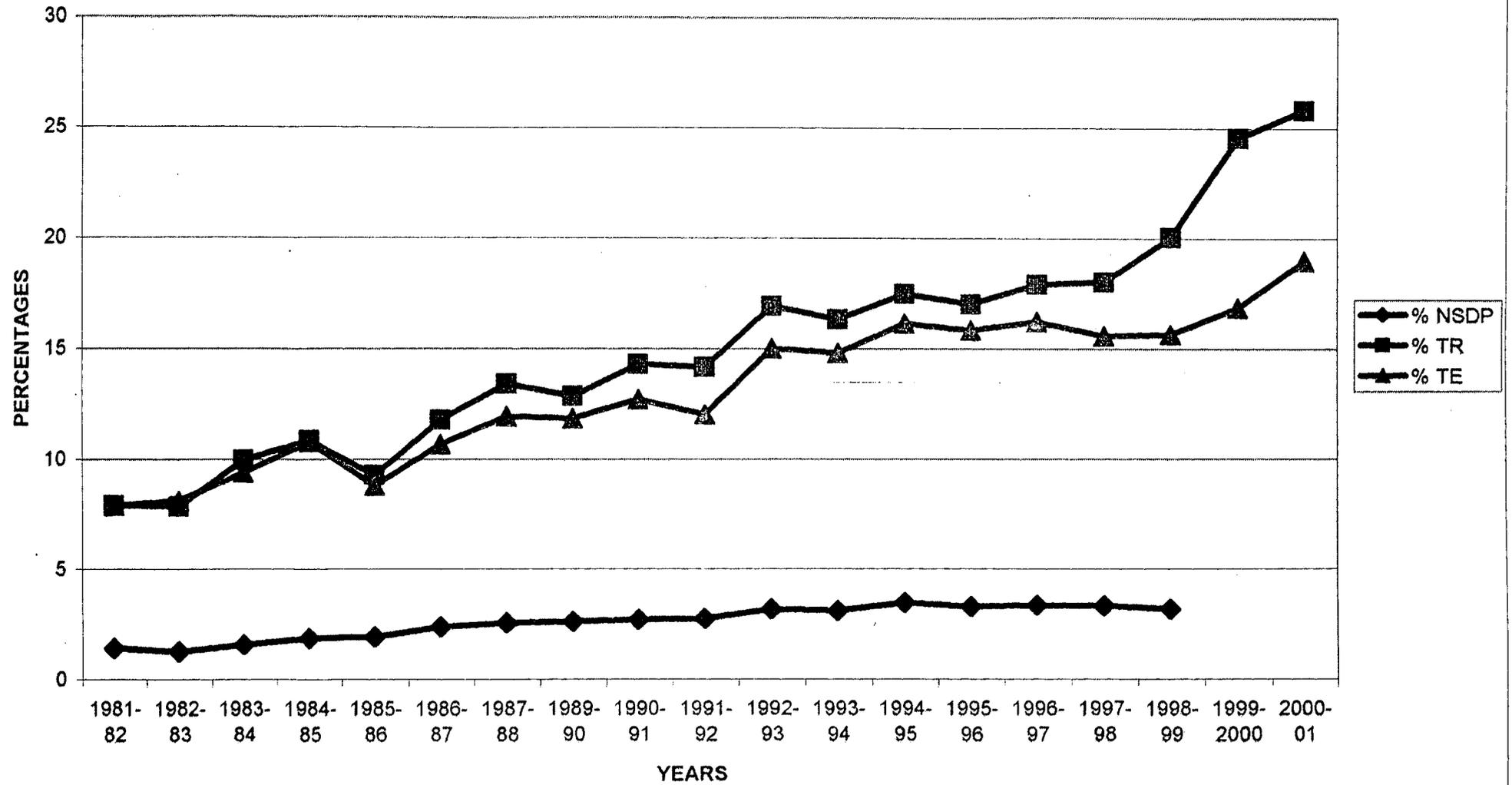
**Table-4.10**

#### **Interest Service Burden Of Kerala**

<b>Year</b>	<b>Total (In Lakhs)</b>	<b>Per Capita Real</b>	<b>%NSDP</b>	<b>%TR</b>	<b>%TE</b>
1981-82	5982.96	21.70	1.45	7.93	7.90
1982-83	6375.42	20.10	1.30	8.70	8.14
1983-84	9345.87	23.79	1.60	10.00	9.42
1984-85	12745.39	29.39	1.95	10.89	10.82
1985-86	12745.39	29.53	1.95	9.30	8.82
1986-87	17728.45	35.03	2.41	11.80	10.71
1987-88	21316.89	38.25	2.58	13.44	11.97
1988-89	24444.39	42.97	2.66	12.88	11.86
1989-90	29300.23	46.83	2.74	14.31	12.75
1990-91	34063.55	50.89	2.79	14.18	12.06
1991-92	48341.59	58.45	3.20	16.95	15.03
1992-93	542250.78	61.14	3.15	16.35	14.84
1994-95	81967.25	76.14	3.50	17.50	16.18
1995-96	92415.56	72.90	3.31	17.04	15.86
1996-97	110341.30	77.37	3.39	17.96	16.26
1997-98	128609	79.51	3.37	18.07	15.61
1998-99	144625.7	80.20	3.21	20.09	15.67
1999-00	165432.8	83.76	3.45	24.58	16.88
2000-01	187344.9	82.76	3.56	25.86	19.01

**Source** Kerala State Budget Papers

# INTEREST PAYMENTS



The above table shows the enormous growth in the interest payments of the state. From 7 percent of the total expenditure in the beginning of the 80's, this rose to around 20 percent in the year 2000-01. As a percentage of NSDP too, this figure more than doubled in the two decades starting from the 1980's. Discounting the effect of inflation i.e. taken in per capita real terms, the burden of interest payments increased almost four times in the same period.

#### **4.7 PENSION & MISCELLANEOUS SERVICE**

This has been another inelastic component of the state revenue expenditure.

Pension payments are one of the inelastic components of Kerala's expenditure. The rising pension payment can be seen in the table in terms of the different indicators. In absolute terms, it rose from 4784.38 lakhs in 1981-82 to Rs.125313.3 lakhs. In real terms it rose from 4459.71 to 22101.10 in the same period. In per capita real terms too pensions can be seen rising throughout the period. (ie from Rs.17.35 in 1981-82 to 2001-02). As a percentage of total revenue, pensions and miscellaneous rose from mere 5.63% in 1980-81 to 23.38% in 2000-01. The same trend can be seen in terms of its proportion to the total expenditure. Kerala has been spending an increasing proportion of its expenditure on paying pension to its employees. Pension payments have increased from around 6% of total revenue expenditure in 1980-81 to 18% in 2000-01.

The major reason for the higher pension payments commitment to government employees in Kerala is because of the lower retirement age in the state i.e. 55 years. Also since there exists low death rate and high life expectancy, the proportion of pensioners in Kerala is invariably higher than in other states.

There are a few state governments in India that spend such a large proportion of their budget on paying pensions. The present generation in Kerala is living at the expense of the next.

**Table-4.11****Pension and Misc. Service**

<b>Year</b>	<b>Amount (Pensions) (In Lakhs)</b>	<b>Real Amount (Pensions)</b>	<b>PCR</b>	<b>% TR</b>	<b>% TE</b>
1981-82	4784.38	4459.71	17.35	5.63	6.34
1982-83	5895.00	4840.31	18.58	7.28	7.52
1983-84	8268.11	5596.05	21.05	8.05	8.33
1984-85	9028.74	5794.71	21.66	8.03	7.93
1985-86	12004.94	7543.16	27.82	8.75	8.31
1986-87	17950.33	9746.08	35.46	11.95	10.85
1987-88	20991.17	10589.30	37.67	13.23	11.79
1988-89	21885.88	10927.10	38.47	11.54	10.62
1989-90	24632.58	11296.76	39.37	12.03	10.72
1990-91	33462.05	14465.07	49.99	13.93	13.00
1991-92	39067.69	13878.40	47.24	13.70	12.15
1992-93	43087.82	14459.00	48.56	12.98	11.79
1993-94	52352.74	16887.98	55.96	13.75	12.19
1994-95	62610.10	17787.16	58.16	13.42	12.36
1995-96	79688.86	19483.83	62.86	14.69	13.68
1996-97	85219.53	18770.82	59.75	13.87	12.80
1997-98	101821.00	20043.50	62.95	14.30	12.30
1998-99	125313.20	22101.10	65.23	17.41	13.48
1999-20	189969.10	24562.30	69.16	23.92	16.43
2000-01	204120.50	26382.40	68.40	23.38	17.19

**Source-Same As Above**

#### 4.8 NON-TAX REVENUE: COST RECOVERY

The table given below shows the total non-tax revenue from social services and the revenue expenditure under these heads.

