Chapter Seven

SUMMARY, FINDINGS AND CONCLUSIONS

This study has provided significant insights into the demographic dynamics and its implications on sustainable development of Kerala. The important findings of the study can be summarized as follows.

7.1 Improved physical quality of life

The demographic indicators like infant mortality rate, death rate, birth rate, literacy, sex ratio and life expectancy draw a picture of highly improved physical quality of the life of people in the State of Kerala. The fact that such achievements were possible with a very meager per capita income, almost one or two percent of the per capita income of many developed nations in the West, made it all the more interesting. The improvement in communications and telecommunications, health care, absence of epidemics, a well developed public distribution system, universal access to education and relatively better standard of living existing in the State point to this fact. The field study conducted at the micro level also corroborated this fact. One of the major conclusions emerged from the field study was that the overall quality of life has improved significantly in the past three decades. This include better access to education, health care, better sanitation, better housing and improved longevity.
7.2 Density of population

The State is one of the most densely populated states in the country with an average of about 750 people staying in a square kilometer. The unique habitat pattern, the extended village structure and the presence of homestead farms create the problems of density to a certain extent. The rural-urban continuum existing in the State is accelerating the shift from an agrarian society to an urban society. The homestead farms with a high level of integration were an answer to the swelling population and marginalizing land holdings. But the recent trends in land use patterns add fuel to the fire. Increasing number of migration cases in search of employment and lower birth rates are signs in the positive direction. With better land use and habitat pattern the density related problems could be minimized to a certain extent. However the state has to impose restrictions further to control the population, for a few more years. The pressure on land is increasing. A shift in resource use, from ‘exploitation’ to ‘use’ would be able to take care of this problem. A sustainable natural resource use pattern as Gandhiji envisaged in his ‘ideal village’ seems a befitting solution in this context. This will help in consolidating and further improving the quality of life. The micro level study reveals that the density of population has increased over the last three decades and now it is slightly above the state average. A substantial population of the panchayat has been migrated to various places in search of habituation, agriculture and employment. This was precisely because of the high pressure for land in the domestic place.
7.3 Demographic transition

The trends in demographic composition necessitate immediate concern. The percentage of the aged population in the State is growing up rapidly. Decreasing birth rates, death rates and increased longevity are the reasons for this transition. This will have an adverse impact on the society as a whole since there is a reduction in the working class in future. This will also have implications in infrastructure development, as well as maintaining the existing infrastructure. The increase in geriatric problems, and the increasing number of old people also have to be looked at seriously. The social systems require re-tuning to meet this unprecedented demand. The increase in Alzheimer’s disease, and a host of other geriatric issues coupled with the migration of the younger generation to foreign nations or to the other cities can make the problems of the old people really serious. The fragmentation of the family system, result in lesser number of children. The emergence of the profession of home nursing and the increasing number of old age homes are the evidences to prove this fact. The increased life span of females aggregated by the hyper gamy system existing in the State is increasing the number of dependent widows in the society. The effects of demographic transition are visible in society. The low birthrate in the State has already begun to make a number of schools ‘uneconomic’. Birth rate, death rate and infant mortality rate have shown considerable decrease over the last three decades. The life expectancy is well compared with many developed countries. The micro level study also revealed this fact. The trends in the ageing of population in the panchayat have shown a steady increase over the last three decades.
7.4 Trends in resource use

There is an increasing tendency to legitimize the use of non-renewable resources in the State. Increased use of petro-chemical derived inputs in agriculture, oil use in transportation, cooking and in almost all walks of life was promoted by the technological breakthroughs in the past few decades. The subsidized and State controlled marketing of petroleum products made them artificially cheap and discouraged the use of natural products. The increasingly opening economy, emerging consumption patterns fuelled by the large inflow of external remittances are also giving a push to the consumption of non-renewable resources. The shift from renewable resources to non-renewable resources is more visible in house construction and agriculture. The bio-resource flows in the State also have undergone a significant transition. The food imported from states located in distances ranging from 300 to 3000 kilometers are competitive with locally produced food thanks to the subsidized food production and distribution system. When we realize that the transportation and handling of food and vegetables consume a lot of non-renewable resources, we understand the gravity of the situation. Subsidizing the nature's gifts irrationally is equivalent to plundering the nature. The state blessed with a relatively high precipitation rate, and with the flow of 44 rivers, and two monsoons is facing water scarcity in the past couple of decades, and this points to the inadequate water resource management. The State with a lot of potential to harness the hydel power to meet the power requirements is finding it difficult to manage its power demands. The power generation systems, which use non-renewable resources have been introduced and such solutions are getting increased acceptance. The irrational energy use, and the increasing
power demand because of the emerging life-styles have resulted in power shortage in the State. The present trends in housing construction also are such that the new houses require a lot of energy supply for minimum functioning.