**Table- 4.12**

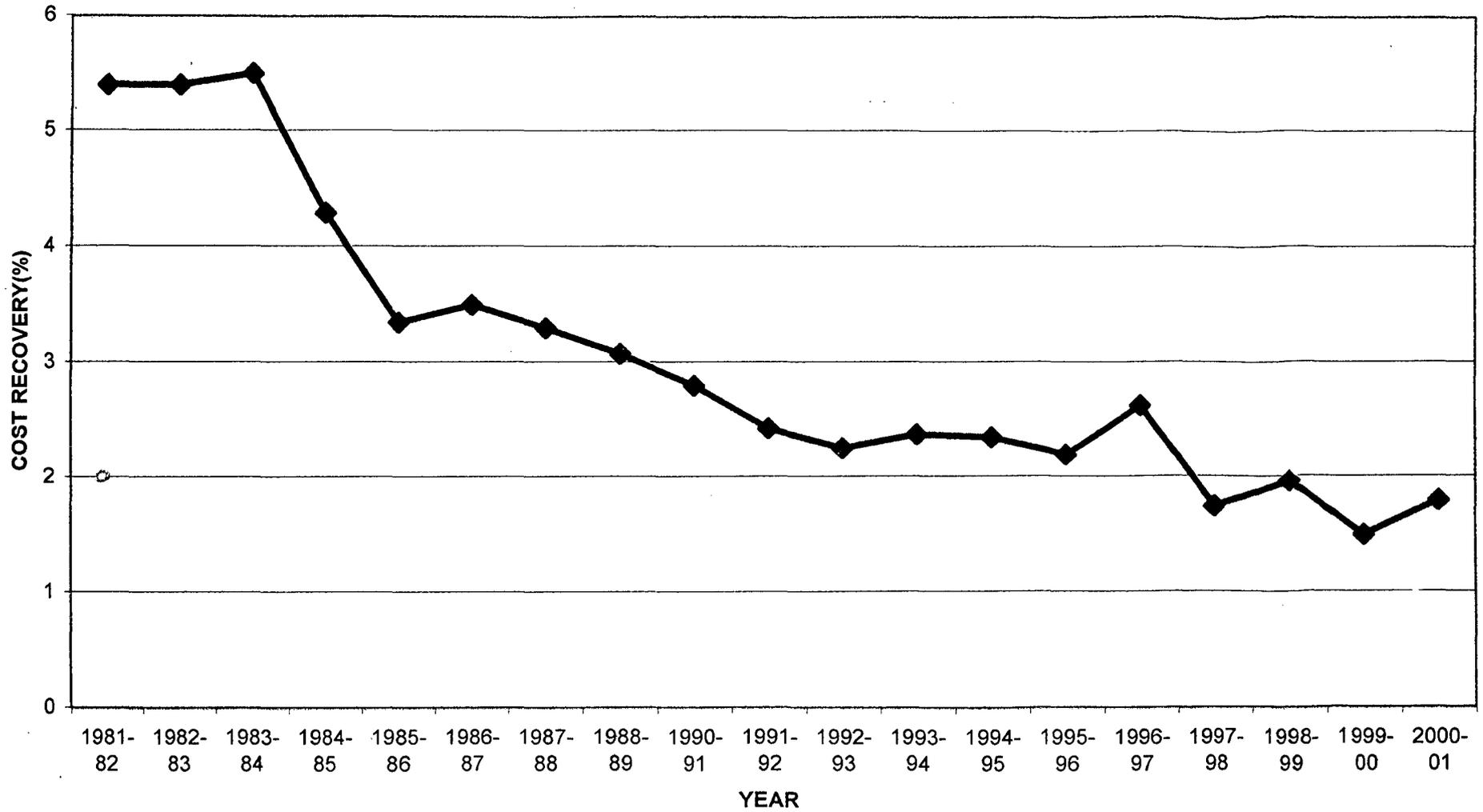
##### **Cost Recovery Of Social Services**

<b>Year</b>	<b>NTR (Social Services)</b>	<b>Total Revenue Expenditure</b>	<b>Cost Recovery</b>
1981-82	2063.20	38157.96	5.40
1982-83	2171.89	39947.67	5.40
1983-84	2566.74	45992.83	5.50
1984-85	2430.06	56420.54	4.30
1985-86	2593.23	77293.27	3.35
1986-87	2708.33	77206.78	3.50
1987-88	2756.39	81885.54	3.30
1988-89	2976.34	96467.42	3.08
1989-90	3031.31	108239.20	2.80
1990-91	3110.32	127483.40	2.43
1991-92	3055.98	134957.60	2.26
1992-93	3433.29	144139.40	2.38
1993-94	4188.54	177655.50	2.35
1994-95	4588.23	208254.10	2.20
1995-96	6093.42	231051.20	2.63
1996-97	4726.49	269107.90	1.75
1997-98	6216.50	298776.54	1.85
1998-99	6613.94	334916.20	1.97
1999-00	6667.82	420636.90	1.50
2000-01	7678.49	418836.50	1.80

**Source:** Same As Above

Kerala had hugely invested in the social and community development services in general and education and health in particular.

# USER CHARGES



Continuous investment in these sectors will increase expenditures and unless revenue generation either from these or other investments does not rise proportionately, a deficit would adversely affect the capacity of the state to maintain the level of services provided.

A major source of the fiscal problem of the state in recent years has originated from meeting the growing demands for critical public services, which has not been commensurate with a reasonable level of cost recovery. N.J. KURIEN & JOSEPH ABRAHAM<sup>6</sup> in their study of the financial crisis of the state has given a detailed analysis of the low cost recovery ratio of public expenditure in some important sectors.

In the table, under social services, education, sports, art and culture, health and family welfare, water supply and sanitation, housing and urban development, information and broadcasting, welfare of SC, ST and OBCs, labor and labor welfare, social welfare and nutrition are included. The figures show that the cost recovery ratio has been declining at a fast rate i.e. from 5.4% in 1981-82 to 1.83% in 2000-01. With the financial crises, the reducing cost recovery from social services will pose major problems for the state to meet the welfare needs of the people.

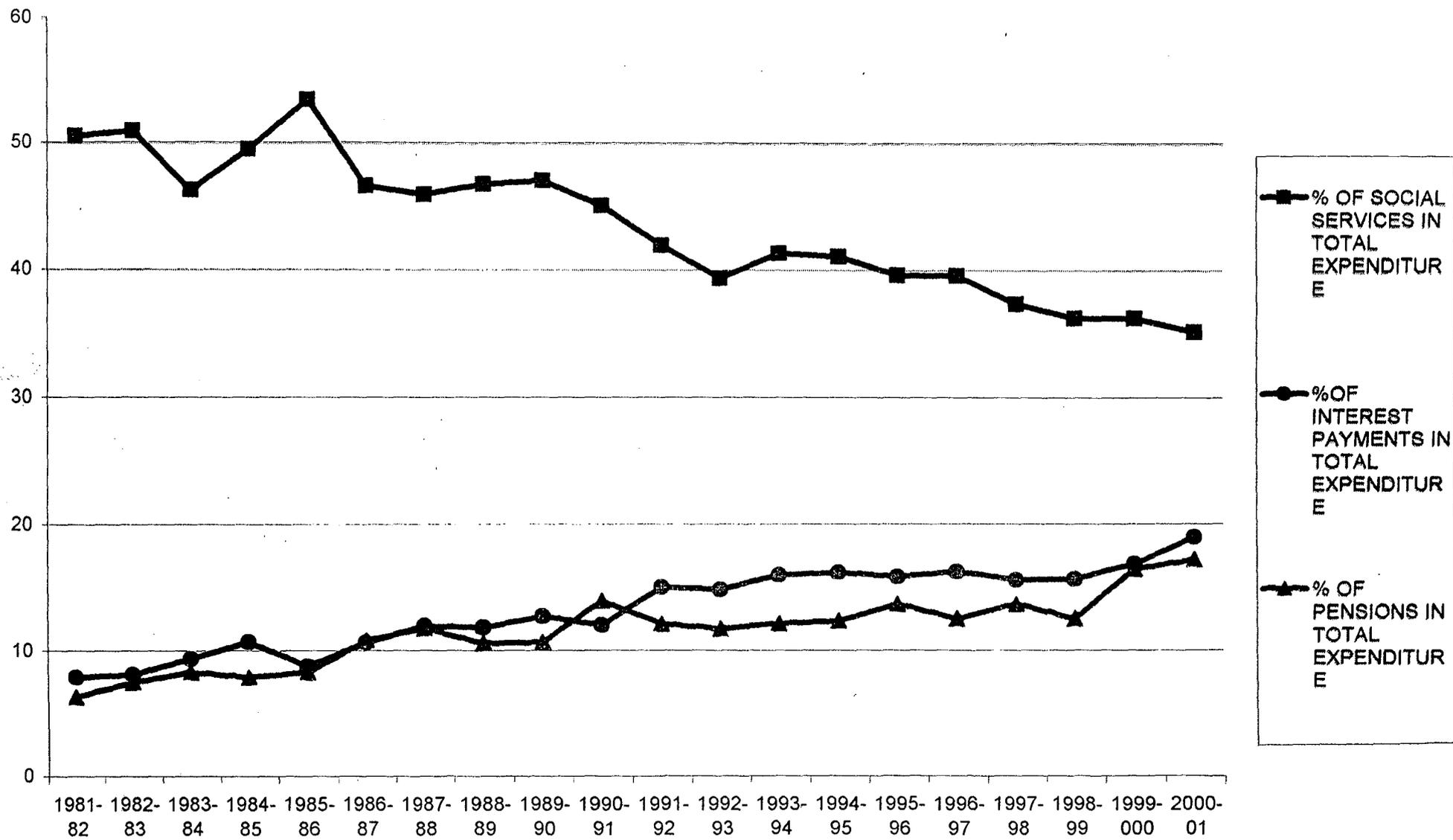
#### **4.9 REPURCUSSIONS ON THE SOCIAL SECTOR**

##### **4.9.1 Composition Of The Total Expenditure**

Keralas high social indicators have been mainly explained in terms of its high social spending. In 1970-71 Kerala was spending as high as 60% on social services. A decade later Kerala still spent about half of its total expenditure to sustain its social sector development. The fiscal crises on the state have however reduced the share that has gone for the sector and in 2000-01 share of the social sector stood at just 35% of the total expenditure. The following table along with the percentage share of social sector expenditure also shows the trends in two major

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<sup>6</sup> Kurien, N.J and Abraham, Joseph, Poor Management of State Finances in Kerala. In Prakash, B.A., (1999), Kerala's Economy Performance, Prospects, Problems



components of the total expenditure viz pensions and interest payments both of which are almost inelastic in nature.

**Table-4.13**

**Percentage Of Social Services, Interest Payments & Pension Payments In Total Expenditure**

<b>Year</b>	<b>% Of Social Services In Total Expenditure</b>	<b>% Of Interest Payments In Total Expenditure</b>	<b>% Of Pensions In Total Expenditure</b>
1981-82	50.57	7.93	6.34
1982-83	50.99	8.14	7.52
1983-84	46.34	9.42	8.33
1984-85	49.55	10.76	7.93
1985-86	53.48	8.82	8.31
1986-87	46.66	10.71	10.85
1987-88	45.99	11.97	11.79
1988-89	46.81	11.86	10.62
1989-90	47.10	12.75	10.72
1990-91	45.13	12.06	13.93
1991-92	41.95	15.03	12.15
1992-93	39.42	14.84	11.79
1993-94	41.38	16.00	12.19
1994-95	41.11	16.18	12.36
1995-96	39.66	15.86	13.68
1996-97	39.64	16.26	12.56
1997-98	37.41	15.61	13.68
1998-99	36.29	15.67	12.36
1999-00	36.30	16.88	16.43
2000-01	35.20	19.91	17.19

**Source:** Same as above

The table given above shows that the share of social sector expenditure to total expenditure has been consistently declining. Though one would consider that it is the non development expenditure that should be subjected to scrutiny and control, the scope of such control in Kerala is limited because of the two main components of such expenditure which are contractual in nature and cannot be reduced in the short run – pension payments and debt servicing, the former rising

from 6.93% in 1980-81 to 18% of total revenue expenditure in 2000-01 and the latter increasing from 7.93% to 20% in the same period. What we see here is that the rise in expenditures to meet the debt servicing obligations and the pension payments have been at the expense of the social sector expenditure which have been seen decreasing continuously since the early eighties. If the current situation continues unabated in terms of the interest payments and the pension payments, the state would see further fall in the share of funds earmarked for the social sector to finance these.

In terms of absolute expenditure made by the government on the social services the study finds that expenditures earmarked for the social sector started witnessing a decline since the mid 1980's, when the state used to spend about 11 percentage of its State Domestic Product on the social services. The below given table shows the declining expenditure on the total social services in the last two decades.

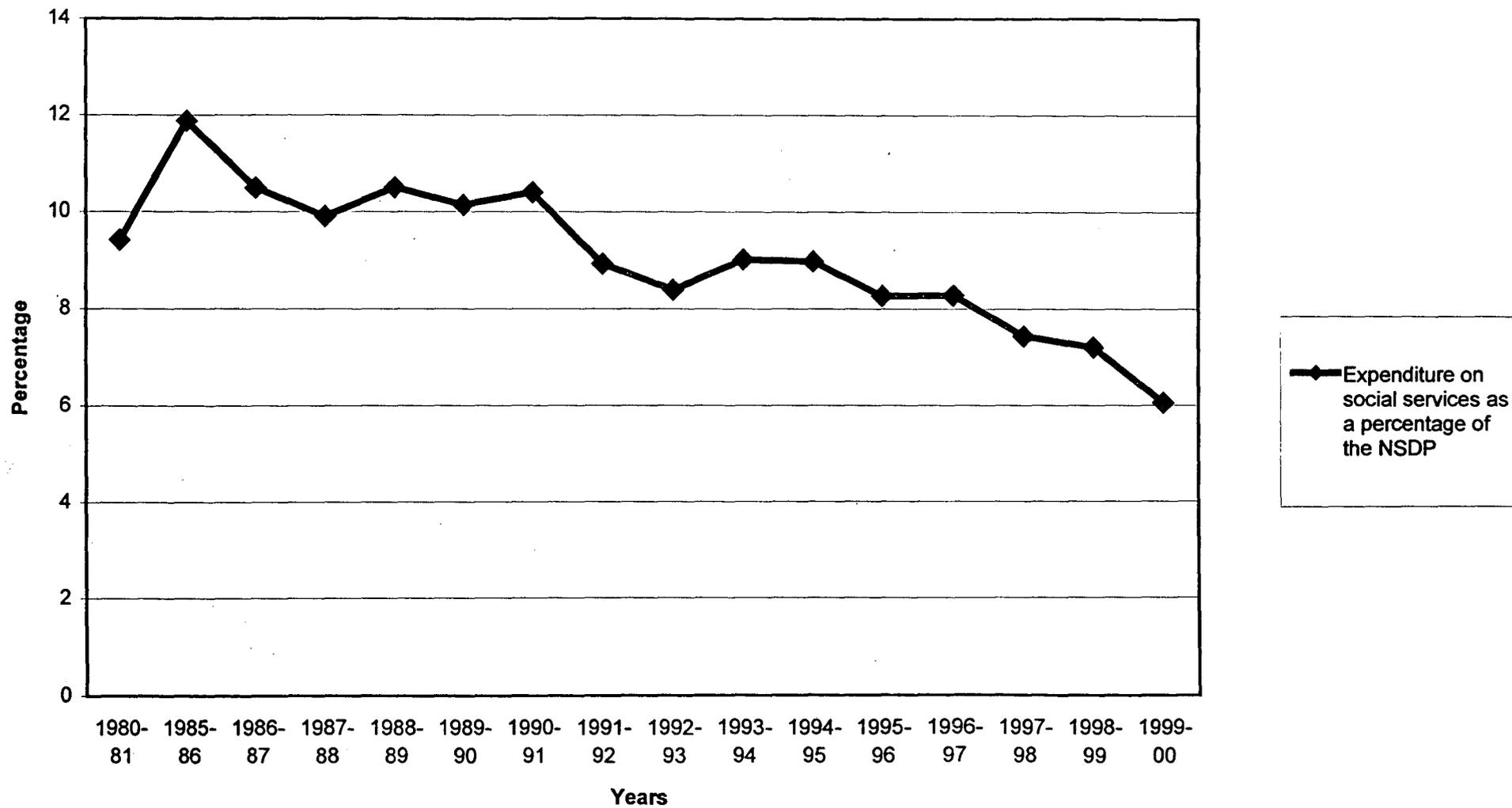
**Table-4.14**

**Expenditure On Social Services As A Percentage Of The NSDP**

<b>S No</b>	<b>Years</b>	<b>Expenditure On Social Services As A Percentage Of The Nsdp</b>
1	1980-81	9.42
2	1985-86	11.88
3	1986-87	10.49
4	1987-88	9.91
5	1988-89	10.5
6	1989-90	10.14
7	1990-91	10.40
8	1991-92	8.93
9	1992-93	8.39
10	1993-94	9.02
11	1994-95	8.98
12	1995-96	8.27
13	1996-97	8.28
14	1997-98	7.44
15	1998-99	7.21
16	1999-00	6.06

*Source Calculated From The State Budget Papers*

### Expenditure on social services as a percentage of the NSDP



Here we see that as a percentage of NSDP the share of social sector has declined by almost half in fifteen years i.e. from 11.88 percent in 1985-86 to 6 percentage in 1999-000. The decline has been almost continuous in the nineties

Even in an era of globalization and privatization where the government is widely accepted to play a minimum interventionist role, the social sector is one area, which has been accepted by one and all for maximum government intervention and participation. It is of utmost importance for any government to ensure that people are not devoid of basic necessities of life. And for this it is necessary that the expenditure on the crucial areas of education and health are not cut to necessitate their spending elsewhere. In the mid 1980's Kerala held the pride of place for spending more than 6 percent of its State Domestic Product on education, the only state then to meet the norms recommended by the Kothari Commission. However the financial crisis faced by the state has forced it to withdraw funds from the crucial social sectors of education and health, the higher attainments levels of which essentially resulted in Kerala becoming a model state. The below given table shows the expenditure made by the government on these two sectors both as a percentage of NSDP and as a percentage of the total expenditure made by the government.

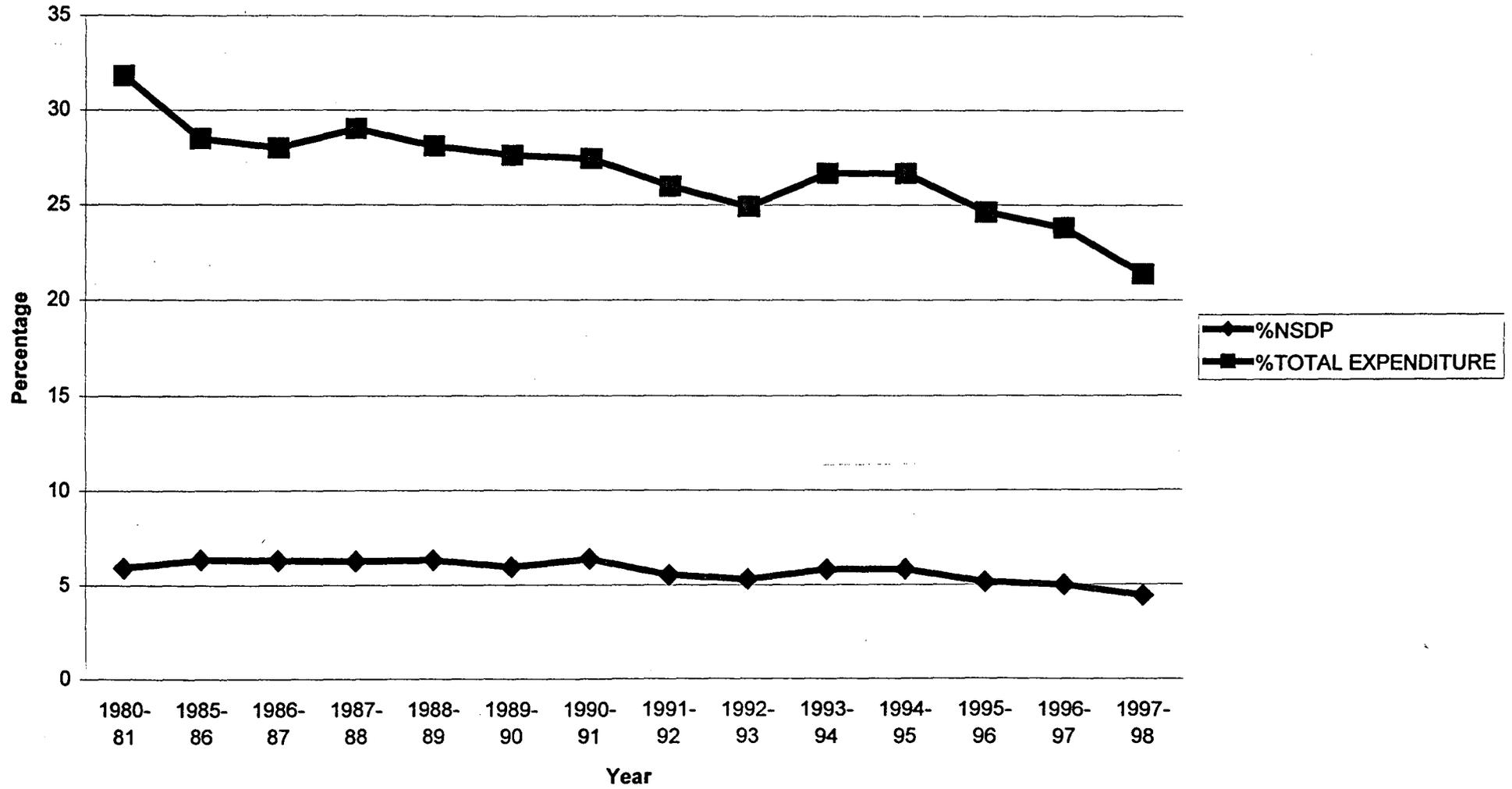
Table 4.15 shows the consequences of the fall in the share of the expenditure allocated to the social sector. In terms of the expenditure on social sector as a percentage of the total expenditure it has fallen from about 30 percent in the 1980's to 20 percent by the end of the 90's. The weaknesses of the educational system in Kerala have been explained in the second chapter. The study revealed the need for the state to spend more on Higher Education and Technical Education to improve the quality of education in the state. Also the composition of expenditure showed a large proportion of expenditure on the compensation of employees resulting in the lack of funds for other expenditure including the maintenance of the large social infrastructure.