7.5 **Shift in cropping pattern and land use: increasing external food dependency**

There is a significant shift in agriculture pattern and crop combinations in the State. The shift is towards the cash crop at the expense of food crops. The prices of land have escalated after the Gulf boom in the 70s and it became commercially unviable to buy land and do agriculture. With the prevailing prices, if the land was purchased for cultivation, even if one goes for the most profitable crop, it will take more than a couple of decades to get the investment back. In such a situation, agriculture is viable only if the land is inherited. Most of the land transactions took place in this period was in favour of the rich, who bought it as an alternative investment. Such owners were never interested in the returns from the land, since they had inherited the land. A lot of wetlands, where paddy cultivation was done was raised and sold as farm plots and the trend continues.

Farmers also opted for the most profitable and less labour intensive crops leaving aside food production. Subsidized public distribution systems also acted as a deterrent to food production. Several agricultural activities had become extinct in this period and the process is still on. Case study conducted in the panchayat substantiates this fact. The food dependency of the State on external sources had gone up considerably, to a stage where three fourths of the total food consumption is imported from outside states. The shift in the land use has resulted in large-scale erosion of genetic diversity -
agricultural, medicinal and the like. Traditional land use patterns and agronomic practices, which had built-in systems of resource conservation, are now conspicuously missing in the emerging land use patterns.

One of the major conclusions emerged from the micro level study in the context of food dependency is that the external food dependency of the panchayat has increased during the last three decades. Most of the food items were came from distances ranging from 300-3000 km. The non-agricultural uses of land in the panchayat is increased. The conversion of paddy fields into housing sites and commercial establishments is a major development over the last three decades. This may be the reason of increased external food dependency. Increase of cash crop cultivation, especially rubber is another development in the panchayat. The crop combination and food habits have changed considerably over the last three decades in the panchayat.

7.6 Trends in health and health care

We had inherited a strong indigenous medicine practice in the State till a decade ago. Knowledge of indigenous medicines inherited from the past took care of most of the small diseases. Maintenance of medicinal herbs was also part of this tradition. With the shift in cropping patterns, and with the invasion of Western medical systems this tradition started to decline. A common man could even identify more than a couple of dozens of herbs and its medicinal applications. These herbs were extensively used in households. Even now the people of the older generation still possess the medicinal knowledge, but unfortunately many of the herbal varieties have disappeared from the
State. The *ayurvedic* system of medicine, which used to be a decentralized medicinal system, is on the verge of commercialization.

However the morbidity rate in the State is on the rise. The increasing figures of drug use in the State indicate the state of health of the population, apparently declining. Increasing dependence on western medical system has promoted a highly commercialized health care system, which is becoming a burden to the population. There is a rise in life-style related illnesses in the State. A lot of drugs to cure the psychological illnesses are also sold in the State. Illnesses like hypertension, heart diseases, diabetics, high cholesterol and other diseases associated with sedentary life-styles are increasing. Even young people, in their mid thirties are also becoming stress patients, may be due to the emerging social systems and employment conditions. The increasing tendency of alcoholism prevalent in the State with the highest per capita alcohol consumption and increasing suicide rate point to the deteriorating health of the people of the State. The emerging materialistic culture is constantly redefining values, which in turn legitimizes the commercialization of health care. The micro level study corroborated this fact. The preference of allopathic medicines and disinterest in traditional knowledge systems is yet another major finding of the micro level study.

### 7.7 Trends in education: need for an education with character

The State being the first to achieve cent percent literacy has a long way to go further in improving the overall education system, both formal and non formal in the system. A need for emphasizing the education of the hand, heart and head is widely felt in the State. The content and method of formal education in the school level is archaic, and failed to absorb innovations. The district primary education program is a change in the
positive direction, but it is already under political opposition. The second and higher phases of the total literacy program is stagnant and requires to be revitalized to reap the benefits of total literacy. The content of education in this sector also requires attention, to include functional literacy at all levels. There is a preference for English medium and private schools in the State than the free education provided by the aided schools or by the government schools. This private education system is not only costly to the society, but introduces children to a different class and culture also. It is a common sight even in the interior villages to find children in suits and tie, carrying heavy school bags going to the local private English medium schools. It has become a common scene now. Commercialized education has become a part of living now. In the meantime there are a number of aided schools becoming uneconomical because of the dependence on family planning programmes. Education has to focus on sustainable development in particular and specialized areas in general.