**Table-4.15****Expenditure On Education And Health As A Percentage Of Nsdp And  
Total Expenditure**

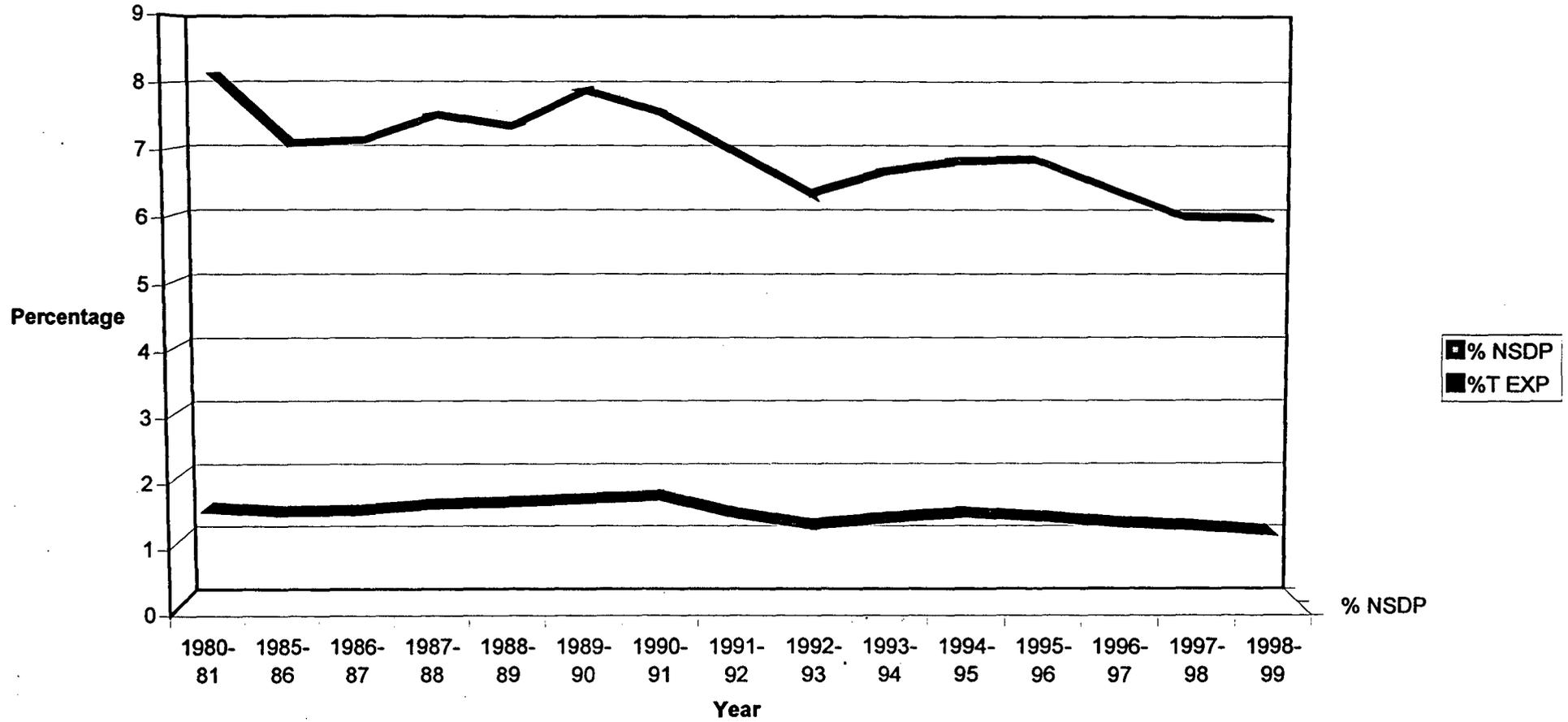
<b>S No</b>	<b>Year</b>	<b>Education</b>		<b>Health</b>	
		<b>%Nsdp</b>	<b>%Total Expenditure</b>	<b>% NSDP</b>	<b>%T EXP</b>
1	1980-81	5.92	31.8	1.56	8.09
8	1985-86	6.34	28.5	1.50	7.05
3	1986-87	6.30	28	1.52	7.10
4	1987-88	6.26	29.03	1.61	7.49
5	1988-89	6.31	28.12	1.64	7.32
6	1989-90	5.95	27.64	1.69	7.87
7	1990-91	6.37	27.45	1.74	7.53
8	1991-92	5.53	25.99	1.47	6.92
9	1992-93	5.30	24.93	1.30	6.29
10	1993-94	5.81	26.68	1.40	6.62
11	1994-95	5.82	26.67	1.48	6.78
12	1995-96	5.14	24.63	1.42	6.81
13	1996-97	4.97	23.81	1.33	6.37
14	1997-98	4.41	21.37	1.28	5.93
15	1998-99	4.35	21.22	1.20	5.91

**Source:** Calculated from the State Budget Papers

**Expenditure on Education as a Percentage of NSDP and Total Expenditure**



**Expenditure on Health as a Percentage of NSDP and Total Expenditure**



Thus the declining share allotted to the sector over the years has meant that after paying up for the almost inelastic component of wages and salaries, funds available for the other important purposes has been declining overtime. Even the Kothari Commission's recommendation of the need to spend at least 6 percent of a state's NSDP on education has not been adhered to by the government since the early nineties and by 1998-99 the expenditure on education fell to as low as 4.3 percent.

The second chapter also showed that the Public Health System in Kerala has been getting alienated from the people. This has been owing to the declining governments investment in the sector and mushrooming of the private medical institutions resulting in the high cost of health care, putting a question mark over the affordability to the poor. The table above shows the falling share of the health sector both as a percentage of the State Domestic Product and as a percentage of the total expenditure of the state. Unless the sector gets its due share the poor and the marginalized sections of the population would be the most affected by the rising cost of medical care in the state.

#### **4.9.2. Compound Annual Growth Rates Of Per Capita Real Expenditures On Education And Health: An Inter State Analyses**

The compound annual growth rate of per capita real expenditures on education and health, which has seen the greatest decline in the nineties, is given in the table below. To give a comparative perspective the growth in expenditure pattern of the 15 major states are given as below.

The figures given in table 4.16 shows that while there has been a greater increase in the per capita real expenditures in these sectors in most of the states, Kerala's case has been different. While in per capita real terms, the expenditure did increase in the early 90's, the second half saw negative growth rates. The same holds for both the education and the health sectors

**Table-4.16****Compound Annual Growth Rates Of Per Capita Real Expenditures**

<b>S No</b>	<b>States</b>	<b>Education</b>		<b>Health</b>	
		<b>1991-95</b>	<b>1995-000</b>	<b>1991-95</b>	<b>1995-000</b>
1.	ANDHRA	-1.12	9.48	-6.7	4.57
2.	ASSAM	3.58	8.71	18.2	20.04
3.	BIHAR	-3.11	10.5	.91	-3.33
4.	GUJARAT	2.21	7.65	.51	13.5
5.	HARYANA	2.5	8.12	8.7	4.37
6.	KARNATAKA	3.9	2.54	-1.1	-3.31
7.	KERALA	8.4	-7.90	1.98	-2.19
8.	MADHYA PRADESH	0.19	1.8	9.60	18.99
9.	MAHARASHTRA	0.86	1.45	1.96	-3.10
10.	ORISSA	2.36	12.37	4.66	-.42
11.	PUNJAB	-2.27	4.55	-19.8	-5.99
12.	RAJASTHAN	7.43	1.66	1.5	8.47
13.	TAMIL NADU	6.19	3.42	8.7	10.35
14.	U. P.	2.14	4.79	-1.2	1.58
15.	WEST BENGAL	2.16	14.92	4.02	10.27

**Source-RBI Bulletins On State Finances**

#### 4.9.2 SALARIES

The main reason for the increasing financial woes of the government is the disproportionate amounts spend on salaries of government employees. While salary expenditure on social and economic sectors would be justifiable on grounds of sustainability of infrastructure there is a need to reduce salary expenditure wherever possible.