7.8 **Housing and habitat pattern: emergence of a rurban continuum**

The extended settlement pattern unique to the State is undergoing a rapid transition. The rural urban composition of the population is also undergoing a transition. A rurban continuum is slowly emerging. The habitat pattern is also undergoing similar changes. A significant portion of the external remittances of the State was diverted to the construction sector in the past two decades. The idea of a house of the common man has undergone a change in this period. The material used for house construction, which used to be locally available come from very large distances and are mostly non-renewable. The emerging housing patterns do not match with the humid and hot climate of the region and requires externally supplied energy for the minimum functioning. The
houses are also emerging as a status symbol, creating social unrest. The average size of the houses is going up when the average family size is decreasing. For the people who don’t have access to foreign incomes, savings of a lifetime is required to construct a house. The houses, which used to be in the middle of a highly diverse homestead is becoming a rarity in the State. A functional homestead used to provide a significant percentage of food and other products for daily life. The emerging consumption patterns, where off-the shelf products are easily available to substitute the homestead produce, the urbanized Malayalee prefers to keep his homestead ‘spic and span’ by avoiding any productive or functional plants, instead maintaining a lawn and a garden of most exotic flowers. In the mean time a significant percent of population is still continuing to stay in thatched houses because they cannot afford to do otherwise. There is going to be demand for large number of houses in the couple of decades to come and this calls for careful planning of land allocation and use of resources. The micro level study also points towards this fact.

7.9 Transition in the social system: the state emerging as a post industrial society

The agrarian society in the State is giving way to a postindustrial society, bye passing an industrial society. The large-scale external remittances have significantly influenced the social system and mode of living. The external remittances were not invested to create industrial employment, most of it was spent on constructing large houses for individuals. There was a temporary rise in the employment opportunities in the construction sector for a while, and this prompted many farm hands to shift to the new grounds because of the increased compensation. The preference to mono cropping, fragmentation of land holding and a host of other reasons also accelerated the shift of
employment pattern. In the mean time the external remittances were extensively used to increase the daily consumption and the life-style. This opened up a number of opportunities in service sector. Many of the cultivators of unviable holdings became entrepreneurs in service sector. Transport sector has emerged as a significant employment provider in the past two decades. The industrial sector has failed to absorb the labor migration from the agricultural sector. Farm employment wages are the highest in the State, higher than the wage provided by many private service sector firms. Still there is no preference to the farm employment among the educated youth, due to the values created by education. The problems of the postindustrial society are visible throughout the state. The cropping patterns, with large percentage of land under the plantation or cash crops also have increased per hectare economic productivity of the farms. Unequal development of the different sectors of the society has given undue importance to the tertiary sector, ignoring the primary and secondary sector. The sustainability of this development is highly doubtful since we are paying up the service sector with our external remittances, and not with our production in the agricultural or industrial sectors. The Gulf war in the present decade has provided some insights into this phenomenon, when the service sector was staggering for a while. However with the trends in migration, it can be expected that the external remittances will continue for a while, and the manpower export can become an enterprise in the state. Simultaneous existence of the agrarian and elements of postindustrial society is likely to pose a number of welfare questions. This also would mean simultaneous existence of two economic and social classes, one richer and the other poorer, and the poorer society aspiring to follow the life style of the richer. The media also glorifies a hyper consumption subtly pushing people to unsustainable and in many cases unhealthy life-
styles. It is quite strange to see that the status of women in a society, which used to be predominantly matrilineal society, is decreasing day by day. Though analysts attribute increased media penetration and awareness as the reason for atrocities reaching public media, it cannot be taken for granted. The emerging value system, which glorifies a material culture, prompts the unemployed youth to make a fast buck in any way. In a hollow society living on external remittances and not deep rooted on the local culture, exploitation becomes a way of life. Unholy alliances of anti-social elements, political leaders, and bureaucrats foster such exploitations. Corruption in any walks of life in the state is not frowned upon.

The social fabric of the State has to improve to consolidate the developments achieved in different areas of physical quality of life. This needs a redefinition of values, and education—both formal and non-formal modes can play a vital role in this.