**Table-4.17**

#### **Real Expenditure On Salaries**

<b>Year</b>	<b>Total salary expenditure(lakhs)</b>	<b>Real Expenditure</b>
1982-83	45467.54	37332.73
1983-84	50371.43	34034.75
1984-85	56371.48	36038.69
1985-86	63543.31	39964.30
1986-87	73971.32	40201.80
1987-88	80485.71	40649.34
1988-89	92199.99	46099.99
1989-90	135606.00	62204.50
1990-91	168265.00	72841.99
1991-92	138359.00	45624.65
1992-93	141946.00	47632.88
1993-94	183613.00	59230.00
1994-95	219425.00	62336.64
1995-96	223040.00	54533.01
1996-97	261666.00	57635.68
1997-98	280326.00	57401.00
1998-99	325468.00	57401.76
1999-2000	450286.00	58212.32

**Source:** Same As Above

A very large share of resource appropriated by state government is utilized in paying salaries of personnel. Also the amount distributed

has actually increased in real amounts. In real terms the state employees are receiving much more than what they were getting in the eighties. With most PSU's turning out to be loss making and with general overstaffing in the government offices the wage increases certainly have not been commensurate by increase in the productivity. Hence there lies no justification for the several fold increase in the salaries that has taken place in the state

If one sees the percentage share of expenditure categories under major health category (given table) one can see the increasing share of expenditure on pay and allowances.

**TABLE-4.18**

**Composition Of Health Expenditure**

<b>Heads</b>	<b>1960</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>
Pay and allowances	36.60	54.52	52.24	56.94	62.48	62.78
Hospital accessories	2.55	3.19	3.196	3.45	2.36	3.93

**Source** S.Rajeev, EPW, August, 11, 2001

Thus we can see that the expenditure on pay and allowances of the health services personnel, which constituted only 36.6% of the total expenditure in 1960, has risen steadily at the expense of other categories. The percentage share of expenditure on hospital accessories where a rising trend would have been necessary to keep up with the developments in technology have remained at the 1960 levels. Hence where investment on drugs supplementary nutrition, equipment and buildings are reduced, consumers of public providers of health services will stand to lose. But the worst affected will be the poor who would have received these free of cost. Even in the education sector it is estimated that more than 90% of expenditure is on salary and other personnel related items (table is given in the earlier chapter) With such

high proportion spent on salaries, very little is left for current expenses or modernizing facilities

#### 4.9.2 Capital Expenditure

With the expansion of administrative machinery and the pay revisions. What has also suffered is the amount of capital expenditure incurred by the government. Ultimately it is the capital expenditure, which is needed to accelerate growth since this expenditure is what contributes to the increase in assets and physical infrastructure.

**Table-4.19**

#### **Capital Expenditure On Social Services**

<b>Year</b>	<b>Total capital expenditure on Social Services</b>	<b>Total real Expenditure</b>	<b>Per capita real Expenditure</b>
1981-82	3138	2971.05	11.56
1982-83	3479	2856.55	10.96
1984-85	4559	2925.99	10.93
1985-86	4413	2772.00	10.22
1986-87	5609	3045.39	11.08
1987-88	4411	2225.19	7.91
1988-89	2301	1148.83	4.04
1989-90	2496	1144.69	3.98
1990-91	3521	1522.06	5.25
1991-92	3352	1190.76	4.28
1992-93	3811	1276.20	4.05
1993-94	4762	1535.08	5.08
1994-95	4430	1258.45	4.11
1995-96	6902	1686.45	5.44
1996-97	8301	1827.89	5.81
1997-98	7905	1556.07	4.88
1998-99	8003	1408.90	4.36

**Source** Calculated From The State Budget Papers

The table shows declining per capita real capital expenditures on social services. This could be reflective of the fact that with stagnant economic growth, the state would not be able to consistently devote more resources to the social sector. If this downtrend continues which is likely to be the case, the current position that the state enjoys in terms of its high achievements in the social indicators may well be threatened.

#### **4.9.5 CONCLUSION**

As seen from the above analyses the state of Kerala is facing deep fiscal crisis. The revenue and fiscal deficit of the state of Kerala is clearly unsustainable. The indebtedness is also on the higher side. The financial crisis of the kerala government is not of recent origin although its frequency and magnitude have increased in the recent years. The budgetary deficits have undoubtedly been a common problem for all the states but their magnitudes and frequency have been small as compared to Kerala. Kerala has also been carving out surpluses on its capital account in order to finance at least partly its current revenue deficits. The diversion of capital funds to finance revenue expenditure is fraught with grave consequences. The diversion of capital funds to finance revenue expenditure reduces the volume of capital expenditure. Besides the utilization of interest bearing loan funds for current consumption expenditure is bound to aggravate the debt-servicing problem in future. Thus financing revenue deficits through borrowings is not healthy as that would lead to increasing indebtedness without creation of physical assets, thus inhibiting the economic growth. due to large scale diversion of development funds for non plan purposes .Kerala,s problem of increasing revenue deficit has its origin in the non plan account itself. In spite of utilizing all additional resources mobilized the state finds it difficult to meet all its non-plan revenue expenditure. The main reason for the origination of the crisis in the non plan revenue account is the preponderance of non plan expenditure in Kerala,s total expenditure

For the higher ratio of non plan expenditure in Kerala,s there are three main reasons. First there is the predominance of social services

particularly education in the total revenue expenditure. The non-plan component of expenditure on these services is considerably higher than that of the economic services. Second, even for social and community services its non plan component is higher in Kerala because the high volume of past plan expenditure on these services gets accumulated as non plan expenditure at the end of each plan. Third the share of non-development expenditure almost all of which are of non-plan character has been higher in the State. Hence what the state needs to do is to control its non-plan expenditure by cutting down its increasingly high level of non-development expenditure.

However disaggregation of non-development expenditure shows that two out of the three major categories of non-developmental expenditure, i.e. debt servicing and pension payments are contractual in nature, which are not amenable to control in the short run. This leaves us with the expenditure on Government services (e.g. Organs of the state, fiscal services and administrative services) as the more or less only controllable factor in the short run

Both the share of pension payments and that of debt servicing have been shown in the chapter. The share of total expenditure of interest payments has gone up steeply during the past two decades. The considerably higher share of debt servicing leaves little for other expenditures of non-plan capital account.

The share of pension payments is considerably higher in Kerala and does not show any scope for reduction in the coming years. The reason for the higher proportion of pension payments is owing to different reasons. One, the retirement age in the state, which is 55 years, is lower than in other states and the Central Government employees. This is despite the state having the highest life expectancy. Secondly, commutation rules have been made more liberal in the state. Thirdly, due to the declining death rate of people above 55 years, the numbers of years for which pension payments are to be made have increased. Fourthly, the state has undertaken the direct responsibility for paying

pension payments to teaching and non teaching staff of all aided private schools and colleges.. Pension payments are likely to rise still more in the future, as life expectancy increases.

Non-plan expenditure under development heads has its genesis in the past plans. At the expiry of each plan completed plan schemes are continued in the non-plan account as committed expenditure. In case the past plan scheme is a capital intensive one, only the maintenance expenditure on the capital asset created will become a charge on the non-plan account. On the other hand a large proportion of expenditure on the schemes with large revenue content will have to be carried forward in the non-plan account. In the case of such scheme most of the past expenditure in them gets accumulated in the non-plan account on the expiry of successive plants. This is the reason why expenditure on social and community services with its large revenue content generates a larger proportion of its non-plan expenditure as compared to expenditure on economic services. Also expenditure on social services has a large staff component and thus the share of compensation of employees is higher for these sectors (given for the education sector in the previous chapter). The higher staff component of expenditure on social services not only pumps up the salary bills but also the pension bills of the employees. There are few state governments in India that spends such a large proportion of their budget on paying salaries, pensions and interest charges. The present generations of Kerala in other words are living at the expense of the future generations<sup>7</sup>.

Right from the mid 70s, two challenges have plagued Kerala – the slow growth of the economy and the liquidity crisis faced by the governments. The capital investment programmes have suffered from very acute resource scarcity. This has two direct and deleterious consequences. Firstly, it prevents potential gains in output and productivity from being realized. Secondly, it leads to starkly rising internal debt and interest liabilities of the state. Today the financial

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<sup>7</sup> Kerala's Fiscal Crisis: A Diagnosis – K.K.George,EPW,September 15,1990

crisis of the governments has affected the social sectors too (depicted by the decline in social spending) which was once a well guarded pride of place for the state. As seen in the second chapter, in terms of most parameters of social development the profile of the state is significantly ahead of the national figures. However, the unique achievements of the state in social development are getting undermined on account of lack of funds for proper maintenance of infrastructure in the social sectors. The weaknesses of the Kerala model have also been analyzed in the second chapter. The fall in the committed expenditure towards the social sector would enhance these weaknesses even further, threatening even what the state has achieved so far (leave alone improving these achievements)

The resource base of the state is too far limited to meet the growing expenditure commitments. The tax receipts in the state have exhibited a certain degree of rigidity during the 90s. The State's tax base has remained narrow with greater dependence on the Sales tax in particular. Today the state's own tax revenue receipts finance only 32-34 percent of the total expenditure.

**FINDINGS OF THE STUDY**

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This study was an attempt to take a fresh look at the problem of sustainability with regard to the development achievements of Kerala. The study focused on the role that state governments have played in the emergence of Kerala as a model state and the threat that is posed to the development achievements by the withdrawal of the government from the social sectors. The declining expenditures earmarked for the social sectors has been due to the increasing magnitude of the fiscal crisis experienced by the state especially in the nineties.

In the first chapter some important research questions central to the study are posed and an attempt is made to answer these in the subsequent chapters. Chapter one dealt with the list of factors that led to the emergence of the Kerala model and also the major factors that are threatening its sustainability. In the discussions at the First International congress on Kerala Studies ISSAC & M.THARAKAN had pointed out that “the state needed to draw up a new agenda that is more responsive to the changed reality of Contemporary Kerala.” At the same Congress, veteran CPM leader Namboodiripad too pointed out the need to accelerate economic growth without sacrificing the welfare gains and the democratic achievements of the past.”

In the subsequent chapters, the study reviews the social achievements of the State of Kerala, makes a comparative analysis of the State with other states in terms of both the development achievements and the factors that have made it possible, explains the weaknesses that the major social sectors of the state faces and above all judges the sustainability of Kerala’s achievements (in the light of the financial difficulties of the State) which is the central objective of the dissertation.

In the first chapter an attempt was made to analyze in detail the factors that have made Kerala a model state in social achievements. This was made in light of the major social, economic and political

transformations that took place in Kerala starting from the pre-independence era. While these changes had roots in Kerala's history, they were also in important sense, achievements of public action. There were many factors that built up the requisite atmosphere in the state, which made the implementation of social policies easier and later made these quite successful. A major factor was the prevalence of mass literacy (promoted initially by the rulers of the princely states, not to leave behind the efforts of the Christian missionaries in promoting literacy among the socially disadvantaged). The enlightened social attitudes towards the girls and promotion of literacy among them was perhaps one of the most notable factors that not only contributed to the educational attainments of the state but also created awareness among them which in the long run were to a significant degree responsible for the improvement in the health indicators. However, be it promotion of literacy or the several other factors that have contributed to the making up of the model, what has made it possible is the public policy interventions of the governments.

The initiatives taken by the successive governments of Kerala, since independence in the social sectors most importantly Education, Health and Social Security have undoubtedly been the backbone of Kerala's development achievements. This does not only include the larger expenditure of the State in all these sectors but also the several other initiatives without which Kerala could not have come to the take off stages in terms of its social development. This includes the transformation of agrarian relations giving the necessary economic clout to a whole lot of socially disadvantaged, thereby bringing about important changes in the conditions of social life of the people of oppressed castes.

Chapter one has analyzed each of the factors that has contributed in making Kerala a model state with special attention to the role of public action and the initiatives of the state governments, which this study considers as the most important causative factor behind Kerala's development achievements. The second part of the chapter discusses

the question central to the study viz. the sustainability of the model. The initial wave of enthusiasm on Kerala studies (which had resulted in a number of research work published on Kerala) had its origin in the mid 70s when a study by the Centre of Development Studies, Thiruvananthapuram highlighted certain key development achievements of the state in health and education. The initial euphoria over a poor third world region like Kerala being able to provide high physical quality of life for its people did lead to Kerala being hailed as a relatively inexpensive model of development (Kerala model), a model for ensuring reasonably high quality of life for the people in poor countries without for them having to wait for reaching higher stages of economic growth and development.

While it was the general background of underdevelopment of the State in terms of economic indicators which made the development achievements of Kerala, a unique one, continuing development crisis of the state manifested in the long drawn out stagnation of the agricultural and industrial sectors of the economy and the inability of the government to continue its high levels of social spending owing to the recurring financial crisis experienced by the State Governments, particularly in the nineties, have been sending alarm signals to the many development thinkers including the ones who were the ardent admirers of the so called Kerala model at one point of time. The development crisis has only further weakened the base of domestic production on which the edifice of Kerala model has been built. With the crisis gripping the economy the focus of research has hence shifted from the gains of social development and the attempts to solve the Kerala riddle to the question of sustainability of the model. Sustainability of the model is defined as the ability of the state to maintain its lead in terms of the statistical quality of life indicators on account of the adverse effects of the financial crises of the Government, following which there has been reduced social spending and withdrawal of the government from the key areas of education and health. The chapter gives the views of different

development economists who believe the Kerala model cannot be sustainable, given nothing is done to improve the present scenario.

In this regard the view of RICHARD FRANKE & BARBARA CHASIN have been discussed in some detail since he has viewed the crisis from eight different perspectives each one threatening the development achievements of the State. In his study, *Perils of Social Development without Economic Growth*, J. Tharamangalam discussed at length the crisis gripping the Kerala economy and the possible repercussions on the social sector. He cites the cost of attaining social development itself responsible for the present crisis of the state. However, it is K.K. GEORGE (*Limits to Kerala model of development*) who dwelt at length on the financial crisis experienced by the state and its threatening impact on the Kerala model. Thus Chapter one is a detailed analysis covering the success of Kerala and the reasons why a question of sustainability of Kerala model has become the prominent question now.

The second chapter includes an analysis of the strengths of the model and the weaknesses of it in terms of important input and output indicators. Among the important health indicators compared and analyzed include the Crude Birth Rates, Crude Death rates, Total Fertility Rates, Infant Mortality Rates, Neo natal Mortality Rates, Expectation of life at age one and persons not expected to survive beyond age 40. The comparison of Kerala is made with other states and India as a whole. The significance of each of these indicators in evaluating the health attainments of the population is analyzed. It is seen that in comparative terms, Kerala remains way ahead of the rest in all these social indicators.

The indicators to analyze the educational attainments include the Literacy rates, the Literacy gap (gap between the male and female literacy rates), the percentage distribution of the household population by the levels of education and the median number of years of schooling. Literacy levels as such have always been high in Kerala and way above the All India average. Also the enlightened social attitudes towards girls and encouragement given to women's education since earlier times has

ensured that literacy gap of the state is extremely less and much below those of other states and India as a whole. The study points out that Kerala remains the only state to have attained the constitutionally set target of 8 years of median number of years of schooling.

The study also analyses key input indicators in the education and health sectors to relate the achievements / failures of the states with these. The input indicators analyzed for the health sector include the number of Hospitals per lakh population, the number of beds per lakh population, the number of medical personnel (Doctors and nurses) per lakh population and the births delivered in the medical institutions (rural and urban) over the years. The study clearly shows that the Kerala government created a much better physical infrastructure for its population compared with other states of the country. Also Kerala does not only have the highest number of hospitals, beds and medical personnel but also better utilization of the institutional facilities as indicated by the percentage of births attended by medical professionals which is almost near universal in the urban areas. Undoubtedly Kerala's achievements have been to a great extent the result of the higher commitment of the government reflected in terms of its high spending on health and the huge infrastructure that it has built over the years.

The input indicators relating to the education sector that are included in the study include the availability of physical infrastructure in schools, like availability of blackboards and other furniture, the availability of ancillary facilities like drinking water, lavatory facilities etc, the teacher pupil ratio and the number of female teachers per hundred male teachers. The study points out that the school environment in Kerala is much more conducive to learning with greater availability of ancillary facilities and other important infrastructure. Similarly the state has the most favorable teacher pupil ratio both at the primary and higher secondary levels. The gender wise classification of teachers' show that female teachers are much higher than male teachers in the primary and higher secondary levels. This particularly helps

greater enrolment in rural areas where the presence of female teachers act as an additional incentive for parents to send children to school.

The second Chapter analyses the weaknesses of the model or rather the difficulties faced by the people of the state owing to the reduced social spending of the state. The repercussions on major sectors of the state viz. health, education and social security owing to the withdrawal of the government is carefully examined and broad conclusions drawn.

Broadly expenditure on social services as a percentage of total expenditure has increased for most of the states. On the other hand, Kerala, which had always devoted more of its expenditure to the social sector, have seen a fall in this and the states figures stand at a comparable position with other states today. A breakup of total expenditure into revenue and capital expenditure further shows that there has been a perceptible fall in both the revenue and capital expenditure (as % of total expenditure). While owing to the larger social infrastructure constructed over the years, the state needs to spend more, the falling revenue expenditure on social services implies that lesser funds are available for maintenance.

In Kerala, the health miracle was built on the solid foundations of active public support which ensured that the key dimensions of health services that determine the extent of equity i.e. access cost and range of quality of services to people are taken care of. The hallmarks of the Kerala model have been its Universal accessibility and low cost of health care. With these, Kerala proved empirically that impressive achievement levels in terms of the health indicators like infant mortality rates; life expectancy rates etc. could be achieved even before high real levels of income are attained and that some aspects of development do not have to wait for economic growth. The decline in the share of expenditure made to the health sector is shown in the study and this means that lesser resources are being deployed for building up the health care infrastructure in the public sector. We see that the percentage of private institutions and the percentage of beds in private institutions have grown

at a rapid pace since the 1970s and today private sector medical institutions dominate the health sector. Also in the comparatively underdeveloped districts of Kasargode, Waynad and Idukki, the number of medical institutions have actually seen a fall. Further except in the well-developed regions like Thiruvananthapuram, Kottoyam, Ernakulam, the bed-population ratio of the government medical institutions have actually (declined) worsened. From the 42<sup>nd</sup> and 52<sup>nd</sup> Rounds of the NSSO dealing with the utilization of medical care in the state we note that the share of public providers in the treated illness in both inpatient and outpatient care has declined tremendously from the mid 80s to the mid 90s. While there has been a fall in the share of the outpatient and inpatient care provided by public medical institutions, the fall has been more in case of inpatient care in the urban areas. The reason should be the higher quality consciousness among the urban people and the availability of better quality health services from the private providers. That the affordability of health services has become a problem for the poor is also reflected by the fall in the percentage of free in-patient and outpatient care as a proportion of the total services available to the people. The demand for services from the private health sector can be highly inelastic in the absence of a functioning health system and unless people have an alternative, they may be compelled to pay high prices or be forced to get out of the health services altogether which could threaten the high health attainments of the state. The study also points out the huge differences in the cost of treatment in public and private medical institutions.

Statistical evidences of health care becoming increasingly difficult for the poor people to access is reflected from the reasons given by the people for not availing treatment in the mid 80s and in the mid 90s. The proportion of people who were unable to access health care because of financial reasons went up significantly in the urban areas. Further, there was an increase in the proportion of people who cited the lack of medical facilities as the reason for lack of treatment. This proportion has gone up more in the rural areas reflecting the fact that the

withdrawal of government from the health sector and the burgeoning of private medical institutions have adversely affected the rural population more. Also the people who cited their health problems being not serious enough so as to avail treatment from the medical Institutions has seen a significant fall between the two periods. This points out the important fact that not availing treatment has become less of a voluntary decision at present. The above findings point out that it is the adverse consequences resulting from the inability of the government in facilitating accessible and affordable medical facilities to the people that is forcing them to opt out of the health services altogether. The study, therefore, clearly points out the need for the government to respond to the imminent crisis in the health sector in the state if Kerala's health achievements are to be sustained.

The study gives a review of the social security system in Kerala, which has been an exception in the country in being relatively successful in providing protective measures to a sizeable proportion of the unorganized sector. With more than 35 social security schemes in implementation, 16 being financed entirely by the state exchequer, the study considered it significant to examine the consequences of the fall in social spending on the sector. The study gives a detailed analysis of the two major initiatives in social security, having considerable impact in terms of budgetary commitment and physical coverage viz. the Kerala destitute and Widows Pension Scheme and the Agricultural Workers Pension Scheme. Besides these Kerala being the home of the largest number of educated unemployed, the study also gives an analysis of the Unemployment Assistance Scheme.

The expenditures incurred and the beneficiaries of each of these schemes are analyzed in the chapter. In case of Kerala old age pension scheme, the physical coverage of the scheme has actually declined in these two decades. Further when we examine the absolute and real amount disbursed by the Government on all these schemes we see the declining amount in real terms that the beneficiaries have been receiving overtime. The real amounts received were too meager owing to the

erosion caused by inflation. ). If at all these schemes have to help the needy, the amount disbursed would have to be increased. Also, given the demographic transition, a multifold increase in expenditures would be required even if the present coverage is to be maintained.

In the education sector, the study concentrates on the expenditure pattern of the states. It is to be noted that this has hardly seen much of a change in the past two decades. The planners and policymakers have so far ignored the changes taking place in the society owing to the demographic transition. The study shows the falling growth rate of the population leading to decline in the school enrolments. Kerala being a state with high literacy rates and also witnessing a perceptible deceleration in the population growth, there are strong arguments for reducing the government expenditure on elementary education. Yet in the past two decades the composition of expenditure has continued to tilt heavily towards primary and secondary education. That the quality of education in the state is not commendable is well known. Also given the highest number of educated unemployed in the state, the need clearly is to upgrade University and Higher education and more importantly the technical education. However, as a proportion of the NSDP and total expenditure, the funds devoted for the education sector has declined tremendously in the last two decades. The proportion of higher and technical education in the total expenditure remaining almost constant, the declining government expenditure on the education sector as a whole has meant that in spite of the need to spent more on these, the expenditures on University and technical education has actually been falling overtime.

The study also depicts the continuous decline in the school going population, thereby promoting the case for enhancing expenditures to improve the quality of higher education. Another difficulty that the state faces owing to the implementation of successive pay commission awards is that the composition of expenditure in the education sector is tilted heavily towards the compensation of employers. As a result of this, hardly any funds are left after paying wages and salaries to employees of

the education sector. This would in the long run further affect the quality of education in Kerala be it elementary, secondary, University and higher education or the technical education.

Given the unchallengeable role played by the state governments over the years in the evolution of Kerala as a model state, the study probes into the financial crisis that has gripped the state in the third chapter. A deep insight into the nature of state finances over the years is given and its possible repercussions on the nature of development policies of the state is evaluated. The magnitude of the fiscal crises is shown in the terms of certain indicators. There has been an inordinate growth of revenue deficit and gross fiscal deficit particularly at the end of 90s.

On the revenue side, the analysis points out the gap in the collection of sales tax. While the tertiary sectors have seen growth in the 90s, the growth in the revenue receipts has not been commensurate to this. The revenue receipts have been further pulled down by the declining trend in the collection of state excise duties and the almost stagnant revenue from stamps and registration fees. The revenue heads have been inelastic with respect to income in the late nineties. The tax receipts of the state have exhibited a certain degree of rigidity during the 90s. Thus the lower revenue mobilization coupled by the need to spend more has added to the woes of the state. The states tax base has remained narrow with greater dependence on the sales tax in particular. Today the states own tax revenue receipts finance only 32-34% of the total expenditure.

On the non-tax revenue front, in the last two decades, 80s and 90s), as a percentage of total revenue, it has reduced to almost half. Other indicators like the per capita non-tax revenue also have seen a fall in this period.

On the expenditure front, the rising total debt of the state is the greatest challenge faced by the state government if its financial condition is to improve. That a substantial portion of the debt is directed towards

revenue expenditure is the most worrying aspect of this problem. That the state crossed the prudential limits regarded for the sustainability of the debt in all the years since 1982-83 reflects the pathetic financial condition of the state. The interest payment, as a proportion of total expenditure has increased to almost three times in the past 20 years. Even the per capital real debt rose by four times in the same period. As a percentage of NSDP too, the debt has more than doubled in the last two decades.

Another inelastic component of Kerala's expenditure are the pension payments, which rose by three times as a proportion of total expenditure. In per capita real terms too, it rose by more than five times. The major reason for the increase in pension payments are the lower retirement age of the state employees, the declining death rate of the people and the greater life expectancy and also owing to the state taking direct responsibility for paying pension payments to the teaching and non teaching staff of all aided private schools and colleges. Owing to all these reasons there is not much scope for the reduction of pension payments in the coming years.

The chapter also analyses another problem facing the state viz the reducing cost recovery from the social services. Kerala having hugely invested in the social and community services, unless revenue generation do not rise proportionately, a deficit would definitely affect the capacity of the state to maintain the level of services provided. With the financial crisis, the reducing cost recovery from the social services will pose major problems for the state to meet the welfare needs of the people.

The repercussions on the social sector of the fall in the government spending are examined in the chapter by analyzing the composition of total expenditure. The composition shows the declining proportion allocated to the social sector along with two components of expenditure, which has been seeing a continuous rise in the past two decades viz. the interest payments and pensions. If this trend continues and the condition of state finances does not see much improvement, the

future would see more cuts in the social sector spending. As a percentage of the state domestic product, the funds allocated to the social sector has almost reduced by half in the two decades covered under the study. The study also showed the break-up of the total expenditure into education and health in terms of their proportion to the NSDP, both of which show a big decline. A further disturbing fact is that the compound annual growth rates of the per capita real expenditures show a negative trend in the nineties which means that the expenditure per person in real terms have actually fallen during the latter half of the decade. The severe decline in the share allocated to the social sector will definitely affect its performance in the near future.

The study finds that the main reason for the increasing financial woes of the government is the disproportionate amounts spend on the salaries of government employees. A very large share of resources appropriated by the state government to pay salaries is without a corresponding increase in productivity. We also see that in real terms too the salary has increased i.e. the compensation of employees has increased at a much greater rate than the inflation rate. This would severely affect the state of affairs in both the education and health sectors. In the health sector, where around 70% of the total expenditure corresponds to salaries, this has lead to reduction in the investment on drugs, supplementary nutrition, equipments and buildings. The adversely affected would obviously be the consumers of public provided health services; and the worst affected would be the poor who would have received these free of cost. In the education sector, where more than 90% of expenditure is on salary and other personnel related items the quality of services has obviously got affected.

The diversion of capital funds to finance the growing revenue expenditure will affect the growth of the Kerala economy since ultimately it is the capital expenditure that is needed to contribute to increase in assets and physical infrastructure. The study points out the drastic decline in the per capita real capital expenditure in the last two decades.

## **5. 1 Conclusion**

Kerala at present faces an inexorable growth of the revenue deficit, an inordinate increase in the public debt as a proportion of the domestic product, increasing reliance on debt for financing revenue expenditure and the commitments on the debt front i.e. debt servicing not seeing any respite. These problems cannot be wished away or left as such thinking that it would get solved automatically.

The fiscally unsustainable situation and its possible adverse repercussions on the Kerala's development achievements have been analyzed in detail in this study. With expenditure being more or less inelastic at present, concentration has to be devoted to enhance the revenue potential. Taking steps to improve the efficiency of the administrative machinery to improve the tax collections is a must in the present scenario particularly considering the inelasticity of the revenue heads with respect to income in the latter half of the nineties. However a quantum jump in the revenue collections that is required at present to finance the growing expenditure with respect to the inelastic components i.e. the pension payments (which is expected to rise in the future owing to the higher life expectancy in the state and with proportion of old age population expected to rise in the future) and the interest payments and most importantly to maintain the level of expenditure required to sustain the massive social infrastructure built over the years, would undoubtedly call for higher rates of growth of the State Domestic Product. This is because low levels of per capita income and the slow growth of the economy impose severe limitations on the revenue raising capacities of the state.

The achievements of Kerala are to a great extent result of the people centric policies and the higher commitment of the state governments towards the social sector. The study has showed that the improvement in the levels of education and health of the population of Kerala is closely related to the pattern of educational and the health care system developed in the state. This system by ensuring its accessibility to the largest number of person has resulted in the highest utilization

ratio achieved by any state in the country. In the weaknesses exhibited by the health sector this study showed that lower commitments of the governments in terms of expenditure has certainly affected the accessibility (declining bed population ratio and number of public medical institution) and affordability of health services in the state. Similarly the study showed the declining expenditure on education. This coupled with the fact that the composition of expenditure continue to maintain the same heavy tilt towards primary and secondary education would result in the deterioration of higher education. The rising unemployment in the state would be a further blight in the model.

The study clearly shows that Kerala has to improve upon the current financial situation and spend adequately on the maintenance of its huge social sector infrastructure. The weaknesses that the important social sectors of the economy faces will further get accentuated if requisite funds are not allocated to these. To sustain the Kerala model that enthralled the development economists for the last two three decades, important steps would have to be taken by the government to improve the condition of the state finances. It should be noted that in the social sector, the private initiative couldn't at any point of time replace the government 's role. At best the private sector can provide only a complementary role, be it in the field of education or in the health sector. Hence if the Kerala model is not to become a thing of the past, the commitment of the government which had once propelled the state into dizzying heights has to be restored once again and it has to be ensured that the social sector gets its due.

## **BIBLIOGRAPHY**

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- Alexander, William (1994): "Exceptional Kerala: Efficient use of Resources and Life Quality in a Non- Affluent Society", GALA (Ecological Perspectives in Science, Humanities and Economics), No. 4 (Heidelberg: Spectrum Akademischer Verlag GmbH)
- Amin. S.(1991). Four comments on Kerala. Monthly Review,42(8),28
- Analysis of Secondary Data of Kerala (2000), South India Human Development Report
- Anand, Sudhir and Sen,Amartya (2000):Human Development and Economic Sustainability,World Development Vol.28,No. 12,pp.2029-2049.
- Bloom, G(1997)- Primary HealthCare meets the Market: Lessons from China and Vietnam, IDS Working Paper 53
- Dev Mahendra S. (1994) : Social Security in the Unorganised Sector ; Lessons from the Experiences of Kerala & Tamil Nadu states. The Indian Journal Of Labour Economics, Vol. 37, No. 4, pp 667-684
- Dreze, Jean and Sen,Amartya (1997): Indian Development:Selected Regional Perspectives. Delhi: Oxford University Press.
- Dreze, Jean and Sen,Amartya. (1989). Hunger and Public Action. Oxford: Clarendon Press
- Dreze,J. and Sen, Amartya.(1995):India Economic Development and Social Opportunity, Delhi: Oxford University Press.
- Duggal, Ravi (1997): Health Care Budgets in a Changing Political Economy, Economic and Political Weekly May 17-24
- Economic Reviews, State Planning Commission, Kerala.

- Franke,R.W,and Chasin,B.H.(2000). Is the Kerala Model Sustainable? Lessons past, prospects for the future. In G. Parayil(Ed), Kerala :The Development Experience : Reflections on the sustainability and replicability, pp.16-39. London: Zed Books.
- Franke,R.w.,and Chasin,B.H.(1994). Kerala: Development through Radical Reform. New Delhi:Promila.
- Franke,R.W.,and Chasin,B.H.(1997):Power to the Malayalee People Economic and Political Weekly,32(48),3061-3068.
- Guhan,S(1992),Social Security for the Unorganised Poor: A Feasible Blueprint ,Paper presented at the Symposium on Economic Growth,Sustalnable Human Developmentand Poverty Alleviation in India,IGIDR,Bombay,3-6 January
- Gumbar, Anil (2001) : Economic Reforms & Health Sector ; Towards Health Equity in India, National Council of Applied Economic Research, Paper presented at the National Seminar on Economic Reforms and Employment in the Indian Economy, March 22-23.
- Heller, P. (1995).From class struggle to class compromise:Redistribution and growth in a South Indian state. Journal of Development Studies,31(5), 645-672
- Heller,P.(2000):Social Capital and the Developmental State : Industrial Workers in Kerala.In G. Parayil(Ed). Kerala: The Development Experience: Reflections on Sustainability and Replicability,London:Zed Books, pp.16-39
- International Conference on Kerala's Development Experience. National and International Dimensions. Abstracts (New Delhi:Institute of Social Sciences)
- International Congress on Kerala Studies-Abstracts, Vol. I (Thiruvananthapuram, A.K.G. Centre for Research and Studies, 5 Vols)

- Iqbal, B (1999) : Peoples' campaign for Decentralised Planning & Health Sector in Kerala , Issue Paper, People's Health Assembly
- Irudaya Rajan, S & U.S. Mishra(1997): Kerala Restructuring Welfare Programmes – Emerging Trends, Economic & Political Weekly – Vol. XXXIII, No. 6, February 8, PP 261-263
- Irudaya Rajan, S. (1996) : Trends and Determinants of Infant Mortality in Kerala , Paper presented at the Seminar on “Role of Non- Government Organization in accelerating the pace of decline in infant mortality”, organized by the Population Foundation of India, New Delhi & International Development for Research Co-operation, Canada at India International Centre, New Delhi, July 29-30
- Irudaya, Rajan (1999) : Ageing and Social Security. In Prakash B.A.'s “Kerala's Economy – Performance, Prospects, Problems, New Delhi pp 49-71
- Isaac,Thomas and Chasin, Barbara,”Kerala:Towards a New Agenda”,EPW,Nos 31 and 32(1995)
- Iyer, R. Ramalingam & Kurup K.N. (1997) : State Finances in India
- James, K.S. (1995) : Demographic Transition and Education In Kerala, Econmic & Political Weekly, December 23
- James,K.S (1995): Demographic Transition and Education in Kerala,
- Jeffrey, R (1987) : Governments and Culture : How women made Kerala literate, In Pacific Affairs, 60(3): pp 447-479
- Joseph, K.P. (1999) : Poor Management of State Finances in Kerala. In Prakash, B.A.'s,”Kerala's Economy - Performance Problems , Prospects, New Delhi, A Sage Publication

- Kannan K.P. (1999) : Poverty Alleviation as advancing basic human capabilities; Kerala's achievements considered, CDS, Thiruvananthapuram
- Kannan K.P. et al (1991) : Health and Development in Kerala, Kerala Shastra Sahithya Parishad, Trivandrum
- Kannan, K.P.(1990), "Kerala Economy at the Crossroads". Economic and Political Weekly, 30, Nos 35 and 36, September 1, 1991-1996
- Kaufman, Daniel & Wang Yan (1995) : Macroeconomic Policies & Project performance in the social sectors ; A model of Human capital production & evidence from the less developed countries. World Development, Vol. 23, No. 5, pp 751-765
- Krishnan, T.N. (1976), Demographic Transition in Kerala, Economic & Political Weekly, August 11 (31-33) 1203-1224
- Krisnankutty, K.P.(2002): Threat of Globalisation to Educational Progress in Kerala: Social Action, 52(4), October -December Issue
- Kunhikannan, K.P and Aravindan, K.P.(1996), Economic and Political Weekly, January 13-20
- Kunhikannan, K.P. & Aravindan, K. P. (1996) : Family health Expenditures after Liberalisation, Economic & Political Weekly, January 13-20
- Lieten, G.K. (2002) : Human Development in Kerala ; Structure and Agency in History, Economic & Political Weekly, April 20, pp 1539-1544
- Mohandas, (1994): Poverty in Kerala . In B.A.Prakash(Ed). Kerala's Economy: Performance, Problems, Prospects. New Delhi: Sage
- Morris, D.M. and Mc Alpin (1982): Measuring the Condition of India's Poor : The Physical Quality of Life Index. New Delhi: Promilla.

- Nair, P.R.G. (1974), "Decline in Birth Rate in Kerala : A Hypothesis about Inter-relationship between Demographic Variables, Health Services and Education, Economic & Political Weekly, 9, pp 323 – 336
- Nambiar, A.C.K(2000):State Level Fiscal Reforms-The Case of Kerala, Indian Journal of Regional Science, VolXXXII, No.1
- Narayana D. (2001) : Macroeconomic Adjustment Policies, Health Sector Reforms and Access to Health Care in India. A study sponsored by the international Development Research Centre (CDS) Thiruvananthapuram
- Narayana, D & Hari Kurup, K.K. (2000) : Decentralisation of the health Care Sector in Kerala, Some Issues, Working Paper no. 298 (CDS Thiruvananthapuram)
- NSSO, Fourty Second Round (1986-87) and Fifty Second Round(1995-96).
- Oommen, M.A. (1993):Essays on Kerala Economy. Oxford and New Delhi: IBH Publishing.
- Parthasarathy, G. (1996) : Social Security & Structural Adjustment. The Indian Journal Of Labour Economics, Vol. 39, No. 1, pp 73-88
- Prakash, B.A. (1999):Kerala's Economy: Performance Problems, Prospects. New Delhi :Sage
- Pushpangadam, K (2002) : Social Returns from Drinking Water, Sanitation & Hygiene Education. A Case Study of two Coastal Villages in Kerala, CDS Thiruvanthapuram
- Rajan,S Irudaya and Mohanachandran,P(1999), Estimating Infant Mortality in Kerala,Economic and Political Weekly,March,20, pp.713-716
- Rammohan, K. T.(2000): Assessing reassessment of the Kerala Model, Economic and Political Weekly, April 8.

- Ratcliffe, J.W.(1978):Social Justice and Demographic Transition: Lessons from India's Kerala. International Journal of Health Services,8(1), 123-144.
- Sadanandan, Rajeev(2001): Government health Services in Kerala, Who Benefits?,Economic and Political Weekly, August,11,pp. 3071-3077.
- Sen, Amartya & Dreze, Jean (2002) : India Development & Participation
- Sen, Amartya (1994) "D.T. Lakadawala Memorial Lecture (New Delhi : Institute of Social Sciences)
- Sen, Gita (1992) : "Social Needs and Public Accountability : The case of kerala", Development Policy and Public Action (Oxford University Press)
- Sen, Gita et al (2002) : Class, Gender and Health Equity : Lessons from Liberalisation in India, Working Paper Series Vol. XII, No. 3
- Sen,A (1987): The standard of living.Cambridge,UK: Cambridge University Press
- Sunder(1995):Household survey of Healthcare Utilization and Expenditure, NCAER, Working Paper No. 53.
- Tharakan, Michael P. K. & Navneetham K. (1999) : Population Projection & Policy implications for Education. A discussion with reference to Kerala, Working Paper no. 296, CDS Thiruvananthapuram
- Tharamangalam, Joseph(1981): Agrarian Class Conflict : The Political Mobilisation of Agricultural Labourers in Kuttanad,South India. (Vancouver:UBC Press, pp. 94-95)
- United Nations(1975):Poverty,Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala, Centre of Development Studies, Thiruvananthapuram. (New York:Department of Economic And Social Affairs, UN)

- Veron, Rene(2001):The'New' Kerala Model:Lessons for sustainable Development, World development,Vol.29,No4,pp. 601- 617
- Veron,Rene(2001)Economic and Political Weekly,December 23
- Zachariah, K.C. et al (1998): Demographic transition in Kerala in the 1980s, Second Edition, Centre for Development Studies, Thiruvananthapuram

